

# **Transition to Secondary School for Aboriginal and Non-Aboriginal Students in High-Ability Settings**

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A thesis submitted in fulfilment of the requirements of the degree of Doctor of Philosophy

Institute for Positive Psychology and Education, Faculty of Health Sciences

Australian Catholic University

August 2020

This research was funded by the Australian Government through the Australian Research Council Linkage Project for Cultivating Capability: Explicating Critical Psychosocial Drivers of Educational Outcomes and Wellbeing for High-Ability Aboriginal Students (project number: LP1401001481).

The American Psychological Association's seventh style guide was followed.

## **Statement of Authorship and Sources**

This thesis contains no material that has been extracted in whole or in part from a thesis that I have submitted towards the award of any other degree or diploma in any other tertiary institution.

No other person's work has been used without due acknowledgment in the main text of the thesis.

All research procedures reported in the thesis received the approval of the relevant ethics/safety committees (2014 340N).

Catherine Jane Tikoft

## Acknowledgements

My sincere appreciation to my supervisors who have continued to set the bar high and model high expectations. I would like to acknowledge my supervisors, Prof Rhonda Craven, Prof Alexander Yeung, and Prof Janet Mooney. Thank you for supporting me and allowing me to undertake this endeavour while under your leadership. I am grateful for all the things I have learned from you regarding the field of educational psychology and Indigenous thriving. I'd like to thank Lily Barclay for her support in conducting this research and supporting high-ability Aboriginal students. I'd also like to thank Dr Alicia Franklin and the team at the Institute for Positive Psychology and Education for assisting in the gathering of data and supporting this research. Thank you all for your time and effort on my behalf. For her assistance, thanks to my copyeditor, Pam Firth.

I'd like to acknowledge my mentor, Prof Alexander Yeung. Thank you for your wisdom and careful guidance while conducting this research. You are a great inspiration and example for me to continue to grow as an academic and researcher.

Thank you to the children who graciously participated in this study. Thank you to my parents Beverly and Philip Hopkin for practical help and support and their understanding of time and commitment that this project required.

Finally, I would like to acknowledge my husband and friend, Karl Tikoft. Thank you for supporting me (and feeding the children) so that I could reach a truly ambitious goal. I can do all things through Christ who strengthens me (Philippians 4:13).

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## **Addressing the Terminology**

It is important to first identify and acknowledge the term *Aboriginal*, referring to Aboriginal Australians in New South Wales (NSW) and used in accordance with the advice of the NSW Aboriginal Education Consultative Group Inc. (AECG), the leading Aboriginal education consultative group in NSW.

The word *Indigenous* is used by governments in Australia and refers to the first people of Australia, Aboriginal and Torres Strait Islander people.

*Aboriginal and Torres Strait Islanders* refers to the first people of Australia, Aboriginal and Torres Strait Islander people.

## Definition of Terms

<b>Academic engagement</b>	Students' interest and positive affect towards their teachers and their classes.
<b>Academic persistence</b>	Students' ability to succeed in school in the face of challenges and setbacks.
<b>Academic planning</b>	Students' ability to succeed in school and display organised learning behaviours.
<b>Academic self-perception</b>	Students' perceptions of their scholastic abilities.
<b>Academic self-concept</b>	A general self-perception of competence in school work, as opposed to more specific perceptions of competence in different curriculum domains (Marsh et al., 2017).
<b>Adolescence</b>	The period between childhood and adulthood, which cannot be clearly defined as it is a continual process. However, early adolescence encompasses approximately the ages of 10 to 15, and these students are found in Year 5 to Year 8 in NSW, Australia.
<b>Affect</b>	Emotions described by such words as anger, pity, frustration, anxiety, and attraction.
<b>Departmentalised</b>	Classes in which students have different teachers for each subject.
<b>Disadvantaged</b>	Students who are from the lowest socioeconomic quartile as represented on the My School website (Australian Curriculum, Assessment and Reporting Authority [ACARA]). Students are placed into high advantage (top quartile), low advantage (bottom quartile), and average advantage (middle two quartiles) schools according to the Index of Community Socio-

	<p>Educational Advantage (ICSEA) of the school they attend. ICSEA is an aggregate measure at the school level of the socio-educational background of all students at a school.</p>
<b>Excellence gaps</b>	<p>Excellence gaps “differences between subgroups of students performing at the highest levels of achievement” (Plucker, Burroughs, &amp; Song, 2010, p. 1).</p>
<b>Forced-Choice Dilemma</b>	<p>“The belief held by some intellectually gifted students that they must choose between academic achievement and peer acceptance” (Jung et al., 2012, p. 15).</p>
<b>Gifted and talented class</b>	<p>A special self-contained program in which students identified as gifted are grouped for the entire day with their intellectual peers.</p>
<b>Goal orientation</b>	<p>The reason a student attaches importance to scholastic achievement.</p>
<b>High-ability students</b>	<p>Students who have met the criteria for identification under superior cognitive ability according to the guidelines of the policy of the local school processes.</p>
<b>ICSEA</b>	<p>“The index of community socio-educational advantage (ICSEA) was created by the Australian Curriculum, Assessment and Reporting Authority (ACARA) specifically to enable meaningful comparisons of National Assessment Program—Literacy and Numeracy (NAPLAN) test achievement by students in schools across Australia” (ACARA, n.d.-a).</p>
<b>Local GAT class</b>	<p>A high-ability grouping made by a high school based on primary school grades and reports. Gifted and talented (GAT) students are grouped according to Gagné’s (2004) proposal that about 10% of students will reach the threshold of ability that is giftedness or achievement, which is talent to be considered in this group. Gagné’s</p>

differentiated model of giftedness and talent (2004) is popular in NSW.

**Mixed-ability class**

Classes where students of the same chronological age with varying abilities are grouped together.

**School valuing**

Students' interest in and affect towards school.

**Secondary education transition**

The change in educational setting from Year 6 to Year 7 in the NSW public school system.

**Selective GAT class**

Within-school structural organisation of identified gifted students, according to ability and performance. An offer of placement to students as a result of a formal test.

**Streaming**

Australian usage to explain classes where students are grouped together according to similar levels of intelligence and ability.

**Tracking**

American usage to explain classes where students are grouped together according to similar levels of intelligence and ability.

**Underachievement**

According to Gagné's (2004) model, this occurs when talent has not been developed from natural abilities (through learning and other catalysts).

**"Years of progress" measure**

A measurement that adjusts for the nonlinear rate at which students typically gain NAPLAN scale scores as they move through school. Student progress for a given cohort is compared by estimating the difference in equivalent year level of the typical student over a given timeframe.

## List of Abbreviations

ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
AECG	Aboriginal Education Consultative Group
AEO	Aboriginal education officers
ASC	Academic self-concept
AWB	Academic wellbeing
AVID	Advancement Via Individual Determination
BFLPE	Big-fish-little-pond effect
CESE	Centre for Evaluation and Education Statistics
COAG	Council of Australian Governments
DEEWR	Department of Education, Employment and Workplace Relations
DET	The New South Wales education department was known as Department of Education and Training between December 1997 and April 2011
DoE	The New South Wales education department has been known as Department of Education since August 2015
DFSEC	Differences in focus and source of effort concept
DT	Design and technology
EBD	Emotional and behavioural disorder
GAT	Gifted and talented
GPA	Grade point average
HSC	Higher School Certificate
ICSEA	Index of Community Socio-Educational Advantage

IEC	Intensive English Centres
LBOTE	Language backgrounds other than English
NAPLAN	National Assessment Plan Literacy and Numeracy
OC	Opportunity class
OECD	Organisation for Economic Co-operation and Development
PCYC	Police Citizens Youth Club
PLP	Personal learning plan
SES	Socioeconomic status
SHS	Selective high school
SRC	Student Representative Council
STEM	Science, technology, engineering, and mathematics
UNESCO	United Nations Educational, Scientific and Cultural Organisation

## **Abstract**

High-ability Aboriginal students are not achieving educational outcomes commensurate to their non-Indigenous peers. High-ability Aboriginal students are also underrepresented in selective academic environments. Transition from primary school to Year 7 in high school is known as a vulnerable period at an age that is a particularly sensitive phase for self-concept development. In addition, when transitioning from primary to high school selective education settings, many high-ability Aboriginal students find that class-average achievement is higher and that they are no longer one of the top students in their class. Researchers have suggested that early streaming of high school classes based upon ability can contribute to negative stereotyping, internalising labels of “ability”, diminishing confidence and motivation in school, and accelerating the formation of deficit beliefs of intelligence as a fixed ability. Other studies have found that experiencing education in a selective setting impacts positively upon high-ability students’ educational striving and achievement. However, there is a paucity of research that has examined high-ability Aboriginal students’ experiences of transition.

It is well established from a variety of educational psychology theories that social and emotional factors are influential in the transition to secondary school. These theories include big-fish-little-pond effect (BFLPE) theory (self-perceptions), growth mindset theory (self-beliefs), expectancy–value theory (self-goals), and ethnic congruence theory (sense of belonging). The quadripolar model is also a useful theoretical framework in that it integrates consideration of two self-protective strategies (success orientation and failure avoidance) on a matrix.

The purpose of this study was to investigate how Aboriginal adolescents experience ability grouping, such as gifted and talented classes, in the transition to secondary school. The study aimed to identify the psychosocial determinants of high-ability Aboriginal and non-Aboriginal primary and secondary students' educational outcomes and wellbeing in different geographical settings (rural and urban) based on the perceptions of multiple stakeholders from rural ( $n = 1$ ) and urban locations ( $n = 2$ ) who participated in a 1-hour interview: high-ability Year 7 Aboriginal ( $n = 5$ ) and non-Aboriginal students ( $n = 6$ ), Aboriginal and non-Aboriginal parents/carers ( $n = 5$ ), teachers ( $n = 12$ ), Aboriginal education officers ( $n = 7$ ), and school principals ( $n = 8$ ). Multiple stakeholders participated in a series of interviews prior to transition to secondary school, after initial transition, and at the end of the first year of secondary school. Interview data were transcribed verbatim, key themes were identified using intercoder reliability, and word-frequency tabulation was employed to identify change in reasoning over time, with the results triangulated across multiple stakeholders.

Students' self-perceptions and confidence were significantly associated with their school stratification position, academic self-concept, sense of belonging, and their personal perceptions of the relevance of school. In addition, it was found that effort investment was associated in distinct ways with the ability levels of classmates. The findings suggest that many high-ability Aboriginal students can experience difficulty transitioning to secondary school when placed in classes where the average-ability levels are higher than theirs, forcing upward comparisons that impact adversely on their academic self-concept. Cooperative learning environments were found to enable Aboriginal students to negotiate difficulties and succeed in challenging learning environments. It was also found that a second transition from a selective context to a mixed-ability context could positively affect self-concept and motivation. The study supports and enhances the quadripolar model by

identifying the classroom compositional effects that foster strategies that students use to avoid failure and approach success. Examination of the data revealed that high-achieving students strategically manage the representation of their identities in school. These findings support and extend the BFLPE theory and its application to Aboriginal students.

It was found that in NSW schools, the achievement levels of Year 7 “gifted and talented” classes are heterogeneous and disparate, and the classroom climate is often competitive with adverse impacts on self-concept. Conversely, cooperative learning environments increased academic self-concept resulting in growth in achievement, enjoyment, and participation. On this basis, it is recommended that gifted and talented classes reduce comparisons and competition and foster peer social support for Aboriginal students. In transition, strategies need to be employed that account for students’ academic self-concept to avoid competition and maladaptive social comparisons.

## Chapter 1

### Introduction

High-ability Aboriginal students' underachievement is a complex and persistent problem, damaging academic motivation and engagement in selective settings. For example, Biddle and Heyes (2014) found that although 7% of students are Aboriginal in New South Wales (NSW) schools, they accounted for less than 1% of the Year 7 selective school intake. In high schools that stream students into gifted and talented (GAT) classes and mixed-ability classes, Bonnor et al. (2018) found that Aboriginal students are segregated. Researchers (e.g., Vinson, 2002) have noted that data are sensitive; there is a need for refined qualitative analyses into within-school "GAT" groupings in secondary education transition to ascertain the effects of such early segregation. A dominant focus for previous research in studies of Aboriginal students has been low-ability students (e.g., Burgess et al., 2019).

What is not yet clear is the impact of selective classroom environments on Aboriginal high-ability students in the Year 6 to Year 7 transition. Currently, there are no data whereby high-ability Aboriginal students have been interviewed at length about their experiences (van Rens et al., 2019; Vinson, 2002). Thus, this study contributes to addressing this gap in the literature by examining the differential impact of different school settings (local high school GAT classes, selective entry GAT classes, and mixed-ability classes) on six high-ability Aboriginal students' transition experiences in comparison to six non-Indigenous peers, across rural and urban geographical locations. By taking a qualitative approach, this research gives agency and voice to high-ability Aboriginal students transitioning to secondary school. There have been calls to address the

underrepresentation of high-ability Aboriginal students in selective settings (Biddle & Heyes, 2014; North et al., 2018); however, the mechanisms that underpin experiences of students in these contexts have not been fully explored.

Rectifying the imbalance between qualitative versus quantitative research methods in many transition studies (Zolfagharian et al., 2019), this study draws on both qualitative and quantitative research methodology. By taking a mixed-methods approach, this is rare research that gives agency and voice to high-ability Aboriginal students transitioning to secondary school. Narrative data sources and data analysis techniques such as grounded theory development and narrative inquiry are combined with quantitative research methods that involve numeric data such as word counts. A rigorous investigation has resulted from the triangulation of different sources of data and methods (Fielding, 2012; Howick & Ackermann, 2011). Detailed studies of the relations between specific variables over time and changes serve to build a better understanding of the overall transition process (Wolff et al., 2019). The importance and originality of this study are that it explores practical applications (Zolfagharian et al., 2019) at the crucial “crossroads” period of transition.

A strengths-based approach and a positive psychology lens was applied to this investigation of Indigenous thriving (Craven et al., 2016). The significance of positive psychology is in its explanatory power of high-ability Aboriginal students’ success. Focusing on a student’s success provides important insights into the transition process. Deep understanding of the ability of Aboriginal students to learn and adapt in challenging circumstances, such as a high-performing class, is missing in this age of ability grouping. As Aboriginal students are rarely found in the high-tracks (Luke et al., 2013), research into the impact of ability grouping for Aboriginal students in the secondary education transition is needed.

A research method was used that recorded information in a culturally sensitive manner and integrated Indigenous worldviews with Western science (Craven et al., 2016). Thus, a natural synergy was created between the Indigenous research method of storytelling, maintaining culture through “yarning” and employing a Western narrative inquiry method. Aboriginal people must be active agents in the research process. Thus, perspectives from multiple stakeholders were also considered and were enriched by insights from students themselves. Interviews were conducted with parents of Aboriginal children ( $n = 5$ ) and parents of non-Aboriginal children ( $n = 5$ ). The Department of Education (DoE) school staff participants included principals ( $n = 8$ ); assistant principals ( $n = 3$ ); head teachers ( $n = 3$ ), comprising 11 males and 11 females; teachers ( $n = 6$ ) (three of whom were Indigenous, three female); and Aboriginal education officers (AEOs;  $n = 7$ ). Aboriginal communities and individuals have deep and accurate understanding of the complexity and issues that their children experience.

Psychosocial skills are crucial for Aboriginal high-ability students as they need to negotiate and succeed in challenging learning environments. Research indicates that there may be many high-ability Aboriginal students with multiple disadvantages and difficulties that are not identified for support in school. The subsequent social-emotional problems can lead to the high-ability student not reaching their promise. Advances in self-concept theory and research can help clarify this failure to reach potential, which can underpin some negative school experiences. From psychosocial mechanisms, classroom composition effects may emanate, such as found in ethnic congruence research. These classroom composition effects are known to impact a successful transition to secondary school (Legette, 2020; Scharenberg, 2016). Other psychosocial research has demonstrated that class-average achievement negatively affects beliefs and self-perceptions about one’s own ability, motivation, and peer interaction (Kavanagh, 2020; Salchegger, 2016). To date,

seminal studies have highlighted that self-concept is an influential psychological tool associated with success for Aboriginal students (Purdie et al., 2000). However, much of the evidence from social–cognitive theory has not been extended to Aboriginal students (Hoffman et al., 2020; Wilson & Leaper, 2016).

Although Aboriginal youth face a large number of challenges, some are achieving and succeeding at school. The nature of how “selectivity and academic self-esteem” (Vinson, 2002, p. 20) mediate or moderate positive transition outcomes for high-ability students in GAT classes (Gillan et al., 2017) remains unclear. Research shows that Aboriginal students may not apply for such selective settings due to low academic self-concepts (ASCs; North et al., 2018). Low ASC is problematic because evidence has shown that self-concept is a driver of positive academic outcomes and is a pivotal construct for psychological wellbeing (Marsh & Craven, 2006; Mooney et al., 2016; Prehn et al., 2020; Whitley, 2014; Yeung et al., 2013).

The self-concept construct is vital to psychological wellbeing as people who feel good about themselves and their abilities are likely to be more effective than individuals with low self-concepts. Self-concept also facilitates other important aspects of psychological wellbeing including happiness, motivation, anxiety, depression, and academic striving behaviours” (Craven & Marsh, 2008, p. 104)

In particular, as the education system has extended to greater racial segregation and ability grouping (Bonnor et al., 2018), these issues have not been explored in relation to high-ability Aboriginal students transitioning to secondary school.

The practice of grouping students by ability is known to make them less successful (Organisation for Economic Co-operation and Development [OECD], 2013). The earlier and longer they are in such stratified groups, the greater the psychosocial cost (Reichelt et al., 2019; Rozer & van de Werfhorst, 2019). These negative effects include internalising labels of “ability”, diminishing confidence and motivation in school, and accelerating the formation of deficit beliefs of intelligence as a fixed ability (Muenks et al., 2018).

Streaming has also been shown to lock Aboriginal students out of academic pathways (Helme, 2005). It is clearly important to shed light on the nature of this inequality, and why it occurs, considering the importance of Indigenous students' increased participation in society for state and national policy.

As a result of the international proliferation of streaming in early secondary school, this study reveals how essential it is to understand the context of ability grouping for students' transition experiences (United Nations, 2020). Other research has used person-centred approaches to transition that limit the focus on the development of theory by targeting individual student profiles (Tuominen et al., 2020). Such an approach facilitates the stereotyping and labelling of students. However, in my research, changes in students' goal orientation were explored as a function of the transition into different educational contexts. The significance of this research is in exploring how contexts, situations, and individual differences combine in the processes that elicit competition and ability differences in streamed classes. As evidence suggests that Aboriginal students are more likely to be educated in segregated settings (Anderson & Boyle, 2019; Bonnor, 2019; Dean, 2018), the role of institutional and cultural frames is highlighted.

Drawing upon research into secondary education transition, we know that students are confronted with social and academic comparisons within a streamed environment. This study critically examines, compares, and contrasts Aboriginal and non-Aboriginal students' and stakeholders' perceptions directed by four facets of transition: students' hopes and apprehensions before entering secondary school, factors contributing to and constraining a successful transition to high school, factors contributing to longstanding secondary school educational attainment, and factors functioning as deep-rooted obstacles. This investigation employed a rigorous and longitudinal design, studying students at three time points across the Year 6 to Year 7 transition: the end of Year 6, Term 1 of Year 7, and

the end of Year 7. Research questions were framed to reflect the themes that contribute to the successful transition to secondary school: experiences of transition, strengths and limitations of the education setting, the influence of the stakeholders on educational outcomes, and why some Aboriginal students do and do not engage successfully in high-ability settings. The study observes the ways selective settings in secondary education transition shape students' self-perceptions as well as how these processes shape students' academic behaviours and outcomes.

In this context, my findings move the field forward by generating new knowledge and identifying applied implications, assisting in the development of theory and data analysis, and make a valuable contribution to advancing educational policy and practice. To achieve these aims, a rural case study and an urban case study were conducted. Both case studies capitalised on in-depth focus group interviews with students purposefully selected on the basis of their high academic achievement using qualitative and quantitative approaches. The research examines where the successes in Aboriginal schooling are occurring, why they occur, and their effect on how we think about growing and training our Aboriginal children. Elucidating the worth of specific facets of quality teaching, effective schooling, and psychosocial drivers identified by research will directly impact on educational outcomes that are yet to be attained by generations of Aboriginal Australians.

This thesis comprises eight chapters. Following the current introductory chapter, Chapter 2 presents a literature review that navigates the development of ability grouping in NSW secondary schools in response to current issues and implications of within-school selectivity in order to develop the rationale for the present investigation. Chapter 3 presents an overview of big-fish-little-pond (BFLPE) theory (self-perceptions), growth mindset theory (self-beliefs), expectancy–value theory (self-goals), and ethnic congruence theory (sense of belonging) so as to bring together a clear appreciation of the necessity for the

current study. Chapter 4 outlines the specific aims, hypotheses, and research questions that guide the research. Chapter 5 summarises the quantitative and qualitative data analysis, the rationales, and the methodologies applied to achieve the study's aims. Chapter 6 and Chapter 7 examine the qualitative interview findings, presenting each of the significant themes emerging from the data analysis. Chapter 6 presents the findings relating to the rural case study, and Chapter 7 presents the findings relating to the urban case study. Chapter 8 presents a comprehensive discussion and interpretation of the findings presented in the previous two chapters, provides a conclusion and summary of the key findings, and identifies suggestions for possible future research.

## Chapter 2

### Literature Review

#### Introduction

This chapter reviews the relevant literature comprising five areas of research: (a) transition as a global issue, (b) a comparison of NSW and New Zealand approaches to transition to secondary school, (c) the geographical and historical context of the NSW education system, (d) culture shock for high-ability Aboriginal students transitioning into selective academic environments in NSW schools, and (e) streaming of students by ability. These research areas correspond to the focus of the current study. In contextualising this research, they explain the conceptions of transition “success” and identify the operational definition of transition success most appropriate for this study.

The relation of ASC, sense of belonging, and the role of classroom composition as a moderator of influences, is examined in the context of transition to secondary school, using a social–cognitive framework (see Chapter 3). Specifically, the significance of the frame of reference processes developed from self-concept (e.g., the *big-fish-little-pond* effect; Parker et al., 2019), expectancy–value (Muenks & Miele, 2017), and ethnic congruence research (e.g., Efferson et al., 2008) is examined. Finally, the underlying mechanisms involved in adolescents’ development of self-concept in mixed-ability or ability-grouped (i.e., GAT classes that are selective based upon ability) classes are scrutinised.

In the past four decades, the decline in motivation towards school and learning that occurs in early adolescence has been documented by educational researchers (e.g., Anderson

et al., 2000; Blyth et al., 1983; McGee et al., 2003; Waters et al., 2012; West et al., 2010). Statistical data have confirmed that Aboriginal students also fit into this pattern of declining academic motivation after the transition to secondary school (Australian Department of the Prime Minister and Cabinet, 2018; Biddle & Edwards, 2017; Centre for Education Statistics and Evaluation [CESE], 2018a). The transition to secondary school has been identified as a time when Aboriginal students need support (Mander, 2015; Ockenden, 2014). Disengagement during this period has received increased attention in Australian education policy and research (Goss et al., 2018; McCourt, 2017; Social Ventures Australia, 2019a). For example, Rickinson et al. (2018) identified level of education and demographics as predictors of disengagement. They identified academic performance including exam success, grades, literacy, and numeracy skills as influencers of dropping out of school early, specifically in upper primary and lower secondary school. As race and disadvantage are closely related, Aboriginal students and students of low socioeconomic background were the salient demographic characteristics. The intersection of race and socioeconomic circumstances by geography has been confirmed by research which reveals segregations has significant negative effects on outcomes (Anderson & Boyle, 2019; Biddle & Heyes, 2014; Bonnor, 2019; Dean, 2018; Jordan, 2010).

At a fundamental level, the streamed or ‘segregated by ability’ culture of secondary school have more challenging behavioural and performance expectations for many Year 7 students, particularly Aboriginal students (McCourt, 2017). Francis et al. (2020) provides “strong evidence for the impact of the labels inherent in setting on *pupil* self-perception in relation to their learning, subject identification, and feelings about themselves, as learners, and about their place in school” (p. 639). In Aboriginal education policy and practice, transition to primary school and transition to work have priority for attracting more funding and more strategies for success, but not transition to secondary school. Literature

and policy reveal that stakeholders identify these developmental transition periods as crucial (e.g., *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014* [ATSIEAP]; Education Council, 2014). Within the entirety of the plan, the ATSIEAP identifies transition to secondary once on page 36. This reference is part of the Australian Capital Territory’s Action Plan initiatives that include “assistance to students during the transitions between primary school, high school, and college” (p. 36). Nationally, it would appear that other transitions, such as the primary school transition and transition to work, are prioritised above the secondary education transition. Aboriginal students have unique needs in the secondary education transition that need addressing through policy and practice. There is an urgent need to address the barriers Aboriginal students face in settling into more challenging educational environments.

A transition is a phase characterised by adjustments in friendship networks, as well as new expectations and academic experiences (Bishop, 2019; Eccles & Wigfield, 2020; Xu, 2020). The transition to secondary school is known to bring declining engagement, poor achievement, increased absences, and increased behaviour incidents, particularly for ethnic minority students (McCallumore & Sparapani, 2010). The impact of transition has a major effect on motivation and causes a decrease in the behaviour driven by students because it is personally rewarding (McCourt, 2017). Secondary school dropout rates are significantly lower in school systems with embedded secondary school transition programs that assist students in settling well into the new school life (J. S. Smith, 2006). It is fundamental to acquiring an education and completing matriculation as the literature on secondary school transition suggests that good transitions are important for long-term school success, including engagement, motivation, attendance, and matriculation (Bishop, 2019; J. S. Smith, 2006). Of concern is the lack of discussion about targeted strategies for secondary education transition, for Aboriginal students, when compared to other

transitions. For example, in a recent Social Ventures Australia (SVA; 2019b) paper, upper primary to lower secondary transition provisions are absent:

For transition to primary school, schools should offer additional support which might involve assistance for language and cognitive development, relationship building, cultural competence, the involvement of Aboriginal and Torres Strait Islander staff, strong relationships between early learning centres and schools, and support for families. For transition from secondary school, this additional support might involve additional careers education and counselling, guided opportunities for work experience, in-school offerings of vocational education and transition mentoring. (p. 30)

In light of the effectiveness of secondary education transition measures to slow a potential spiral towards being retained or even dropping out (Bishop, 2019; J. S. Smith, 2006), the absence of specific strategies for primary to secondary transition is disappointing. The transition to primary school has been attended to with programs and funding, as well as the school to work initiatives, but not transition to secondary.

A global characteristic of secondary school curriculum is the segregation of students by attainment or 'ability'. Streaming students by attainment values classes organised on the basis of 'ability'. Studies such as those by Oakes (1985) and Francis et al. (2020) have long established that the transition from the heterogeneous primary classroom setting to the homogenous secondary classroom is not smooth for many students. In a large study in Germany, Francis et al. (2020) drew on survey responses from 9,059 12-13 year olds who were streamed on entering secondary school. The findings suggest a growing gap for self-confidence between high- and low- streams. They identified the difficulty of disaggregating influential factors, stating that "there may be a range of different psychological factors and processes which mediate the affects between the receipt of an 'ability label' via tracking, and self-confidence in learning" (p. 638).

Change has been slow, and there has been a lack of long-term initiatives emanating from this research on the structures and organisation of secondary schools (Covington, 1992; Legette, 2020). Unfortunately, there has been little accompanying policy change, updated routines, or renewed organisation from the education system (Jonasson, 2016; Spina, 2019). Are these new routines and school organisation the core issues of the decline in engagement that begins in early secondary schooling? The routines of transition involve sharing of information between schools, school visits, and orientation activities like camps, buddy systems with peer tutoring, and welcoming programs. The fact that the 2019 *Alice Springs (Mparntwe) Declaration of Education's* (Council of Australian Governments [COAG] Education Council, 2019) description of secondary education transition bears striking resemblance to other descriptions of the move to the secondary context from the past half century is disappointing:

These transitions involve a move from familiar and personal surroundings to usually much larger and more complex learning environments and systems. Students have to adapt to new routines, changes and pressures in social environments, a broader range of curricula, larger numbers of teachers and different teaching styles, new educational demands, and a fast-changing labour market. (p. 14)

The approach to transition orientations and routines remains standard practice in schools. Superficial and short-term investigations are too limited to explore the important aspects of the effects of school learning environments on transition and future engagement in education. Thus, more research is needed that uses longitudinal data and qualitative analysis that account for students located within schools and classes.

For both Aboriginal and non-Aboriginal students, support strategies to improve the transition to secondary are lacking (SVA; 2019a, 2019b). The transfer from one educational setting to another can be understood as a crucial process of change that

involves not simply a transfer of context but a change of existing interpersonal relationships into another educational context (Jindal-Snape et al., 2020). The challenging transition period has been identified as the result of a mismatch of developmental needs with the schooling system (Eccles & Midgley, 1989). Therefore, more awareness and greater importance needs to be placed on supporting adolescents to succeed during this period.

### **Conceptions of Transition “Success”**

Historically, there has been a lack of theoretical clarity in how to define the “successful” integration of primary students into the secondary school setting (Benner, 2011; Hanewald, 2013; West et al., 2010). Transition is conceptualised as a process that operates across academic and psychosocial processes of adjustment (Evans et al., 2018). Constructs of “success” are the result of particular conceptions of transition (Anderson et al., 2000; Evangelou et al., 2008; Kennelly & Monrad, 2007; Riglin et al., 2013). The first indicator of a successful transition is academic achievement. Studies show that some students are particularly vulnerable to lower levels of academic achievement during this time (Borman et al., 2019; Dotterer et al., 2009; Gutman & Midgley, 2000) in particular minority students (e.g., Benner & Graham, 2009; Goings & Ford, 2018; Mander, 2015; Rozer & van de Werfhorst, 2019). Student grade-point averages, standardised testing, and school-based achievement provide straightforward measures of this outcome.

The second indicator of a successful transition is wellbeing. Nonachievement-related outcomes, such as wellbeing, self-concept, confidence, and sense of belonging, are also important aspects of educational effectiveness because they are considered educational objectives in themselves (McCourt, 2017). These views of what it means for a student to have adjusted to the new school setting, in particular to the changes involved in the transition process, have created a vast “transition” literature. This research is important,

as schools must try to explore ways that student factors and schooling structures affect whether students have a successful transition or not. Creating a system that examines and can predict with accuracy if a student is going to be successful will build the capacity of teachers and schools, and the capabilities of all students.

Traditionally, transition researchers have focused on the institutional adjustments that involve a series of well-ordered processes: changing classrooms, numerous teacher relationships, stricter discipline, being outnumbered by other mature students, and additional personal accountability for belongings. The effects of the various aspects of transition to secondary education on academic achievement have been a reason for the volume of literature in this area but also the complexity of comparative analysis (van Rens et al., 2018). Considering the multiplicity of sociocultural characteristics of schools — such as curriculum continuity, school rules and routines — the peer support program, teacher quality, and school/class size are the concrete aspects of transition (e.g., Hanewald, 2013; Hopwood et al., 2016). With generally clear and bounded domains, these processes and activities have been explored empirically and exhaustively. Therefore, this aspect of transition does not need to be reviewed.

Although the declining engagement with school has been identified in the transition to Year 7 (McCourt, 2017), an under researched issue in secondary school transition is ability grouping or tracking (Lucas, 2001). Internationally, there is an increase in grouping students by ability as they enter secondary school. This intended or unintended segregation may have consequences for the success of transition for certain groups of students, as Rozer and van de Werfhorst (2019) noted:

Moreover, around the age that tracking occurs (i.e., between age 12 and 16), three out of four of these models show a significant negative effect. These indicate that the later

countries track, the smaller the gaps between children with few and many books at home. (p. 53)

Studies in countries where students are grouped by ability in the secondary education transition, such as Hungary and Germany, reveal that this leads to the stronger academic achievement of the wealthier groups and is detrimental to the performance of those in the lower groups (Dumont et al., 2019; Horn et al., 2016; Schultz et al., 2017). A student may have downward comparisons with students in a low-track, resulting in a high self-perception (Marsh et al., 2000). Another student may have upward comparisons with students within a high-track class, resulting in a low self-perception (Marsh, 1987). These self-perceptions are known to have a reciprocal effect on persistence and engagement with school (Kavanagh, 2020). As discussed, the first year of high school is crucial in forming self-perceptions. Self-perceptions facilitate other outcomes including motivation and academic persistence. Moving between schools or classes of different levels of ability will exaggerate social comparisons with others (Boone & Demanet, 2020). In streamed academic settings, there is evidence that the development of self-concept based on relative comparisons with others may become internalised (Knigge & Hannover, 2011). Research is needed to appropriately support schools and teachers in the intentional development and formation of a healthy self-perception, particularly for Aboriginal students.

### **Transition as a Global Issue**

According to the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) *Global Education Monitoring (GEM) Report* (Bridges, 2019), streaming, selection, and segregation in secondary education are a global phenomenon with social and cultural implications. In Austria and Germany, students are tracked from the age of 10 years (Schneeweis, 2015). According to Crul and Mollenkopf (2012),

Western European schools have education systems more stratified by tracking, meaning that on average immigrant students are five times as likely to be placed in low-tracks in early secondary at age 12. Ludemann and Schwerdt (2012) found similar trends in German schools. The ethnic polarisation in schools theorised by Hargreaves (2006) is also a trend identified in the report (Bridges, 2019), creating further serious obstacles that prevent ethnic minorities from making the most of opportunities. Market forces aggravate segregation between majority and minority ethnic races with movement to private education systems in Denmark (Rangvid, 2010), the Netherlands (Ohinata & van Ours, 2013), the United States (Betts & Fairlie, 2003), and Australia (Ho & Bonnor, 2018). Bonnor et al. (2018) examined the negative racialisation experienced by Aboriginal Australians. He described the continued disadvantage among these people and focused on how educational segregation and discrimination has yielded an educational underclass that has no parallel (Cooke et al., 2007).

**School Environments.** There is plenty of evidence regarding social–emotional outcomes generally for secondary school transition (Hopwood et al., 2016; Maguire & Yu, 2015; Van Ophuysen, 2009; Vaz et al., 2014; Waters et al., 2014). Less is known about tracking and compositional effects regarding student psychological adjustment. Within the school context, these effects may be also varied according to the pedagogy and curriculum directed at different streams within a particular cohort (Craven et al., 2000; Johnston & Wildy, 2016).

Most of the current evidence supports consistent differences in the quality and expectations between high- and low-track classes (Gamoran, 1986; Oakes, 1987; Rozer & van de Werfhorst, 2019). Teachers in the higher tracks are more likely to be experienced and skilled in providing high-order questioning, discussion, and activities. In contrast, teachers in the low-track classes are more likely to be skilled in explicit teaching,

providing scaffolded tasks, and decontextualised reading and writing skills (Nystrand & Gamoran, 1991).

**Ethnic Separation of High-ability Students.** Internationally, ethnic segregation in schools is pervasive (Rozer & van de Werfhorst, 2019; Schutz et al., 2008). In the United States, one qualitative study revealed polarisation of the learning environment while examining barriers in school environments between ethnic high-ability students and non-ethnic high-ability students. J. R. Cross et al. (2018), in a study of 81 Year 7 high-ability students from high- and low-income groups, investigated what students perceived to be barriers to academic success in secondary school. The two groups of participants were selected by family income and scores on achievement or aptitude testing (in the upper first decile). The low-income group labelled SC, who had family incomes less than \$45,000, consisted of 84% African American, Hispanic, or Biracial, and 16% Caucasian students, attended “large high-poverty schools” (p. 113). The high-income group labelled EP, whose family incomes were more than \$100,000, consisted of 89% Caucasian and 11% African American, Asian, or Indian students. Students in this group attended “a variety of public and private schools” (p. 113). They found that both groups felt constrained by the secondary school environment that did not suit their person–environment–stage fit (Eccles et al., 1993). The person–environment–stage fit is defined as a match between the characteristics of the person, including their abilities, goals, and psychological needs, and the characteristics of the environment, including its demands, values, and culture. It is generally assumed that the person–environment–stage fit leads to positive outcomes, such as engagement, achievement, and overall wellbeing.

The students complained of a lack of differentiated instruction, lack of variety in teaching strategies, and teacher stifling of organic engagement with content or with productive interaction with others (for SC [mainstream] students). SC students indicated

that many students in their classes were bored, leading to misbehaviour. EP students mentioned being in homogeneous or gifted classes, but these were not always satisfactory. (J. R. Cross et al., 2018, p. 115)

J. R. Cross et al. (2018) also provided evidence of schools specifically adapting their expectations and curricular differentiation to the composition of the respective student population they were teaching. They described the teaching style as lacking in differentiation, engagement with content, or using cooperative learning. It is evident that this style of teaching, for SC mainstream students, can result in lower standards of teaching and learning (Dreeben & Barr, 1988). Students were separated into streaming at the school level, meaning that different schools have different average-ability compositions. Therefore, the polarisation effect can be explained by the perceived status of the attended “high-poverty school” (p. 113). The perceived status of the attended school may result in a deviant subculture or opposition to norms of the secondary school system.

J. R. Cross et al. (2018) found that the group with high ethnic diversity in high-poverty schools were “resource poor”. In contrast, the group with low ethnic diversity, catered for in GAT classes, were “resource plenty”. There was a greater investment of resources in schools with low ethnic diversity and wealthier parents. Affluent communities have greater financial resources to support their schools. This investment translated into increased achievement for students. J. R. Cross et al. (2018) concluded,

High-ability students from higher-income families rapidly surpass their peers with similar abilities who have fewer economic resources. The privilege embedded in the academic experiences of the EP students (Jennings, Deming, Jencks, Lopuch, & Schueler, 2015) is evident in the juxtaposition of narratives with their SC peers. The unruly academic environments and inadequate resources described by SC students

contrast starkly with complaints of slow computers or delayed online grading. Income allows for the acquisition of resources. (p. 122)

Despite not exploring the contextual construct of ethnicity empirically, other findings are noteworthy from J. R. Cross et al.'s (2018) study. High-ability students in the low-income group found the school environment was a poor social fit, citing evidence that many high-achieving students see social and academic goals as conflicting (Blaas, 2014). Students pursue multiple goals. The pursuit of any goal needs an investment of time and effort. Motivational conflict results when a person has two goals and is limited in time and resources to achieve both. Fries et al. (2005) found that motivational conflicts are common in adolescents. Other cross-cultural comparative studies argue that some motivational conflicts in achieving goals can vary between cultures and derive from a culture's dominant value orientations (Greenfield et al., 2003).

The mission of gifted education researchers is to systematically and strategically explore and develop the potential of gifted students through "knowledge production and eventual dissemination and application of research findings to practice and use in advocacy efforts" (Jolly & Chessman, 2018, p. 88). Jolly and Chessman (2018) in their investigation of gifted literature found that there was a "lack of robustness in the quality of research" (p. 87). In Australia, the development of a journal of gifted education theory and practice, in the field of gifted education, served as "a clearinghouse of information as Australian researchers began to develop sound knowledge and defensible practice" (p. 89) as well as to develop their own academic discourses.

Therefore, gifted education literature has identified the motivational conflict between social and academic goals. Jung et al. (2012) identified when researching gifted students that students' different goal orientations were not integrated. They labelled the conflict between academic and nonacademic goals "the forced-choice dilemma" (p. 15),

where capable students underachieve to fit in socially. Similarly, J. R. Cross et al. (2018) found that African American students were more likely to choose friends who were similar to themselves socially rather than academically. The study found evidence that ethnic identity might be a protective factor for academic achievement.

Another issue related to social interactions in streamed classrooms is the quality of relationships with teachers. J. R. Cross et al. (2018) found “gifted students in gifted classrooms had better relationships with their teachers than those in heterogeneous classes” (Vogl & Preckel, 2014, p. 123). However, the level of competition created negative relationships. Also, others have identified the dilemma in gifted education research. The benefits of “outstanding performance” have a cost on “the effect on interpersonal relationships of environments built around the competition to outperform peers” (J. R. Cross et al., 2018, p. 124).

Covington (1992) found that “compared to competition, cooperation promotes greater interpersonal attraction between ethnic minorities and middle class students” (p. 279). Cooperative learning is a teaching method where students are grouped heterogeneously, not by ability. The success of the group depends on the joint and individual contributions of all its members. In his seminal study, Covington (1992) identified the advantages of cooperative success as “stronger beliefs that one is liked personally, is accepted by others, and that other team members care about how much one learns” (p. 279). Cooperative learning environments have been shown to develop higher level thinking and reasoning as well as promote interpersonal relationships between students because of the environmental factors of group structure and composition that underpin this pedagogical approach (Giel et al., 2020; Lessard et al., 2020).

### **Development of Sense of Academic Futility in Secondary School Years**

In the gifted education research, research “interventions” for gifted students is synonymous with streaming (e.g., Bolland et al., 2019). Streaming may occur either within schools (Johnston & Wildy, 2016) or across schools (Sloan, 2018) or even school systems such as in Germany (Preckel et al., 2019). Often the educational environments of gifted students are not described fully in the literature of gifted education research, even in qualitative studies (e.g., Desmet et al., 2019). This absence is misleading in the assumption that learning environments are contextual, neutral, and self-contained constructs. In a review of the literature connecting identity formation to streaming, Knigge and Hannover (2011) found that although selection and grouping practices communicate messages to students’ developing self-concept and can be internalised, they found

[streaming] practices that tend to be considered as normal, unproblematic, and—in the cases of selection processes, differentiation, and certain teaching strategies—efficient, yet were found to often inform adolescent’s self-understandings in a negative way. (Knigge & Hannover, 2011, p. 204)

In contrast, Bolland et al. (2019), in researching gifted students, labelled high-ability, poor minority students as being negative. They made individual connections between “gifted classification” and affective risks, and maintained the “giftedness may also create risks for students . . . in specific, hopelessness” (p. 227). While concluding that GAT programs primarily “still serve White, middle class, and upper-class students” (Bolland et al., 2019, p. 225), the study found gifted programs as buffers or a “protector” from declining feelings of hopelessness, implying causality. The neat justifications of “participation in these programs create a sense of stability for gifted students . . . and create an ongoing peer group for gifted students . . . that provide a sense of connectedness. Both

stability and connectedness can mitigate feelings of hopelessness” (Bolland et al., 2019, p. 228).

Bolland et al. (2019) asserted that the development of academic futility is under researched, especially among low socioeconomic and disadvantaged students and studies that have reached “inconsistent conclusions” regarding its cause (Bolland et al., 2019, p. 227). A vast and recent body of literature connects high and low tracking to feelings of academic futility (Boone & Demanet, 2020; Demanet & Van Houtte, 2012, 2019; Dockx et al., 2019; Muller et al., 2016; Muller & Zurbriggen, 2016). Global agencies also have recognised the impact of streaming, selection, and segregation in blocking education avenues for minority and disadvantaged youth. Much of the UNESCO research in the *GEM Report* (Bridges, 2019) identifies the strong association between social background and student results. Majority students are more likely to be placed in higher performing tracks while minority students are more likely to be placed in lower performing tracks. Highlighting the relations between the constructs, but not determining causality, the report states “Ability sorting leads to inequality . . . and it may compromise subsequent opportunities for students” (p. 49).

### **Comparison of Australian and New Zealand Approaches to Transition**

The domain “ethnic identity” is one of many contextual constructs that influence the transition to secondary (Evans et al., 2018) as Australia’s intake of immigration ranks 10th among OECD countries (United Nations, 2020). Globally, 3.4 % of the world’s population do not live in the country where they were born. The ethnic density of classrooms and the increasing population of ethnic and multiracial people is the consequence. Many studies of transition focus on “Western systems”; therefore, there is a lack of cultural diversity in the analysis of secondary education transition. Especially in light of increasing multiracial identities of adolescents, there is a need to examine the

issues students encounter through a more culturally responsive lens. One reason for this is the difficulty of examining majority ethnic and minor ethnic distinction with various attitudes and levels of acculturation. As students of lower socioeconomic status (SES) tend to have lower academic achievement than high-SES youth (Goings & Ford, 2018), and far more ethnic/racial minorities tend to live in poverty (Crowley et al., 2019), researchers have found it difficult to separate empirically these influences. It is important to understand the full extent of how directives from Department administration filter down the system to classrooms to impact school outcomes of high-ability Aboriginal students.

**The NSW Approach to Transition.** For example, when comparing NSW recommendations for transition, the guidelines published by the CESE (McCourt, 2017) identify Aboriginal students as a vulnerable cohort. The CESE provides strategic, evidence-based resources that make explicit the characteristics of high-quality, effective professional learning for teachers such as the secondary education transition guidelines (e.g., McCourt, 2017). However, provisions and strategies to cater for the unique needs of Aboriginal students are not proposed. Transition policy documentation should differentiate, but did not differentiate, the unique needs of Aboriginal children as modelled by the Victorian and New Zealand “best practice” documents (Department of Education and Training, Victoria, 2016; Ministry of Education, New Zealand, 2016). Within the documentation environment, which provides direction and guidance for the whole sector, cultural responsiveness needs to be addressed. Student adjustments at this vulnerable time require the provision of clear and necessary support of the education system (Education Review Office [ERO], 2012). Highly effective systems need to document their provisions for change to show respect for culture (Faaea-Semeatu, 2011; Gunstone, 2012). NSW’s documentation from the CESE reveals an onus on individual students, parents, and teachers to adapt to the changes in setting (McCourt, 2017). As modelled by the New

Zealand ERO (2012), respect and enculturation of understanding about Indigenous culture, at a system level, will affect change. Both the dominant culture and the Indigenous culture (at an individual level) need to reflect this mutual respect. The system, with its power to structure schools and classroom composition, has a responsibility to meet the needs, interests, and potential of all learners (Ministry of Education, New Zealand, 2016).

The guidelines, set out by education authorities, for practitioners in administering transition programs at the local level can be compared across the Tasman Sea. The growing concern from rapid declines in student engagement in early adolescence worldwide has refocused stakeholders' attention on the transition to secondary school. The New Zealand document *Transition from Primary to Secondary School* (ERO, 2012), when compared with the NSW document *The Role of Student Engagement in the Transition From Primary to Secondary School* (McCourt, 2017), reveals a more culturally responsive approach. The NSW guidelines identify, "Transition can also pose specific problems and concerns for students who do not belong to the majority culture within the school" (McCourt, 2017, p. 2) and "The decline is larger for students with low-SES backgrounds and Aboriginal students" (pp. 1–10). "Aboriginal students report a 10-percentage point drop in a sense of belonging between Year 6 and Year 7, whereas non-Aboriginal students report a two-percentage point decrease" (p. 3). The document identifies Aboriginal students as vulnerable; however, provisions and strategies to cater for their unique needs are not proposed.

**New Zealand Approach to Transition.** The New Zealand document *Transition from Primary to Secondary School* (ERO, 2012) is a full 22 pages long, indicating its detail and comprehensiveness, with accompanying methodology and appendixes. The word "Māori/Pacific" is cited 31 times throughout the document, indicating its importance. The word "pastoral" is cited 12 times. The word "culture" is cited 17 times. The cultural word

“whanau” is cited 22 times, and “aiga” is cited 12 times. The frequency of these words indicates the significance given to them. By citing case studies that include Māori students, the review models best practice and cultural responsiveness. The balanced review of important social and physiological aspects of transition is integrated with implications of the needs of students and in particular normalises the cultural needs of students through practical pastoral care, small groups, and mentoring.

Changes in the dynamics of our cultural diversity in Australia, with 33% of our population having been born overseas (Australian Bureau of Statistics [ABS], 2016a), mean that our classrooms reflect that diversity. In NSW, the CESE document (McCourt, 2017) focuses on the importance of a sense of belonging in transition success. In an apparent oversight, the link between valuing multiculturalism and sense of belonging is absent in this key NSW document guiding pedagogy for teachers. It is a concern that cultural responsiveness was not discussed in response to developing students’ sense of belonging in the school context. Over half the population of NSW government schools in metropolitan Sydney (54.5%) are from language backgrounds other than English (LBOTE). In the rest of the state, the concentration of cultural diversity in schools is significantly less. In rural areas, only 10% of the public school populations are from LBOTE. In metropolitan areas, increasing cultural diversity (of LBOTE students) is a trend in schooling, increasing by one percentage point each year (CESE, 2018a). Bringing together many different beliefs and practices in classrooms may impact both the wellbeing of students and their learning environment during the transition to secondary education. In the analysis of the sense of belonging, the CESE review (McCourt, 2017) did not acknowledge and respond to the growing cultural identities of all students or the role of schools in placing emphasis on sustainable systems for pastoral and learning care.

By contrast, in a similarly culturally diverse education system, the New Zealand document explains how schools should do more to draw on the contexts and themes relevant to Indigenous students:

Part of knowing the student is to explore the cultural capital they have and use their knowledge to shape the curriculum. This can help students feel a sense of belonging in the school and connectedness to their own cultural roots. Schools should be places where learners' cultural and ethnic identities are acknowledged, celebrated and promoted through the curriculum. (ERO, 2012, p. 25)

Bishop et al. (2003) emphasised that Māori students' culture can be the catalyst for making connections with culture "in the classroom so that learners are able to make meaning of new information and ideas by building on their own prior cultural experiences and understanding" (p. 201). "Such acknowledgement is important for all students" (ERO, 2012, p. 19).

The system has a role in encouraging schools to create an environment where students want to fit in and belong. To "fit in", students must feel that their cultural background is respected. Also, the cultures, interest, and potential of all students, including those from Indigenous cultures, need to be valued within the curriculum content and in the school community (Kickett-Tucker & Shahid, 2019; Sahdra et al., 2019).

### **Historical Context of NSW Public School Sector**

The specific topic of transition to secondary school, with a focus on Aboriginal and high-performing students, is under researched in Australia:

There is a growing concern that Indigenous educational policy, literature, and practice has been focussed on the more remote and traditional Indigenous communities commonly found in the Northern Territory, South Australia, and Western Australia and yet there is also a need for more careful consideration of urban Indigenous

communities' needs, as identified over two decades ago by Harris (1994). Much of the available literature does not relate specifically to the NSW situation and to some degree has generated a wrongly placed emphasis in policy direction and has led to unquestionably ill-informed policy and practice related stereotyping of the contemporary Indigenous educational situation in NSW. (Lester, 2016, p. 20)

To highlight this discrepancy, the literature review references relevant policy and reports from the NSW and Victorian Departments of Education. Detailed consultation with the broader community about the future of public education by the NSW Department of Education and Training (NSW DET) in 2005 included a paper on the middle school years. The purpose was to establish the priorities for education that should guide the strategies implemented in the years 2004 to 2014. It was unique in that a large number of members ( $N = 28,519$ ) chose to participate across the whole school system. The consultation paper detailed the questionnaire given to participants. There were 85 questions including, "Question 4D: How can we better support students' transition from primary to secondary school, in particular to meet the needs of students who have low levels of literacy and numeracy skills?" The context of this question in the consultation document established its importance and relevance for student outcomes:

The importance of school entry and the transition from primary school to secondary school is recognised across the country. People have already told us . . . effective transition programs on school entry and between Year 6 and Year 7 are critical. (p. 13)

In addition to the questionnaire, 2,500 written submissions were received and analysed both internally by education experts and externally by independent text analysis undertaken by the University of NSW. The themes that emerged included a desire for a statewide coordinated and coherent strategy towards transition programs, a focus on student-teacher relationships, tracking student achievement, and addressing the issue of

the separation of subject disciplines within the secondary school curriculum. The report found that different schools implemented different transition processes, and there was an inconsistency of approach across the whole school system.

Despite the finding that a consistent statewide approach for transition programs was needed, only a small disadvantaged subgroup of students has been provided with a coordinated and coherent strategy. Since the NSW DET *Future Directions* report was published in April 2005, a federal budget of \$200 million has been invested to support individual students who fit the profile of “providing additional support for students with disabilities to transition effectively between stages of schooling” (COAG, 2012, p. 2). However, the NSW Legislative Council Standing Committee (2012) inquiry into transition support for students found

Aboriginal people may be unwilling to disclose disabilities due to stigma or misunderstanding, which results in very low referral rates for disability treatment or disability development and support services. This also directly impacts on their ability to access transition supports or services. (p. 86)

In the NSW education system, there is a decline in sense of belonging across all types of students in the Year 6 to Year 7 transition, but particularly for low-SES and Aboriginal students (McCourt, 2017). There is a definite need for an evaluation of the impact of initiatives emanating from NSW DET’s *Future Directions* report (2005).

In Victoria, the DoE was audited by the Attorney-General’s Office. The audit not only researched the middle years’ literature, as the 2004 NSW DET consultation did, but conducted interviews and examined the practices of 30 schools, taking into account their use of funding and student achievement against known indicators of smooth transitioning (J. Doyle, 2015). The findings replicate the unpublished conclusions in NSW.

Both reports had similar findings. There are inconsistencies in transition practices across the system, and the Department does not monitor or track outcomes as efficiently in the early years. There is no coherent framework for the primary to secondary transition, despite its widespread importance in reversing disengagement with school. There is better support for students with additional needs than those in the mainstream or gifted cohorts. Crucially, there is a limited collation of evidence and data to monitor success in transitioning to secondary school. Both in NSW and Victoria, there are difficulties and a lack of knowledge about privacy regulations in relation to transferring information between primary and secondary schools, and this causes inefficient responses to helping students and providing proactive interventions (J. Doyle, 2015).

**Research Impacting Transition Practice.** The basic social and academic issues identified in Eccles and Midgley's (1989) seminal research still apply today: personal anxiety, repetition of work, and uncertainty of expectations for adolescents as they transfer to secondary school. These three issues can be traced back to appropriateness, suitability, and relevance of the secondary school context. In terms of curriculum, Year 7 teachers continue to take a "fresh start" approach to new secondary school students, meaning that expectations and standards are too low, producing boredom by the lack of challenge for high achievers (Boykin & Noguera, 2011; Dinham & Rowe, 2007). The suitability of secondary school workloads in the first term, either too much or too little, has been a common complaint (McGee et al., 2003; West et al., 2010). However, academic content and literacies can be conceptually difficult, with metalanguage that is difficult to access (Juvonen, 2007). Metalanguage is language that describes language. For high school students to value learning, the style of teaching needs to be accessible, relevant, and engaging.

Decades of investigations have examined how differences in pedagogy between primary and secondary affect learners. Studies have revealed how primary contexts have promoted individuals' motivational needs (Galton, 2009). The NSW DET report (2005) testified to the culture shock of Year 6 students arriving at secondary school as "there was a general feeling that the teaching was too content-driven and instruction-based. They suggested that early adolescent students needed greater stimulation and challenge if they are to be engaged in their learning" (pp. 62–63). Despite compelling evidence of an incongruity between the needs of adolescents and the school environment of secondary schools, changes in structures and policy do not occur (Jonasson, 2016). At an individual level, consistent with self-determination theory (Ryan & Deci, 2000), Tian et al. (2014) have shown how students' satisfaction of competence, relatedness, and autonomy needs have reciprocal relations with school-related wellbeing. A reciprocal relation is defined as a mutual action: After an action, a reaction is given in return. The strength of the reciprocal relations is increased in an upward cycle of success as psychological needs are being met (Huebner & Gilman, 2006).

### **Culture Shock for High-Ability Aboriginal Students Transitioning Into Selective Academic Environments**

The subtle differences and complexity related to the rural and urban education of Aboriginal and Torres Strait Islander children experiencing diverse cultural and geographical contexts must be acknowledged (Yeung et al., 2013). There is a greater involvement in culture and cultural practices in rural areas (Dockery, 2010). In a Canadian study of Aboriginal students' self-concept, Whitley et al. (2014) found the praise and criticism of community, peers, and teachers impacted powerfully students' ASC and grades. In this study, I use the term "academic self-concept" to denote a general self-

perception of competence in school work, as opposed to more specific perceptions of competence in different curriculum domains (Marsh et al., 2017). The self-concept construct is central to psychological wellbeing (Craven & Marsh, 2008). ASC is an important construct because it generates, explains, and predicts behaviour and outcomes in the academic domain.

As Aboriginal adolescence has become excessively concerned with appearances as a way to “fit in” and be liked (Kickett-Tucker & Shahid, 2019), the composition of, and relationships within, the diverse communities and educational settings to which they belong become salient. Some research indicates that despite the diversity of Aboriginal cultures, they are collectivist in nature (Purdie & McCrindle, 2004). This would explain why in an analysis of the ASCs of Aboriginal students aged 9.5 to 11 years, Prehn et al. (2020) found that students were more susceptible to the opinions of community and peers than to non-Aboriginal people. They argued that Aboriginal students place greater emphasis on their peer and family self-concepts. Socialisation influences the development of identity.

**Urban Contexts.** Kickett-Tucker and Shahid (2019) argued that in urban settings, “often urban Aboriginal values are not recognised, articulated or respected [because] their identity is portrayed as not authentic” (p. 199). In half of Australian schools, Aboriginal students are a minority. As the urban schools have 5% or less Indigenous enrolments (Ho & Bonnor, 2018), Aboriginal students have few same-ethnic friendships in class. As there are approximately 2.5% of teachers in NSW who identify as Aboriginal (Johnson, 2017), Aboriginal students have fewer teacher role models, as well. Also, a non-Aboriginal teacher may not have a deep understanding of their culture or perspective. Mainstream schooling, in its origins, culture, expectations, and structure, is alienating to the values, beliefs, and morals of Aboriginal students (Kickett-Tucker & Shahid, 2019). A decade ago,

Purdie et al. (2000) identified the need for urban schools to place value on Aboriginal identity, have Aboriginal resources and activities, and include an Aboriginal perspective where appropriate across the curriculum. Heterogeneous systems, policies, politics, and historical contexts influence the unique experience of Aboriginal kinship and language groups across Australia.

**Rural Contexts.** Regional areas have the greatest proportion of Aboriginal students (ABS, 2016b). Purdie et al. (2000) found that “in schools in which there were high numbers of Indigenous students, identification as an Indigenous person was more strongly expressed than in schools with low numbers of Indigenous students” (p. 27). However, research has identified the association between the increased proportion of the less advantaged Aboriginal students in rural schools with poor and declining average overall student achievement (Biddle & Edwards, 2017; Bonnor et al., 2018; CESE, 2020; SVA, 2019b). Also, a segregated school system is likely to lead to Aboriginal and disadvantaged students not encountering high-achieving coequals and quality teaching environments (Biddle & Edwards, 2018). The resulting intersectional and centrifugal nature of historical outcomes and Indigenous wellbeing are closely connected to geographical separation and disadvantage (e.g., Dean, 2018; Francis et al., 2020).

Poor mental health is also concentrated in rural and remote areas. Stark statistics identify Indigenous youth with a higher incidence of emotional and behavioural disorders and suicide ideation than non-Indigenous youth (Dickson et al., 2019). Dunstan et al. (2017) argued that although parental support, intergenerational trauma, and socioeconomic level increase the risk of emotional and behaviour dysfunction for Indigenous students, “the environment within schools may be more important than the environment outside of schools for affective engagement outcomes” (p. 265). All these factors make rural Aboriginal students more vulnerable.

**Similarities Between Aboriginal Students in Rural and Urban Contexts.** In times of transition and change disruptions in friendships, and changes in academic performance and grades, these changes can impact wellbeing and socioemotional functioning. There may also be insecurity about levels of competence in the new educational setting. In addition, as members of a minority group, Aboriginal students may perceive discrimination and biased treatment as they progress through secondary school. Benner and Graham (2009) in a longitudinal study found decreased wellbeing and lower grades when minority students moved to a high school with fewer members of their race.

Ethnic congruence describes the social situation where minority students create communities of support or ethnic friendship groups with those of the same ethnicity. These social networks are strongest when the number of co-ethnic, or same race, students at school is greater (Georgiades et al., 2013). Often these groups are a response to racism or a way to deal with social exclusion (Ho, 2020). Georgiades et al. (2013) discovered that there is a better person–environment–stage fit with higher ethnic congruence. They found that students enjoying a fit have a higher sense of belonging. Others have found other benefits with ethnic congruence such as better grades (Benner & Crosnoe, 2011) and better wellbeing (Prehn et al., 2020). While these benefits are similar across a diversity of settings, students from different Aboriginal backgrounds will be impacted to varying degrees. For example, decreased achievement and wellbeing may influence rural students hosted in urban secondary schools or urban students attending selective schools. In the Benner and Graham study (2007), the negative effect of transition was more pronounced for Black students. Consistent with these findings, Sahdra et al. (2019) found stronger relations with negative self-perceptions for minority ethnic race members than majority members.

While racism is everywhere, it is also likely that it is “everywhere different” (Kobayashi & Peake, 2000; Vasta & Castles, 1996:14). This variation is likely to be related to the different cultural make-up of each and every region of Australia, to the different needs and resources of the cultural groups in each place, and to the different problems and tensions in each locality. (Dunn, 2003, p. 11)

Discrimination and sanction may take place everywhere even within racial groups. In a study of the racial identity of Aboriginal students, Kickett-Tucker (2008) found students’ prejudice towards other Aboriginal students extending to comparisons of skin colour, knowledge of language, cultural knowledge, and enculturation into schooling. Enculturation into school is defined as successfully meeting the behavioural and performance expectations of school. Qualitative examples from both rural and metropolitan subgroups in NSW in this research give a perspective of the various factors influencing social and academic outcomes across the state’s education system that affect Aboriginal students.

### **Diversity of the Experiences of Aboriginal Youth Across Geographic Areas**

A core developmental need during adolescence is the formation of identity through social structures and interactions with others (Erikson, 1963). There is a complex interplay of social, historical, and environmental factors that interact with the knowledge and feelings attached to family, kin, culture, and country across a lifespan to form identity (Corenblum, 2014). The ABS (2016) reveals that across all socioeconomic indicators, but particularly primary health, Aboriginal Australians are more disadvantaged than other Indigenous groups (Cooke et al., 2007; Steering Committee for the Review of Government Service Provision [SCRGSP], 2009; Townsend et al., 2019). SVA (2019b) found that four key persistent factors distinguished Aboriginal students from other ethnic minority groups. First, the vulnerability of their health might impact their education. Second, as a group,

these children may experience separation from their culture and experiences of racism. Between 1910 and 1970, many Aboriginal children were forcibly removed from their families as an outcome of many government policies. Third, they may experience trauma passed down generations through colonisation and separation of families through removal. Finally, they might attend a school with limited appreciation of Aboriginal culture (SVA, 2019b, p. 7).

Past government policy has disrupted Aboriginal identity, culture, and connection with the land (Kickett-Tucker & Shahid, 2019): “Aboriginal people were forcibly removed from their lands and forbidden from undertaking cultural practices (Trudgen, 2000). Such racially driven practices created feelings of powerlessness, hopelessness, psychological stress and related illnesses” (p. 196). The self-concept construct, at the core of identity construction, is fundamental to Indigenous thriving (Craven & Marsh, 2008).

In delineating the identity journey of Aboriginal youth, Kickett-Tucker and Shahid (2019) argued that for Aboriginal identity to flourish, there must be recognition. In addition, an appreciation of the Aboriginal language and formal recognition of Aboriginal culture by non-Aboriginal citizens of place should facilitate reconciliation. The future generation will be able to build an identity from a sense of pride, dignity, and acceptance. Bodkin-Andrews et al. (2019) found that a strong Aboriginal identity is a critical element in an Aboriginal young person’s positive development and sense of self, and linked overall to positive self-concept, mental health, and behaviour.

Kickett-Tucker and Shahid (2019) found developmental differences in how Aboriginal children viewed their identity. While the most reported elements of self for children were respect and “being different . . . made them feel special” (p. 197), as they grew older, Aboriginal youth became more self-conscious about their identity. Students were excessively concerned with appearances or “how people see you” (p. 198), as

students described it themselves. Apart from “pride about self”, Aboriginal adolescences reported being conscious of “how people” (p. 198) viewed them. The teenage years are a time when young people gain a greater awareness of discrimination and have larger networks of relationships (Sanders-Phillips, 2009). Adolescents are more vulnerable to negative reactions and perceptions. Using multiple indicators of racial discrimination, and longitudinal data among Aboriginal youth, Shepherd et al. (2017) found racism also had adverse effects. Their study found direct and persistent vicarious racial discrimination against Indigenous children was associated with poor mental health, sleep difficulties, asthma, and obesity. A growing body of literature finds consistent evidence. A strong Aboriginal identity is found to be a protective factor for children’s development and wellbeing (Colquhoun & Dockery, 2012; Kickett-Tucker & Shahid, 2019). It provides coping skills and positive self-esteem.

### **Racial–Ethnic Factors and Culture Shock**

There is a notable silence across nearly all gifted research focusing on GAT Aboriginal and Torres Strait Islander students concerning programs to meet their needs. Although approximately seven percent (CESE, 2018a) of all NSW public school children identify as Aboriginal, less than three percent apply (North et al., 2018), and less than one percent (the My School website; ACARA, 2019) attend opportunity classes and selective schools. Only a small amount of research has specifically examined high-performing Aboriginal students. By contrast, gifted education research in the United States (Subotnik et al., 2019) estimates 6.4% of U.S. students are identified as gifted, establishing a benchmark for the percentage population of high-achieving students in the general population of a public education system. The excellence gap (i.e., differences between subgroups of students performing at the highest levels of achievement) in Australia has received little attention and research.

Underachieving, gifted students are invisible in classrooms. In a study on the relation of positive self-concept to school outcomes, Purdie et al. (2000) discovered a general belief among Aboriginal students that “lots of White people think we’re not very smart” (p. 8). In recent research on the long-term effects of teachers’ expectations of Aboriginal students, participants agreed that “certain assessment may be an issue and gifted Indigenous students may be under-recognised because of prioritisation of skills like numeracy and literacy” (Riley & Pidgeon, 2019, p. 133). In the Riley and Pigeon (2019) study, even if identified as gifted, teachers would be less inclined to admit Aboriginal students to academically challenging coursework if their family circumstances were difficult because of the “impact on [the students’] work” (p. 132).

The *Report of the Review of Aboriginal Education* (NSW Aboriginal Education Consultative Group [AECG] & NSW DET, 2004) echoed this frustration regarding limited understanding about high-performing Aboriginal students: “There is little literature or evidence from the field trips about the identification of, or programs developed to meet, the learning needs of gifted and talented Aboriginal students” (p. 99).

This interpretation contrasts with Merrotsky (2013) who created a profile of the possible macro and micro impacts of a disadvantaged background on Aboriginal high-ability students who may be at risk of low self-efficacy. School may be uncomfortably rigid and inflexible, causing culture shock (Purdie et al., 2000). The home values of the student may conflict with school values (Peterson et al., 2009). They may not have the trust, values, and beliefs of the dominant culture, or be in isolation from it (L. Doyle & Hill, 2007). These students may be caught in a developmental stage where they fear failure, are self-conscious, are searching for self-identity (or imposing their identity on others), and may be under greater influence of their peers’ acceptance (Gfellner & Armstrong, 2013). In describing in particular GAT Aboriginal students, Merrotsky (2013)

observed unique differences between high performers and underachievers. He believed that it is likely that underachievers had low self-efficacy and intentionally lowered their academic ability constantly to fit in with their peers and be accepted. The relationship between socio-emotional and learning support, self-concept, and academic persistence is essential to understanding psychological adjustment in the classroom.

Congruent with stage-environment fit (Eccles & Midgley, 1989), the social environment and school context play critical roles in shaping motivation (Eccles & Wigfield, 2020; Schunk & DiBenedetto, 2020). Teacher expectations and specific behaviours influence students' self-perception (Szumski & Karwowski, 2019). Research reveals that despite claims, sometimes loud claims, of being in a post-racial era, teachers make judgements about gifted students biased by their attributions of racial-ethnic factors (Irizarry & Cohen, 2019). Potential talent is not being fully developed amongst groups who have been historically disadvantaged, with some describing the situation as an excellence gap in Australia (Sahlberg, 2020). Teacher expectations have been found to be systematically biased towards outlier groups of students (based on socioeconomic status, or race; e.g., Szumski & Karwowski, 2019). For example, some researchers (Groome & Hamilton, 1995; Partington & Gray, 2003) point out that some people make judgements that Aboriginal students have defiant attitudes to education. As Gray and Beresford (2008) argued, "The wider issue raised by resistance theory is the extent to which racist assumptions continue to underlie the educational policies and practices experienced by Indigenous students" (p. 210). A teacher's perception of a student relates to their ASC and how their academic growth is impacted.

Positive interactions in a classroom are related to a student's ASC (Szumski & Karwowski, 2019) and the development of their beliefs and values about themselves in that context (Craven & Marsh, 2008). Inferring a person's ability is a process underlying ASC.

A teacher's perceptions, behaviour, and feedback can become a self-fulfilling prophecy for ASC (Gentrup et al., 2020). In general, lower expectations of high-ability minority students are made in teachers' evaluations (Benner & Crosnoe, 2011). Self-fulfilling expectations occur when students behave or achieve in ways that support teachers' perceptions. There is a large body of research that supports the differential treatment of students by teachers (e.g., Brophy, 1983; Legette & Kurtz-Cortes, 2020) but also show the impact is strongest on minority students (Demanet et al., 2016; Moodie et al., 2020). For example, in an Australian study, Dandy et al. (2015) found teachers had greater expectations for mathematics achievement for Anglo Australian students compared with Aboriginal students.

Pre-conceived beliefs, implicit attitudes, and cultural factors are key to understanding how teacher expectations are formed (Johnston et al., 2020). Negative stereotypes about race do exist, however subtle and unconscious, and particularly around ASC (Noguera, 2012), except when you belong to the majority. Limited role models, a lack of awareness, and a fluctuating supply of culturally responsive materials in classrooms mean that Aboriginal youth internalise stereotypes of lower academic ability (Merrotsy, 2013). Instead of providing holistic and affirming accounts of how academic identity can be forged to social identity (Burgess et al., 2019; Dillon et al., 2020; McDool, 2020), teachers focus on deficit perceptions of racial differences (Peterson et al., 2016). Stereotypes are powerful unless teachers make a deliberate effort to challenge them (Burgess et al., 2019). All students can achieve at high levels if given the chance and know-how.

Within classrooms, the value of Aboriginal identities is not questioned but more often sidelined in an already crowded curriculum (Masters, 2020) or made susceptible to deficit thinking. Western ideological perspectives continue to permeate the debate with

some suggesting that Aboriginal culture and identity are “wasteful” (H. Hughes & Hughes, 2012, p. 1). In schools, standardised achievement is the public measure of success. In New Zealand, a study by Bishop et al. (2014) revealed that teachers felt Māori students’ cultural capital (limited family support, poor ASC, and basic skills and knowledge) held back their expectations of what students could achieve. Teachers interviewed suggested initiatives for educational success as involving remedial programs or behaviour frameworks. In Australia, similar qualitative results were that teachers had low expectations for Aboriginal students (Munns et al., 2008). Studies that have been conducted reveal that in unfavourable school contexts self-concept may decline, while in favourable school contexts ASC will strengthen. Self-concept effects the motivation to work at school (Hattie, 2009). Therefore, ASC in certain environments will act as psychological construct in the relationship between emotional and learning support and then student expectancy of success.

**Cultivating a Positive Cultural Identity.** The evidence suggests that Aboriginal students’ sense of identity does increase intrinsic motivation (Marsh & Craven, 2006; Mooney et al., 2016; Whitley et al., 2014; Yeung et al., 2013). Increased student expectancy of success may affect the effort put into learning. The way Indigenous students perceive themselves influences the way they perform (Kickett-Tucker, 2019; Marsh & Craven, 2006). For example, in the Te Kotahitanga Project in New Zealand, creating a culturally responsive pedagogy in secondary schools improved the cultural identity of Māori students. Measurable increases in Māori students were found in student engagement, attendance, retention, motivation (Berryman & Eley, 2017; Graham et al., 2010), and achievement (Graham et al., 2010; Hynds et al., 2017). In Australia, Prehn et al. (2020) found that for each extra unit in “days per week spent with Elders” (p. 5), there were related increases in Aboriginal students’ reading self-concept. They found across measures and subjects, the cultural training of spending time with Aboriginal community was

significantly related with an increase in ASC. Bodkin-Andrews et al. (2019) argued that there are distinctive cultural influences drawn from Aboriginal epistemologies that may provide deeper relations between motivation and schooling outcomes for Aboriginal students (Corenblum, 2014; Dockery, 2011; Kickett-Tucker & Shahid, 2019; Osborne & Taylor, 2010). Traditionally, cultural identity and practice have been important in the development of Aboriginal adolescents (Burgess et al., 2019).

Despite the progress of these culturally specific findings, the impact of cultural identity to engender academic motivation has been difficult to validate empirically through quantitative research. This difficulty has been the result of the complexity of classroom influences. However, education policy (e.g., Bishop et al., 2014), theory (Sarra et al., 2018), and quantitative evidence (Harrison & Greenfield, 2011; Preston & Claypool, 2013) emphasise that strengthening cultural identity within the schooling environment for Indigenous students has positive outcomes.

### **Streaming**

The extent to which the impact of streaming is neglecting groups of high-performing minority students, such as Aboriginal students, is a concern in educational research and practice all around the world (Boone & Demanet, 2020; Ozer & Perc, 2020). Streaming or tracking is used to assign students to certain academic classes based mainly on their demonstrated ability or high achievement (Chmielewski, 2014; Loveless, 2013). The institutional effects of tracking in the early secondary school years lead to an emergence of two separate learning environments of differing quality and school culture (Knigge & Hannover, 2011; Legette & Kurtz-Costes, 2020). Separate trajectories of students' school achievement and development of cognitive ability are created by these institutional differences (Becker et al., 2012; Schulz et al., 2017). In addition, research on achievement gaps in secondary school has shown that large gaps occur in learning gains

between track differences (e.g., Dockx et al., 2019; Kulik & Kulik, 1982). Following the trajectories of high- and low-tracks, these institutional effects also influence positive and negative outcomes (e.g., Knigge & Hannover, 2011; Scharenberg, 2016; Van Houtte, 2016). A major concern with early tracking, such as occurs in the NSW public school system, is an increase in inequality of opportunity (Hanushek, 2020). Educational inequality increases systematically in countries which implement early tracking (Reichelt et al., 2019).

### **Purpose of GAT Streams**

In the NSW public school system, GAT classes are increasing (Johnston & Wildy, 2016; Spina, 2019). In the “GAT class” model, local schools hold selective tests at the transition to secondary school when students are between 11 to 12 years old. Local secondary schools invite students that show high cognitive ability to be placed in a special program. Thus, these students join a special educational program with quality provisions across the curriculum but are also exposed to same-age peers of similarly high intellectual ability. In this type of program, the entire curriculum is designed for academically gifted students.

Johnston and Wildy (2016), in their review of the prevalence of streaming in secondary schools in NSW, found that a highly structured ability grouping is socially divisive, and pupils in the lower ability groups may be stigmatised. For example, according to the OECD (2013), most (95%) of Australia’s schools use some form of streaming. “Streaming” is defined as a within-school mechanism for dividing students into ability-based classes (Johnston & Wildy, 2016). This structured form of ability grouping is used by many schools across Australia to differentiate students’ academic needs during the lower secondary years (Spina, 2019). The ablest students are siphoned off into the top class in the local comprehensive high school (Bonnor et al., 2018).

The entry to a top class has been thought to be a self-fulfilling prophecy. Francis et al. (2020) state:

the original prophecy interpolated by the ‘ability track’ label *snowballs* as it builds momentum and impact via the various practices, understandings and behaviours on the part of the individual concerned (pupil), inter-actors (teachers, parents, peers), and organisational structures (the school and its practices). (p. 639)

In a recent study which set out to determine the association between classroom composition effects and teacher quality, Fauth et al. (2021) using multilevel analyses of a sample of 1,070 3rd graders, confirmed that classes with more favourable cognitive composition might be exposed to more favourable learning contexts. Often, the students in the top class receive more resources, “better” teachers, and more challenging courses (Johnston & Wildy, 2016; 2018; Legette & Kurtz-Costes, 2020).

Therefore, a broader systemic context shapes the opportunities students have, including entry to Selective School. The process of selection is not culturally or gender neutral. For example, the *Review of Selective Schools Access* (North et al., 2018) identified that although applying for selective school “is a deliberate choice by students and their families . . . [there are] unintended barriers in the application process” (p. 5) for Aboriginal students. The review (North et al., 2018) reveals evidence of an ‘excellence gap’ whereby there are differences between sub-groups of students (such as low socioeconomic status and ethnicity) performing at the highest levels of achievement (Jacobs & Wolbers, 2018). Other evidence comes from the OECD’s PISA 2018 survey where performance gap between the highest and lowest deciles in socioeconomic status was significantly wider in Australia (OECD 2020).

The review revealed several limitations in the design of selection tests finding that

Low targeting is a problem because it means that decisions based on placement scores at the higher end of the scale are effectively determined by a very small number of items, largely from the maths and general ability tests. This creates a greater chance for measurement imprecision. (North et al., 2018, p. 15)

Second, the review found a high correlation between the mathematics and general ability tests, which represented half the overall placement score: “This over-weighting of mathematical ability may be a cause of a gender gap in profile score” (p. 15). Finally, the review found that the tests’ design and structure made it predictable: “Predictability is a problem because it increases the likelihood that test scores reflect on-the-day performance rather than true ability. Prediction can also make the tests more ‘coachable’” (p. 17). As coaching is expensive, some socio-economic and demographic groups have more access to educational opportunities such as tutoring and coaching.

Further, there is evidence that coaching is related to cultural and geographic backgrounds and locations, thus a factor contributing to the presence of excellence gaps in Australia (Ho, 2020). Coaching can be defined as deliberate practice for a test. In the qualitative fieldwork of the review project, researchers asked students for feedback on the test. “Students who hadn’t engaged in coaching or had other test preparation assistance reported that they were often surprised by questions and the test format, ran out of time, and struggled to understand questions” (p. 18). Dooley et al. (2020), in their analysis of private tuition in Australia, found 46 suppliers in a suburb of Australia that had a sizeable population of immigrants from East Asia. The review (North et al., 2018) reported they found less use of coaching in rural and regional areas compared to urban areas.

It is true that the institutional effects of tracking in the early secondary school years lead to the emergence of two separate learning environments of differing quality and school culture (Knigge & Hannover, 2011; Legette & Kurtz-Costes, 2020). Separate trajectories of

students' school achievement and development of cognitive ability are created by these institutional differences (Becker et al., 2012; Blossfeld et al., 2016; Schulz et al., 2017). Ozer and Matjaz (2020) in their review of international research on tracking found negative effects are particularly salient with early tracking simply because the developmental age of students means their social background may impact on learning influential manner and the early lack of resources may mean they are less able to compensate for any gaps in academic strategies, skills, or content. In addition, research on achievement gaps in secondary school has shown that large gaps occur in learning gains between track differences (e.g., Dockx et al., 2019; Kulik & Kulik, 1982). Following the trajectories of high- and low-tracks, these institutional effects also influence positive and negative outcomes (e.g., Knigge & Hannover, 2011; McDool, 2020; Scharenberg, 2016; Van Houtte, 2017).

The present research aimed to identify the features of educational programs that attract and benefit high-ability Aboriginal students to join their Year 7 GAT class and the extent to which high-ability Aboriginal students' perceptions differed in reasoning and participation in the GAT class over the year.

### **In-School Stratification Systems**

Highly structured streaming in the NSW educational system is concerning given international research supporting the BFLPE in academic contexts. This system divides students based on past performance at a time when new social groups and frames of reference are developing. In a study of 109 high-ability students entering a gifted stream in high school, Preckel et al. (2010) found the students reported a decrease in maths ASC which was largest early in the year. Other research into transition has also found the change from a mixed-ability class to a more competitive class with higher achieving peers can change the frame of reference (Park, 2020; Vogl & Preckel, 2014). Becker et al. (2014) in an investigation

into transition compared the development of 155 early-entry students who moved to an academically selective secondary school to 3,169 regular students. They found that the combination of uncertainty about one's ability in the early-entry group with a possibly more competitive environment may increase the likelihood of revealed contextual effects of negative ASC and school anxiety. This loss is of concern as positive ASC has been found to have beneficial effects on motivation, well-being, and subsequent achievement (Marsh et al., 2020).

Moreover, the BFLPE, a theoretical perspective of ASC, has proven to be a robust psychosocial phenomenon in educational research (e.g., Marsh et al., 2020). The secondary education transition is a stage characterised by the growing importance of academic achievement and competition between students (e.g., Simmons, 2017). Students in a competitive learning environment, where one is relatively less bright, may result in a lowered self-concept academically (Kadir et al., 2017). The detrimental effects of this comparison process have been validated across responses in over 57 countries, making it generalisable cross-culturally (Nagengast & Marsh, 2012).

The BFLPE conjectures that one's ASC is relatively high when one is the most talented in a group (e.g., a gifted student in a regular class) but relatively lower when placed within a competitive pool of talents (e.g., an average member in a gifted group). Regardless of academic ability, ASC is influenced by the person's self-assessment of personal ability level in comparison with others in the school or class. This relativistic impression is used as the basis to form an individual's sense of competence. For students of the same ability, those in mixed or low-ability schools would have higher self-concept than those in more elite schools. The effect of school-average achievement on ASC is therefore negative. Based on the logic of BFLPE, going to an academically selective school or class is expected to result in lower ASC. Apart from larger negative effects on

ASC, the school-average ability also negatively affects self-esteem, standardised test scores, and attendance (Nagengast & Marsh, 2012).

As students move from primary into secondary school, the change in the school environment is challenging. Students' observable deterioration in drive and commitment in classrooms reflects the developmentally unsuitable shifts in the culture of classroom environments. Streaming in Year 7 causes systematic differences in students' social-cognitive development (Preckel et al., 2010; Becker et al., 2014). Social-cognitive development involves an individual's shaping of self-perceptions, beliefs, and goals. Streaming shapes students' social cognitions, which influence wellbeing, effort, and achievement. In addition, as streaming is associated with students' social networks and self-beliefs, these associations may be moderated by ethnicity and the racial composition of the class or school. In the Australian context, Prehn et al. (2020) concluded that Aboriginal students who had a positive ASC were also part of the Aboriginal community and had strong social networks.

However, in general, considering the structural inequalities and disadvantages faced by Aboriginal students, Aboriginal students have been found to have lower ASCs when compared to their commensurate peers (Yeung et al., 2013). Some argue that this contributes to lower levels of engagement, wellbeing, and achievement. In NSW schools, engagement and sense of belonging have been identified as declining in transition to Year 7 (McCourt, 2017). Internationally, the increasing sense of academic futility has been well established in the transition literature (DeWit et al., 2010; Eccles et al., 1993; Eccles & Roeser, 2011; Nagaoka et al., 2015). In Year 7, the positive attitudes that new secondary school students arrive with decline significantly by the time they move into Year 10 (Cox & Kennedy, 2008; McGee et al., 2003).

In-school stratification systems create academic peer groups within schools that form students' self-perceptions, beliefs, and goals. Differences in teacher expectations, beliefs about the source of effort, and conflicts between social and academic goals might shape students' experience of the secondary education transition. In turn, these social–cognitive processes may impact academic performance and behaviour. Finally, ethnic congruence, class ethnic composition, and school demographics may also impact students' achievement motivation. Considering the effects of streaming and various classroom environments on student motivation, as well as the proliferation of GAT classes in NSW high schools, it is important to understand the social–cognitive effects on Aboriginal and non-Aboriginal students. There is also little knowledge about how classroom composition processes, such as the BFLPE, may influence their school engagement, motivation, and achievement (Johnston & Wildy, 2016) across various classroom environments and selective academic settings.

### **Development of Beliefs Shaped By Tracking and Ability Grouping**

**Development of Effort Source Beliefs.** Children increasingly integrate information from their surroundings into the construction and formation of their self-concept as they become more cognitively mature. Adults often assume that there is an inverse relationship between effort and ability (Heyman et al., 2003; Wen et al., 2019), whereas children may find them more related. In other words, while for adults, higher effort indicates lower intelligence, some researchers suggest that this cognitively demanding concept is not commonly found in primary aged children (Surber & Manis, 1984). Transition to secondary school where there is increased emphasis on both achievement and competition, high-ability students may be prone to comparisons of effort. Higher investment of effort, as compared to others, may increase uncertainty about one's ability and the ambiguity of verifying their own competence. This may be one of the

factors may induce lower ASC in a close relationship with academic engagement and competence-related beliefs.

On the other hand, the cost of effort may impact student's self-perceptions via overconfidence. In systems where students are grouped according to ability, the high- or low- ability class inevitably operates as a reference for student self-evaluation. Perception of one's ASC is likely to be higher in a low-achieving class than in a high-achieving class (Marsh, Abduljabbar, et al., 2015). In specific circumstances where a school social comparisons provide a student with confidence, ASC can further reduce the fear of failure, which may decrease academic effort (Francis et al., 2020). BFLPE research relies on contextual differences, that is high-average-ability contexts, with frames of reference as the most important factor. According to the results of Kizilcec et al. (2017) college students who had low levels of fear of failure but perceived that they had higher levels of competence, BFLPE, disengaged academically during the course. Thus they found a decrease in investing in effort for those who perceived themselves as higher performers to compared to peers.

**Development of Ability Judgements.** The guiding rationale of social-cognitive theorists is that there are developmental changes in cognitive maturity that impact emergent reasoning about "ability" at the life stage in which transition occurs (Marsh et al., 2014; Muenks & Miele, 2016). Folmer et al. (2008) concluded that the effect of age on motivation was due to the effect of age on ability judgements. Self-concepts of ability can be generalised over all age cohorts. The BFLPE model postulates that placement in a high-ability group exerts a negative effect on self-concept and hence. Students who are equally capable may feel less competent in comparison to their classmates. Indications of more complex cognitive development of the BFLPE process has also been found as students grow older. Marsh et al. (2014) found that BFLPE was significantly larger and more

negative in secondary (eighth grade) than in primary (fourth grade). Older students with more cognitive maturity have been shown to experience a more negative BFLPE than students who are younger.

**Implicit Theories of Intelligence.** By contrast, individual differences in beliefs about the nature of intelligence have been popularised in education as an essential variable for helping struggling students (e.g., Blackwell et al., 2007). In a recent study on growth mindsets, Tarbetsky et al. (2016) investigated low-ability Aboriginal students in relation to how malleable they believed intelligence and ability to be. The students were asked whether they believed in “growth” potential of their intelligence, or alternatively a “fixed” ability that can hardly change. Tarbetsky et al. (2016) found a significant association between Aboriginal status and fixed mindset beliefs. Aboriginal students tended to view intelligence as an unchangeable entity. Additional significant associations were found between a fixed mindset and low levels of achievement. Three explanations were suggested for this finding in Aboriginal students: (a) stereotype threat (Dandy et al., 2015), (b) high levels of fear of failure (Groome & Hamilton, 1995), and (c) being regularly and consistently subjected to low expectations (Gray & Beresford, 2008). Tarbetsky et al. (2016) recommended explicitly promoting incremental beliefs and personal goal setting. This recommendation was based on the premise that a growth mindset enables an individual to see socially imposed personal beliefs as malleable. Viewed this way, a student’s currently low performance can change, so the student does not need to remain low. As this study investigated Aboriginal students, further research is needed to investigate whether promoting incremental beliefs would in particular benefit high-ability students.

Simple interventions using effort–ability beliefs aimed to lessen the achievement gap; however, not all evidence has been straightforward. Some studies have shown that

high-ability students do not benefit from growth mindset interventions. A meta-analysis of growth mindset studies by Burnette et al. (2013) showed small effect sizes. A large-scale growth mindset intervention found improved growth in the grade point average (GPA) of average and low-achieving students (Yeager et al., 2016), but again, the effect size was small. The high achievers had a nonsignificant effect size from the growth mindset intervention. The researchers Yeager et al. (2016) explained this statistical anomaly for the high-ability students in terms of a ceiling effect. As students' baseline grades were already high, there was little room for growth for this cohort.

In a critical review of this study, Schwartz et al. (2016) provided a different explanation for this apparent incongruity for the high-ability students. They hypothesised that high-achieving students did not reason growth as relevant for them. These students were succeeding in the context that had been well established. They were already building their self-concept on academic competence and skills. Setbacks were not expected based on the evidence of their successful personal experiences. Understanding the tenets of growth mindset did not significantly impact the performance of the high-ability students' performance or perceptions. For underachieving high-ability students, however, they may have different perspectives for their reasoning. There appear to be individual differences due to personal estimations of ability and effort.

Accordingly, the nonparticipation of high-ability Aboriginal students in selective class environments may deepen and extend our understanding of student perceptions in high performance and socially comparative situations. It is a fact that, annually, many gifted Aboriginal students who are eligible to enter selective high schools (SHSs) decline to participate. An SHS is a known competitive environment where the reasoning about effort, and its relationship to ability, continually affects motivation. The nonparticipation of Aboriginal students in competitive situations may be a result of their personal

estimations of ability and effort, which are different from their non-Aboriginal peers. Hence, there appears to be a difference between Aboriginal and non-Aboriginal students in the way they view “intelligence”, with Aboriginal students more likely to hold a fixed mindset (Tarbetsky et al., 2016).

One may hypothesise that these impressions (effort vs. ability), when juxtaposed, would result in the BFLPE. If students, in their reasoning, identify their level of competence as inferior to others in their class, this comparison would lead to an estimation of a huge amount of effort required to remain competitive, and this estimation will make them feel helpless (Muenks & Miele, 2017). Therefore, we can hypothesise that disadvantaged students (such as Aboriginal students) who identify the ability gap being too large are more likely to choose not to participate, feeling success is out of their control. For students who identify their level of competence as comparable, if not superior, to their peers, they are less likely to estimate that the effort will be costly. In this case, their reasoning may lead to their choice of participation in a mixed-ability classroom. However, if they hold a fixed mindset and experience setbacks as they progress in the competitive setting, their reasoning based on this mindset may cause them to believe they will continue to fail, and therefore cease to try. This mindset, together with a lack of academic skills and competence due to the suboptimal effort, may lead to lowered motivation and subsequently, lower achievement.

### **Chapter Summary**

Research examining the effects of transition to secondary has predominantly focused on the decline in engagement, attendance, and achievement across the Year 6 to Year 7 period. Additional awareness and greater importance should be placed on supporting adolescents to succeed during this period. Indicators of a successful transition include emotional wellbeing and academic growth. Internationally, there has been an

increase in grouping students by ability as they enter secondary school. This intended or unintended segregation by ability may have consequences for the success of transition for certain groups of students, in particular minority races such as Aboriginal students. Where students are streamed from the early secondary school transition just when they are developing their sense of self, there is evidence that the development of self-concept based on relative comparisons with others may become internalised.

In NSW pedagogy and practice of transition, processes focus on “Western systems”. In a society characterised by increasing cultural diversity, effective education systems need to value, model, and implement respect for diverse cultures. The education system has a role in encouraging schools to create an environment where students want to fit in and belong. To “fit in”, all students must feel that their cultural background is respected. In New Zealand, the Te Kotahitanga pedagogy (Bishop et al., 2014) was probably successful because in classrooms teachers strengthened the cultural identity and potential of Māori students. The Te Kotahitanga strategy modelled how Indigenous cultures can be valued within the curriculum content and in the school community.

By contrast, there is convincing evidence of a mismatch between the needs of adolescents and the school environment of Australian secondary schools. In particular, the NSW education system with its competitive culture of streaming in early secondary school has more challenging behavioural and performance expectations for many Year 7 students, particularly Aboriginal students (McCourt, 2017). Despite years passing since the *Future Directions* report (NSW DET, 2005) was published, changes in structures and policy have not occurred. However, literature and policy reveal that NSW stakeholders have identified this period of secondary education transition as crucial.

In the transition to secondary school, Aboriginal students are underrepresented in selective academic environments compared to their non-Aboriginal peers. For high-ability

Aboriginal students transitioning into selective academic environments in NSW schools, the culture they come from at home may bear little resemblance to the one they enter at high school. There are indications that a cooperative learning environment may support self-concept (Frank, 2020; Kulakow, 2020). The development of a healthy academic identity for Aboriginal students may be a strategy to facilitate a successful transition. Therefore, streaming in Year 7, the development of a strong ASC, and students' social and academic outcomes over time and their relations with each other, should be examined.

As grouping by ability systematically shapes students' social cognitions, it is likely that streaming produces differences in ASC during the transition period. In the perception of students, grouping students by ability suggests that intelligence is fixed in quantity and unchangeable. The conspicuousness of these grouping arrangements has the potential to influence students' identities, shape their self-perceptions of ability, and place them on trajectories for their future that may be difficult to change. For Aboriginal students, the racial incongruence and composition of classrooms are possibly mediating factors in the development of competition and maladaptive upward comparisons in selective academic streams. As a result of these social–cognitive mechanisms occurring in secondary education transition, strategies need to be employed that account for and support students' ASCs.

## **Chapter 3**

### **Theoretical Underpinnings**

#### **Introduction**

This chapter illustrates the significance of psychosocial mechanisms (Marsh et al., 2020) in examining the impact of selective settings on high-ability Aboriginal and non-Aboriginal students in secondary education transition. Self-concept theory and wellbeing research are used to contextualise students' academic and social functioning during this transition. Hence, this chapter provides a theoretical and empirical foundation to determine how this transition may impact students.

The chapter presents an overview of self-concept theory (especially self-perceptions derived from the BFLPE), growth mindset theory (self-beliefs about ability), expectancy–value theory (self-goals), and ethnic congruence theory (sense of belonging). These four prevalent theories allow for a nuanced understanding of what influences how individuals think about the relation between levels of effort and ability. These theories are chosen because they help understand that self-perceptions shape students' self-beliefs about their academic abilities. BFLPE is based on self-perceptions derived partly from social comparisons. Self-beliefs about ability are based on conceptions about the malleability of intelligence. If intelligence is not changeable, this concept influences the amount of effort students may be willing to invest in tasks. Self-perceptions drive the types of goals (self-goals) that students set for themselves. Students act to achieve these goals. They make personal judgements of how well they have achieved these goals, in turn mediating academic behaviours and achievement. Finally, given the purpose of school is to

learn, these social cognitions may moderate whether a student values school and feels like they belong. Ethnic congruence research focuses on how motivation operates ethnically diverse student populations. Hence, these theories make sense to be studied together. The current research seeks to make a significant contribution to identifying how the research supports and extends recent advances in these theories concerning the secondary education transition. These are known important cognitive and affective concepts for appreciating how students function in socially comparative situations such as streaming.

First, current theory and research are explored that reveal the role of transitioning into ability groupings in the first year of secondary school. This streaming shapes the experiences and social–cognitive beliefs of high-ability students. Second, the role of self-concept in the development of the social–cognitive belief system during adolescence is examined. Third, an overview of key theories is provided: BFLPE theory (self-perceptions), growth mindset theory (self-beliefs), expectancy–value theory (self-goals), and ethnic congruence theory (sense of belonging). Then, an adapted quadripolar model (Covington, 1992) is described, shifting the focus to the dual goals of the learning context. Finally, the connections between homophily, race, and the valuing of school are explored. The implications of recent advances in self-concept theory, Indigenous thriving, and research in relation to the secondary education transition illuminate issues that remain underexplored yet are critical to understanding the academic experiences and successes of high-ability Aboriginal students.

## **Changes in Self-Concept Associated with Transition from Primary to Secondary School**

### **Transition to Selective Academic Environments**

Research into schooling in the transition years identifies the secondary education transition as simultaneously occurring during a crucial stage in human development, puberty. Adolescence encompasses puberty and brings significant physical and developmental change. The change to a new educational setting provides major disruptions. Students must cope with impacts to their self-image as well as the new social and academic challenges of secondary school. A characteristic of adolescence is self-consciousness, which can create a struggle with real or imagined social pressure. Adolescents tend to see themselves in ways they envisage others see them. Adolescents are inclined to match their beliefs and behaviours to group norms to be accepted by other adolescents (Ryan & Deci, 2017). Thus, adolescents are considerably influenced by their peers (Pozzi et al., 2019).

Some studies have found that competitive academic environments may facilitate feelings of self-consciousness and anxiety (Eccles & Midgley, 1989; Roeser et al., 1996). Competition “to be the best” pervades selective academic environments and becomes a threat to self-worth. Secondary school environments have been shown to be more competitive and evaluative than primary school environments (Ryan & Deci, 2017). Other research has found that as students move through the school system, the learning climate becomes more focused on achievement and performance (Maehr & Zusho, 2009). The increasingly evaluative environment of secondary school provides an intense education that is likely to suit some personalities, and kinds of ability, more than others. If the social environment does not fit the psychological needs of adolescents, then a decline in

attendance, engagement, and achievement is expected (Eccles et al., 1993). Therefore, secondary settings represent changes from the less-competitive values of primary school. Secondary schooling may also result in new friendship groups and a shift to more rigorous behavioural and performance expectations from secondary school teachers.

### **Compositional Effects of Ability Grouping**

A central aspect that students are confronted with after transitioning to secondary school is compositional effects of selectivity within the two-track system of most schools. This is despite the Vinson (2002) inquiry conclusion that there are “no values or evidence-based rationale that would support a rigid division within the same school into two totally separate streams (the ‘gifted’ for all subjects and the ‘non-gifted’ for all subjects)” (p. 29). The Vinson (2002) inquiry drew attention to problematic issues such as disadvantage and inequity in education that accompanies rigorous ability grouping (Dillon et al., 2020; Fogarty et al., 2018). In a key policy document, Ockenden (2014) summarised what we know about factors that can affect Aboriginal students reaching their academic potential as “poor transition from primary to secondary school, racism, poor teacher–student relationships and poor perception of academic ability” (p. 1). Research indicates that teachers tend to underestimate academic talent from some cultural groups including Aboriginal students (Riley & Pidgeon, 2019; Vinson, 2002).

Recent studies have shown how school segregation, through the mechanism of systemic ability grouping in secondary schools, has played a role in undermining the education performance of Aboriginal students (Biddle & Heyes, 2014; Bonnor, 2018). Classroom composition effects, such as the BFLPE, are known to impact a successful transition to secondary school (Legette, 2020). In a transition study Preckel et al. (2010) found BFLPE on ASC when new and more similar ability groups are formed for high-ability students (who had come from mixed-ability primary schools). BFLPE develops

through experiences with and interpretations of one's environment. For example, Szumski and Karwowski (2019) using a large sample in a longitudinal investigation observed an indirect effect by demonstrating that teacher expectations were related to students' ASC and which then translated into achievement.

Indeed, students who feel more confident in an area of study or work will engage better and persist longer (Dulay, 2017; Marsh & Craven, 2006). Numerous studies have cross-culturally supported the BFLPE (Guo et al., 2018; Nagenast & Marsh, 2012). Purdie et al. (2000) in a seminal study identified:

When young people have positive conceptions of themselves both as Indigenous people and as students, attachment and commitment to school, and successful school performance will be more likely outcomes than when there are excessive contradictions or tensions between the various aspects of self. (p. ix)

A positive self-concept is related to success for Aboriginal students. However, systemic ability grouping in secondary schools has played a role in undermining the positive self-views of Aboriginal students.

### **Nature and Development of Self-Concept**

Self-concept research studies internal and extrinsic factors that contribute to an individual's striving for self-actualisation: motivation, flourishing, social integration, and wellbeing. From our image of ourselves come our values and motives that, in turn, provide the most meaningful explanations of behaviour. In an educational context, the internal perceptions of ourselves contribute to self-actualisation. However, in many school settings, the prioritisation of external accountability, in the form of standardised testing, has narrowed the focus of stakeholders to cognitive goals (or the demonstration of "intelligence") (e.g., Ryan & Deci, 2017). In schools where priority is placed on cognitive outcomes, evidence of intelligence becomes the basis for self-worth. This priority can be

powerful in undermining a student's personal development and wellbeing. Despite a growing acknowledgement of wellbeing as an educational priority, education policy has continued to focus more on achievement outcomes from standardised testing sources (e.g., Centre for Education Statistics and Evaluation).

Notwithstanding, ASC, wellbeing, and academic achievement have been shown to have mutually beneficial effects (Marsh & Craven, 2006; Marsh et al., 2002) including satisfaction and enjoyment of school. In social-cognitive theory, Bandura's (1986) conception of human agency was based on individuals possessing self-beliefs that allow them to implement control of thoughts, feelings, and actions. People direct their thoughts and actions in intentional ways. In achieving goals, they are both influenced and acted upon in dynamic cycles by the environment and their behaviour. Individuals interpret their experiences and relationships, reflect on their self-beliefs, and alter their thinking and behaviour. Self-concept is a measure of a student's confidence in their abilities and includes both reasoned (thoughts about) and emotional (feelings about) self-judgements (Marsh et al., 2017). Self-concept scales reflect this construct and are indications of students' perceptions of themselves and typically include relative self-comparison. Absolute self-perceptions imply judgement against a concrete performance such as an assessment or test (Boissicat et al., 2020). Therefore, evaluations of internal and external comparisons of oneself influence ASC (Marsh, 1993). Positive ASC will have a positive effect on behaviour, aspirations, and achievement outcomes (Bakadorova & Raufelder, 2020; Craven & Yeung, 2008; Marsh & Craven, 2006).

### **Distinguishing Characteristics of Self-Concept**

Shavelson and Marsh (1986) identified five features to define self-concept: organised, multifaceted, hierarchical, evaluative, and differentiable. "Self-concept beliefs are normative, typically aggregated, hierarchically structured, and past-oriented self-

perceptions that are more stable due to their generality” (Schunk & DiBenedetto, 2016, p. 39). Self-concept reveals how comparisons relative to others form evaluations of personal competence (Schunk & DiBenedetto, 2020). However, these evaluations are swayed more by the localness of the information than by its accuracy. In schools, this causes the BFLPE, whereby students evaluate themselves in relation to their standing within a local group of peers. An individual’s self-concept becomes dependent on the social comparison within that local context, such as the class. Self-concept cannot be satisfactorily understood if the role of frames of reference is overlooked. The standard of comparison that individuals use to evaluate themselves can lead to different self-concepts, even when using the same objective characteristics. Hence, self-concept does not always fit with reality.

Another key distinguishing characteristic of self-concept is its many dimensions. Marsh (1993) advised the “research clearly demonstrates that self-concept and its relation to other variables cannot be adequately understood if its multidimensional, domain-specific nature is ignored” (p. 92). The hierarchy progressively tapers to more distinct self-concepts. For example, ASC can be subject specific. Self-perceptions of particular aptitudes (e.g., self-efficacy) impact subdomain self-concepts (e.g., mathematics, English), which merge to shape the ASC.

### **Primary Sources of Self-Efficacy**

Research confirms that several mechanisms modify and mediate self-views over time, either directly or indirectly. Self-efficacy refers to an evaluation of one’s abilities and a self-view that one is capable of learning and achieving performance (Bandura, 2010). Similar to Bandura’s (1997) primary sources of self-efficacy, the mechanisms are divided into five subtypes: attributions, self-perceptions, temporal comparisons, social comparisons, and self-evaluation (Hannover & Zander, 2020). All of these mechanisms have an important role in the development of self-concept and consequentially, the

facilitation of motivation in students. First, attributions are the self-reflections made when viewing oneself through the perspective of one's peers (Harter, 2006). The importance of third-person perspective taking in adolescence has been confirmed by neuroscience, which has found that adolescents have more activity in the region of the brain used for attribution than adults (Pfeifer et al., 2009). Second, self-perceptions are a person's own beliefs or predictions concerning their abilities and performance (Harter, 2006). Also, Silverthorn et al. (2005) identified two types of comparison: temporal comparisons, which refer to an assessment of present performance and past performance over time, and social comparisons, which refer to comparisons of one's own behaviour to the behaviours of others. By capitalising upon these different theories that account for change in self-views, this study provides greater insight into the situations in which these mechanisms occur and the optimal educational contexts for psychological wellbeing, flourishing and succeeding.

### **Self-Efficacy and Identity**

Self-efficacy is a performance-based measure of perceived competence and therefore is a "bidirectional, cumulative, and dynamic nature of relations among the constructs in their models both over time and across situations" (Wigfield & Koenka, 2020, p. 2). There is consensus among theorists and researchers that the social environment and context plays a central role in shaping motivation (Eccles & Wigfield, 2020; Nolen, 2020; Ryan & Deci, 2020; Schunk & DiBenedetto, 2020; Wigfield & Koenka, 2020). Students make moment-by-moment decisions and evaluate different bases for efficacy to make differential aptitude conclusions about themselves (Schunk & DiBenedetto, 2016). Nolen (2020) identified context as an important influencer of efficacy, impacting students' self-views rather than mediating them.

In examining factors influencing efficacy, recent research has revealed that it is not simply the type of evaluation source (the personal experience) but importantly, the

credibility of the person giving that feedback in the social environment (Duchatelet et al., 2020). A credible teacher's feedback, or a credible peer's feedback, will "impact" student self-efficacy (Nolen, 2020, p. 4). Therefore, school experiences are crucial for the development of self-efficacy. Some minority students' experiences of being excluded from the opportunity structures in schools may rouse personal contemplation as to whether school is a place I/my group can belong (Gray et al., 2018). For example, systemic ability grouping in secondary schools has been found to play a role in undermining the positive self-views of Aboriginal students (e.g., Kickett-Tucker & Shahid, 2019; Luke et al., 2013; Prehn et al., 2020).

Hence, there has been a recent theoretical shift away from trying to "fix" or improve the student towards changing the educational setting as a result of the central role of the social environment and context (e.g., Duchatelet et al., 2020; Wigfield & Koenka, 2020). My study provides greater insight into the situations in which these mechanisms occur by providing greater focus on how students' race has implications for self-efficacy and subsequent reasoning and behaviour (Nolen, 2020; Rjosk et al., 2017; Wigfield & Koenka, 2020).

### **Transitioning Into Ability Groups**

Ability grouping or streaming has been shown to have a direct impact on students' self-perceptions. In NSW schools, ability grouping between schools and within schools sorts students into ability groups in the secondary education transition. This practice of streaming makes differences in aptitude salient in the school context. As has been discussed, this streaming occurs at a time that is foundational to the development of a self-concept that may stay with them for the rest of their lives. Streaming shapes important types of psychosocial processes: self-perceptions, self-beliefs, goals (social and academic), and sense of belonging (Darling-Hammond et al., 2020; Marsh et al., 2020). Streaming

directly shapes students' self-perceptions because streaming makes differences in ASC more salient. In a high-ability group or track, students are often highly motivated and are potentially ego-involved in personal self-perceptions of effort investment, rankings, grades, and teacher–student interactions (Luthar et al., 2019; Lyman & Luthar, 2014; Poorthuis et al., 2015). High-stakes testing and ego-involving pressure can create competitive educational settings. In ego-involving educational contexts, the effects of competition are expected to be negative (Hirsch, 2019; Kim et al., 2017; Luthar et al., 2020).

A family and/or school environment characterised by extreme pressure to succeed or to outdo everyone else . . . can affect youth in significantly deleterious ways, including causing high levels of stress and anxiety or alcohol and drug use and dependence. (Geisz & Nakashian, 2018, p. 20)

Classroom climate and evaluations impact a student's self-actualisation that, in turn, affects both achievement and wellbeing outcomes.

## **Self-Perceptions**

### **ASC**

Students' sense of self at school can influence their motivation and behaviour. Perceived self-efficacy can play a direct role in formulating positive or negative beliefs about ability and facilitate striving or thwarting personal goals, thereby operating together to shape behaviour (Muenks & Miele, 2017).

Positive self-perceptions (Ryan & Deci, 2020; Wigfield & Koenka, 2020) and self-efficacy (Schunk & DiBenedetto, 2020) are based on past experiences and comparisons with others that an individual can plan, organise, and succeed in academic development. In a longitudinal study of students' ASC over the transition from primary school to secondary

school, ASC declined (Wigfield et al., 1991). Wigfield et al. (1991) found students' perceptions of lower academic competence were due to the change in educational settings. Simmons (2017) also found that the move to secondary school accentuates competition, social comparison, and ability self-assessment. The development of increased abstract logic and reasoning processes gives early adolescents increased intuition to use social comparative information to appraise their aptitudes (Gurel et al., 2020; Muradoglu & Cimpian, 2019). In adolescence, individuals value the perspective of others greatly and seek approval from the significant people in their lives (Bakadorova & Raufelder, 2020; Kavanagh, 2020). Adolescence is the stage where individuals explore their sense of self.

In this study, I use the term ASC to denote a general self-perception of competence in school work, as opposed to more specific perceptions of competence in different curriculum domains (Marsh et al., 2017). ASC is an important construct because it generates, explains, and predicts behaviour and outcomes in the academic domain. ASC development represents students' self-evaluation of their learning and success experiences in three areas: academic self-perception, motivation, and academic competence beliefs. The fact is that "self-concept makes good things happen and underpins human potential" (Craven & Marsh, 2008, p. 108) and facilitates positive outcomes in varying school subjects. Achievement at school may impact one's overall self-concept, but it is most evidently related to ASC (Marsh & Craven, 2006).

The role of classmates in the development of ASC may be intensified during adolescence. That is, students evaluate their academic abilities using comparisons between students to develop ASC (Marsh & Craven, 2002), which further affects learning processes (Chen et al., 2015). They are prone comparing with their classmates for evidence about how to rate their academic performance, thus forming subsequent academic achievement (Henson & Eller, 1999) in a reciprocal manner (Marsh & Craven, 2006). A sense of

competence has been shown to facilitate both products of learning, including achievement, and the processes of learning including academic motivation and resilience (Marsh et al., 2017).

ASC is defined as a general self-perception of competence in school work (Marsh et al., 2017). Studies provide evidence that there is a decline in ASC from the end of primary to the end of Year 7, along with lower levels of self-esteem (Arens et al., 2013; Coelho et al., 2017; Wigfield et al., 1991). ASC has a multidimensional structure with different academic domains generally correlating with school subjects (Marsh, 1993). Students' preference for certain subjects confounds the understanding of varied perceptions of academic competences.

Similarly, the use of nondomain specific measures of achievement goals and self-esteem means that much research has been unable to adequately describe the links between experience, wellbeing, and outcomes or the predictors of those variables. By using a domain-specific measure such as ASC, the discrete factors in the structure of ASC may allow the exploration of the factors that interact to affect motivational outcomes. Research shows that ASC can be highly predictive of motivation and learning.

### **Counterbalancing Comparisons**

Within-school streaming makes differences in students' abilities more obvious (Chmielewski et al., 2013). Thus, research demonstrates that streaming shapes different aspects of self-perceptions in different domains (Dumont et al., 2017). Becoming a member of a selective academic class where the class-average achievement is high results in a more competitive basis of comparison for one's academic performance. This compositional context provides a strong negative effect. However, belonging to a selective academic class may also be a source of pride, with a weaker positive assimilation effect on self-concept from the higher perceived status. Simultaneously, the negative BFLPE is the

net effect of these compensating influences: “In the BFLPE, contrast occurs when higher school-average achievement levels (the context) lead to lower individual student ASCs (target judgement), whereas assimilation occurs when higher school-average achievement leads to higher academic self-concepts” (Marsh et al., 2000, p. 337).

BFLPE is primarily due to an upward comparison causing self-doubt (Marsh et al., 2000). This psychosocial phenomenon is an adverse effect on students’ self-perceptions, not directly on actual achievement. Unfortunately, lowered ability-beliefs could negatively affect subsequent academic performance.

### **Theoretical Basis of BFLPE**

ASC is linked with the behaviour of comparing oneself with peers, which is the theoretical foundation of the BFLPE. The BFLPE is a theoretical perspective of ASC that has been shown to be universal. Marsh (1987) noted that “academic self-concept may have a larger impact on academic performance when students change academic settings” (p. 292). Interstudent comparisons of ability can influence interest and motivation in school and school work. Marsh elaborated that “the size of the BFLPE will vary according to variability of school-average ability” (p. 292) in the educational settings.

Students in a competitive learning environment, where one is relatively less bright, may result in a lowered self-concept academically (Kadir et al., 2017). The detrimental effects of this comparison process have been validated across responses in over 57 countries, making it generalisable cross-culturally (Nagengast & Marsh, 2012). In the educational context, ASC development represents students’ self-evaluation of their learning and success experiences. The fact is that positive outcomes in varying school subjects contribute to building a positive ASC (Marsh & Craven, 2006). That is, students evaluate their academic abilities to develop ASC (Marsh & Craven, 2002), which further

affects learning processes (Chen et al., 2015), psychological mindset (Luther et al., 2020; Rathmann et al., 2018), and subsequent academic persistence (Arens et al., 2019) in a reciprocal manner (Marsh & Craven, 2006).

The BFLPE conjectures that one's ASC is relatively high when one is the most talented in a group (e.g., a gifted student in a regular class) but relatively lower when placed within a competitive pool of talent (e.g., an average member in a gifted group). Regardless of academic ability, ASC is influenced by the person's self-assessment of personal ability level in comparison with others in the school or class. This relativistic impression is used as the basis to form an individual's sense of competence. For students of the same ability, those in mixed- or low-ability schools would have higher self-concept than those in more elite schools. The effect of school-average achievement on ASC is therefore negative. Based on the logic of the BFLPE, going to an academically selective school or class is expected to result in lower ASC. Apart from larger negative effects on ASC, BFLPE also negatively affects self-esteem, and engagement in school (Nagengast & Marsh, 2012). There is also evidence that the BFLPE is detrimental to psychological wellbeing. Rathmann et al. (2018) in a study of 5226 German students in early secondary school found more at risk students in high-ability groupings suffered more negative mental health effects than those with more positive wellbeing as measured by psychosomatic complaints.

Highly structured streaming in the NSW educational system is concerning in light of international research supporting what is known about the BFLPE in academic contexts. As Aboriginal students are rarely found in the high-tracks (Luke et al., 2013), and it is known that the BFLPE is salient in selective settings, the theory may explain why high-ability Aboriginal students may feel threatened by this type of educational context.

However, given the paucity of research with high-ability Aboriginal students in general,

and in relation to the secondary transition in particular, research into the impact of ability grouping for Aboriginal students in the secondary education transition is needed.

## **Growth Mindset Beliefs**

### **Beliefs About the Nature of Intelligence and Motivation**

According to well-established theories (Blackwell et al., 2007; Marsh, 1987; McGregor & Elliot, 2002; Muenks et al., 2017), self-perceptions have an important role in the facilitation of motivation in students. These social–cognitive processes have been shown to impact effort, persistence, and achievement (Bakadorova & Raufelder, 2020; Kavanagh, 2020; Wigfield et al., 2016). In adolescence, approval from significant people is an important factor in the adolescent’s self-evaluation. Positive student–teacher interactions build beliefs that one is able to grow academically and strengthen the personal resolve to persist through difficult challenges. Individual differences in beliefs about the nature of intelligence have been popularised in education as an essential variable for helping struggling students (e.g., Blackwell et al., 2007).

### **Relevance and Impact of Mindset Beliefs for Underachievers**

In a recent study on growth mindsets, Tarbetsky et al. (2016) investigated low-ability Aboriginal students in relation to how malleable they believed intelligence and ability to be. The students were asked whether they believed in “growth” potential of their intelligence or alternatively a “fixed” ability that can hardly change. Tarbetsky et al. (2016) found a significant association between Aboriginal status and fixed mindset beliefs. Aboriginal students tended to view intelligence as an unchangeable entity. Additional significant associations were found between fixed mindset and low levels of achievement. Three explanations were suggested for this finding in Aboriginal students: (a) stereotype threat (Dandy et al., 2015), (b) high levels of fear of failure (Groome & Hamilton, 1995),

and (c) being regularly and consistently subjected to low expectations (Gray & Beresford, 2008). Tarbetsky et al. (2016) recommended explicitly promoting incremental beliefs and personal goal setting. This recommendation was based on the premise that a growth mindset enables an individual to see socially imposed personal beliefs as malleable.

Explanations for the nonparticipation of high-ability Aboriginal students in selective class environments may deepen and extend our understanding of student perceptions in high performance and socially comparative situations. Many gifted Aboriginal students who are eligible to enter SHSs decline to participate. The nonparticipation of Aboriginal students in competitive situations may be a result of their personal estimations of ability and effort, which are different from their non-Aboriginal peers. Hence, there appears to be a difference between Aboriginal and non-Aboriginal students in the way they view “intelligence”, with Aboriginal students more likely to hold a fixed mindset (Tarbetsky et al., 2016).

### **Beliefs in Sources of Effort Mediating Beliefs in Sources of Ability**

One may hypothesise that the juxtaposition of effort versus ability would result in the BFLPE. If students, in their reasoning, identify their level of competence as inferior to others in their class, this comparison would lead to an estimation of a huge amount of effort required to remain competitive, and this estimation will make them feel helpless (Muenks & Miele, 2017). Therefore, we can hypothesise that disadvantaged students (such as Aboriginal students) who identify the ability gap as being too large are more likely to choose not to participate, feeling success is out of their control. For students who identify their level of competence as comparable, if not superior, to their peers, they are less likely to estimate as huge an effort investment. In this case, their reasoning may lead to their choice of participation. However, if they hold a fixed mindset and experience setbacks as they progress in the competitive setting, their reasoning based on this mindset may cause

them to believe they will continue to fail and therefore cease to try. This mindset, together with a lack of academic skills and competence due to suboptimal effort, may lead to lowered motivation and subsequently lower achievement.

### **Distorted Self-Beliefs and Aboriginal Students' Choice of Academic Pathway**

Other research shows that Aboriginal students may not apply for selective settings due to low ASCs (North et al., 2018). The widespread practice of ability grouping, with Aboriginal students overrepresented in low-tracks, accelerates the development of the concept of intelligence as a static, fixed ability and the formation of high ASC. The students who are in a low-performing ability grouping will develop a positive view of themselves because they are separated from experiencing in the same classroom peers who are also top performers to compare their ability to. Streaming impacts upon the self-beliefs of students in streamed groups, both in the high-track and the low-track. High-ability students in a mixed-ability class gain increased self-concept from going into a less competitive class or stream.

In rural or low socioeconomic areas, students in less-selective classes or mixed-ability have difficulty translating this confidence into actual increased academic performance:

Selectivity actually makes it really hard for poorer kids to “spend” their increased self-concept on better outcomes, and that’s due to the lower expectation that society places on children that come from the schools they attend. And so they’re actually less able to translate their greater confidence into more ambitious post-school pathways. (Parker, n.d., para. 25)

Parker et al. (2019) found the more selectivity a country has, the greater the BFLPE will be and students in that country (or region) will have misplaced confidence and beliefs. Thus, as students experience increased confidence in a mixed-ability setting, the BFLPE

explains why high-ability Aboriginal students may be reticent about taking on the challenge of a competitive selective setting.

## **Social and Academic Goals**

### **Social Comparison of Effort**

In social–cognitive theory, goals and outcome expectancies govern the impact of social comparison on complex decision-making (Bandura, 2018). These social–cognitive processes have been best articulated by Bandura (2018) as dynamic, reciprocal influences, co-factors that continually interact to explain human behaviour. Involvement in a class climate that aligns with personal social and academic goals fosters engagement in learning (Lerang et al., 2019). The quality of instruction understood as student–teacher interactions are causally related to students’ achievement at school. The relations with individual motivation and how different types of goal orientations can create distinct classroom climates for teachers and students have not been widely examined. Contexts, situations, and individual differences combine in social–cognitive processes that elicit competition and ability differences in streamed classes (Legette, 2020). The role of institutional and cultural frames is important to examine, as well as focusing on individual student profiles (Tuominen et al., 2020).

### **Different Types of Goal Orientations**

Goal orientation has been developed through social–cognitive theorists (e.g., Bong, 2009; Elliot & McGregor, 2001) to understand students’ reasons for doing school work. There are four types of goal orientations: performance-avoidance orientation (hereafter performance avoidance), performance approach (performance orientation), mastery orientation, and mastery-avoidance orientation (hereafter mastery avoidance) (Lerang et al., 2019).

Elliot and McGregor (2001) found that mastery approach entailed deep scholarship, while performance approach entailed academic attainment. Recent research indicates that performance approach goal effects vary on how they are described (Senko & Dawson, 2017), and some researchers believe that the strong relations between performance approach and performance-avoidance goals indicate a similar or single construct (Chung et al., 2019; Senko & Dawson, 2017). Performance avoidance, referring to students who avoid completing difficult tasks, is related to lower ASC (McGregor & Elliot, 2002). Both performance approach and performance-avoidance orientations have a high fear of failure and outcomes such as competitiveness and dissatisfaction (Anderman & Patrick, 2012; Elliot, 2020; Lau & Nie, 2008; Murayama & Elliot, 2009; Pahljina-Reinić & Kolić-Vehovec, 2017). Mastery goal orientation refers to students who believe in learning and have high motivation and flexible learning strategies (Bong, 2009; Toh, 2010). Mastery avoidance refers to students who avoid situations in which they are unable to learn and has shown relations with lower self-esteem, cognitive anxiety, and fearfulness (Sideridis, 2008).

In a study of 1,196 Korean primary and early secondary students, Bong (2009) found that mastery-approach goals anticipated deep learning strategies, while performance avoidance anticipated anxiety. The youngest students revealed strong intrinsic motivation or mastery-approach goals, but those in Years 5 to 9 were driven by external grades or performance-approach goals. “Work-mastery, self-determination, and perceived classroom engagement predicted a mastery-approach goal, whereas fear of failure, competitiveness, and SAT scores predicted a performance approach goal. Fear of failure and self-determination were, respectively, common positive and negative predictors of avoidance goals” (Bong, 2009, p. 880).

The outcomes of mastery avoidance included disorganisation, time-contingent trait anxiety, worry, and emotionality. The outcomes for performance avoidance were similarly negative and decreased academic performance (Toh, 2010).

Research has demonstrated the relations between performance orientation and achievement are the same as those between mastery orientation and academic achievement (Lerang et al., 2019). Ironically, for Year 7 students undertaking their high-stakes testing at the beginning of their second term, mastery goals are related to academic achievement (Bong, 2009; Dupeyrat & Marine, 2005; Lau & Nie, 2008; Toh, 2010; Tuominen et al., 2020). However, examination results could be used for greater opportunities for social comparisons. Therefore, the motives for carrying out the achievement goals are more salient than the type of goal. Reiterating, motives are strong predictors for the resulting positive or negative wellbeing as well as for differential educational achievement.

### **Classroom Climate**

The classroom climate is an important factor that influences students' individual goal orientations (Anderman & Patrick, 2012; Lerang et al., 2019). In a study of the relations between teacher–student interaction and goal orientation, Lerang et al. (2019) found that student goal orientation predicted the association between classroom climate and the three outcomes of goal orientation: academic achievement, nonattendance, and disobedience. They found that if teachers promoted competition and expected high marks, they could foster performance goal orientations within the class. Equally, teachers, who placed value on effort and understanding, promoted mastery goal orientations. A considerable amount of literature has been published on cognitive, motivational, and behavioural outcomes of goal orientations. These studies show that mastery and performance orientations often encourage academic achievement. However, avoidance is negatively related to achievement (Elliot, 2020). In addition, a recent study found that

students with a performance-avoidance orientation also enjoyed learning less when they were trying to evade seeming inept compared to others (Gertsakis et al., 2020). They concluded that when “emphasis is given on ability comparisons, students are less likely to experience positive emotional engagement” (Gertsakis et al., 2020, p. 12).

**Teacher Reference Norms.** Achievement goal theory is strongly related to the concept of frame-of-reference since, as has been explained, performance goal orientations are concerned with either the achievement of success or avoidance of failure. Reference norms are defined as a comparison standard to which an achievement can be contrasted (Lohbeck & Freund, 2020). In a study which revealed the relations between context and the choice of reference norms, Lohbeck and Freund (2020) found a convincing indication that students', and teachers', reference norm orientations (indicated by social comparisons within the class) are a significant contextual factor influencing the development of ASC, and hence motivation.

Nevertheless, when the perception of academic ability is mainly based on a specific reference norm it is an individual evaluation. In contrast, when the perception of academic ability is mainly based on a number of evaluative reference norms, it is a social comparison. There is strong support for the BFLPE across school streaming contexts (Lohbeck & Freund, 2020) because students may favour using a social norm if competition with others is encouraged. ASC is positively influenced by an individual reference norm and negatively influenced by a social reference norm (Dickhauser et al. 2017).

It is noteworthy that teachers differ in their judgements of students' achievements according to the context, preferring either individual or social comparisons in differing classroom compositions. After analysing teacher reference norms in the transition to secondary school Dickhauser et al. (2017) found students' ASC decreased about one-third. In addition, growth mindset (i.e., a belief that they could develop their competence)

decreased by almost one half of a standard deviation per school year. Dickhauser et al. (2017) found the motivational beliefs of students depended on teacher norm orientations. The link between teacher perceptions and the development of ASC has been under researched. Even though achievement positively predicts ASC at the individual level, classroom level achievement has a negative effect on student ASC because of the social comparison reference norms.

### **Differences for Source of Effort Concept**

Recent motivational theory connects entity beliefs to perceptions of effort source. Differences in focus and source of effort concept (DFSEC; Muenks & Miele, 2017) states that observations of comparative importance of these two causes within a certain class context might impact how one interprets quantity of effort to ability. It is based on the twofold purpose of effort: as an assessment of what one has remembered (information retainment effort) and as a way to monitor performance (strategic effort). Muenks et al. (2017) found that individuals' discernment of effort source impacts their appraisals of ability, not just their conclusions about how much they have learnt. Individuals in the task-elicited condition judged that increased effort made them perceive they were less capable, whereas individuals in the self-initiated condition judged a that increased effort was a reflection of their ability. Hence, when effort appears comparatively more excessive than others in completing a task, high effort reflects low-ability. Further, when effort arises due to motivation or lack of motivation, the perception is that high effort reflects high-ability.

**Classroom Interaction in Association with Goal Orientation.** Classroom goal structures have been shown to be related to students' conceptualisations of the association between effort and ability within a specific context (Muenks et al., 2017). Goal orientation theory (Gertsakis et al., 2020) and DFSEC (Muenks et al., 2017) have both revealed that an

individual's reason for pursuing achievement goals is more important in accounting for the educational effect than the goal itself. For example, an emphasis on mastery goals within a classroom may contribute to the conviction that effort is more imperative than ability for attainment (e.g., Elliot, 2020). When children grow older, they differentiate between effort and ability further (Nagengast & Marsh, 2012). For students in a streamed classroom, inevitably an ego-involved context, they will view their own high effort as an indication of a lack of capacity. They would reason that low levels of effort reveal of high levels of ability in that ego-involved classroom situation (Muenks & Miele, 2017; Sierksma & Shutts, 2020). In this "differentiated" conception of ability, there are limits to how much the effects of effort can influence knowledge acquisition.

These evaluations can affect students' motivation. DFSEC states that perceptions of effort source and ability conceptions are explicit notions, but they may have a bidirectional influence. In understanding the compositional effects of ability-grouped classrooms, differences in source of effort may lead to different ability conceptions. In addition, perceptions of effort source and ability conceptions may have important consequences for a student's motivation to accept a selective placement. The theory explains how conceptions of ability can adapt depending on the relative emphasis of the source of effort. Students may perceive effort investment and ability as either associated positively or contrariwise depending on where the effort originates (task-elicited or self-initiated). These perceptions of ability may be separate from previously held entity concepts of ability.

When children grow older, they differentiate between effort and ability further (Nagengast & Marsh, 2012). Adults often assume that effort and ability work in the opposite way, whereas children may find them more related. In other words, while for adults, higher effort indicates lower intelligence, some researchers suggest that this cognitively demanding concept is not commonly found in primary aged children (Surber &

Manis, 1984). As the reasoning between effort and ability is a higher order concept, students with high-ability would probably be able to grasp it more readily than their lower ability peers. As students get older, school work becomes more demanding, and their self-concept becomes more realistic.

The guiding rationale of both DFSEC and BFLPE theorists is that there are developmental changes in cognitive maturity that impact emergent reasoning about ability at the life stage in which transition occurs. Folmer et al. (2008) concluded that the effect of age on motivation was due to the effect of age on ability judgements. Although social comparison processes, such as the BFLPE, can be generalised over age cohorts, Marsh et al. (2014) found that BFLPE was significantly larger and more negative in secondary (eighth grade) than in primary (fourth grade). Older students with more cognitive maturity have been shown to experience a more negative BFLPE than students who are younger. As qualitative designs are informative in analysing the assimilation and contrast thought processes, my study is well placed to examine such processes to unveil the BFLPE and DFSEC impacts during transition. These impacts arise from contextual changes and social comparisons, which underscores motivation, not simply achievement.

### **Covington's (1992) Quadripolar Model**

This model can explain and elaborate how the mechanics of the BFLPE and DFSEC operate in the thinking of high-ability students. The quadripolar model is useful for showing the ways beliefs and goals work in unison to shape behaviour in secondary education transition (Covington, 1992). Research has demonstrated that streaming shapes students' academic wellbeing (AWB) through self-perceptions, beliefs, and goals. Self-perceptions, beliefs, and goals influence achievement and motivation. Given the interaction of these processes, it is important to observe how they operate in one model. Covington's quadripolar model can be adapted to examine these processes through the lens of four

types of classroom climates: overstriver, self-protector, optimist, and failure acceptor. The classroom climate develops success orientations and goals of teacher–student interactions. As seen in Figure 3.1, the model locates these four broad orientations on a Cartesian graph where the vertical axis represents “fear of failure” and the horizontal axis represents “success orientation”.

**Figure 3.1**

*Adapted Quadripolar Model (Covington, 1992)*



For my study, low success orientation can be hypothesised to correlate with low-track learning environments, and high success orientation can be hypothesised to correlate with high-track environments. Those in the “high success–high fear of failure” quadrant (overstrivers in Covington’s model, see Figure 3.1) would have a high ASC in primary school transitioning into a high-track secondary class composition, reinforcing their high ASC. The competitive nature of the class means there would be a high fear of failure, the threat of being dropped from the class, together with a high success orientation.

Those with high success orientation but low fear of failure (optimists in Figure 3.1) would have a high ASC in primary, but when transitioned into a low-track secondary

school, they would experience a lower class-average achievement. Transitioning from a high-achieving track to a low-achieving track leads to an increase in ASC and perhaps motivation but a decrease in progress and potentially achievement. Those who have a high fear of failure but low success orientation (self-protectors) would have a low ASC in primary school, and when transitioned into a high-track class composition in a school with high class-average achievement, they may have a higher fear of failure.

The “low success–low fear of failure” quadrant in the quadripolar model is the designation of failure acceptors. Failure acceptors would have a low ASC in primary school and transitioned into a low-track class composition in a school with low class-average achievement, giving them a low fear of failure. By choosing a track with lower class-average achievement, this choice may still allow failure acceptors to maintain a certain level of achievement in class as they may strive to appear able to their peers. This analysis is consistent with those found in Martin et al. (2001). In a longitudinal study of 328 university students, Martin et al. (2001) empirically tested the conceptual integration of the four typologies of avoiding failure and approaching success represented in the quadripolar model. They found that the quadripolar model represented two strategies, success orientation and failure avoidance, reflecting dual motives of students. Structural equation modelling was used to validate the model. The reason that students gave for their choice of track was for social (the stigma of intellect) or academic (fixed mindset) reasons. These students were motivated to protect their self-worth. They found, “This multidimensional framework, then, lends clarity to the issue of how defensive expectations and reflexivity are both self-protective (high in failure avoidance) yet lead to quite different outcomes (due to their differing status in success orientation)” (p. 601).

### **Attributions of Success and Failure**

Moving to a selective setting is a critical experience that affects motivation (Song et al., 2020). The factors that the students attribute to failure can change how a student experiences a selective setting (Weiner, 2010). The amount of effort the student decides to invest can determine the way a student reasons about why they succeeded or failed in a particular classroom climate. The adapted quadripolar model proposes that people cognitively evaluate causal properties about each classroom climate they enter. Some students may show greater willingness to engage in the educational context with less competition and high expectancy of future success climate (Darling-Hammond et al., 2020) to avoid a classroom setting with competitiveness and low expectancy of future success (Ryan & Deci, 2017). Eventually, a student's assessment of the affective and cognitive domains of the learning climate of a class may predict or influence future behaviour in those settings.

### **Homophily, Race, and Valuing of School**

A central tenet of social-cognitive theory is the individual's belief in their capacity to perform a behaviour. However, behaviour is also determined by their anticipation that their behaviour will lead to certain aspirations being accomplished. Thus, in the context of schooling, the desire to achieve or the valuing of school is one of the co-factors assumed to facilitate the performance of positive behaviour at school. Particularly for Aboriginal students, the importance of academic achievement must be a shared message (Prehn et al., 2020). Consistency between the messages from home, friends, and school about the importance of academic achievement helps to develop personal resolve to achieve and value school (Kickett-Tucker & Shahid, 2019). By valuing school, an individual is strengthened in their purpose to stay on task without wavering. School is in its purest form

a community brought together because of the same underlying goals and values. It therefore has a culture and identity that is maintained around academia.

As has been explicated, the way racial diversity is operationalised across schools, sectors and systems matters. Cultural maintenance and identity are important factors to be considered when assessing homophilous networks. Homophily is the networking of social groups around similar others. “People who are homogeneous in age, ethnicity, educational level, and status are much more likely to interact with each other than with people who are heterogeneous” (Yuan & Gay, 2006, p. 1064). In a school setting, homophily means that friendship groups are built from students who feel comfortable around each other because they have similar interests, values, or ethnicity.

The social and academic motivational processes that interact to inspire achievement in school also transfer to the home environments. Although the influence of parents on schooling wanes, adolescents still appear to be greatly influenced by parents (Song et al., 2015). Song et al. (2015), in their sample of students in the first 2 years of high school, separated the perceived support of each of the influences of parents, peers, and teachers in contributing to adolescent academic motivation and achievement. In addition to the importance of emotional support of parents and peers, the study showed the nature of the learning environments that were fostered. Within these psychologically safe places, students experienced stronger mastery goals, weaker performance goals, lower test anxiety, and higher academic achievement.

Similarity breeds connection. Cultural connection is another form of emotional support (Ho, 2020). Ooka and Wellman (2006) found that more recently arrived immigrant groups had more homophilous networks. For many people of ethnic background, their identity is closely tied to that cultural group. A shared understanding of similar ways of thinking and behaving will create a sense of fellowship and familiarity with that ingroup,

stemming from the collective identity. Other theorists (e.g., Branscombe et al., 1999) explain the development of a collective identity through rejection identification theory. This theory proposes that experiences with prejudice can promote closer ethnic identity networks, as members of a devalued group are more likely to avoid interactions with individuals of some out-groups and selectively connect with members of the in-group.

Biddle and Heyes (2014) found that Aboriginal students tended to perform better when they were grouped together with other Aboriginal students. Patterns of homophily tend to get stronger as more types of ties exist within the relationship (McPherson et al., 2001). Status homophily (race, sex, age, intelligence) may be one type of tie, while value homophily (work ethic, conceptions of intelligence, family) may be another type of tie (Yuan & Gay, 2006). Some Aboriginal students change schools to leave an outgroup and seek to belong to an ingroup in another school community. In a school community, homophily simultaneously builds and divides a community (Yuan & Gay, 2006).

People who share the same characteristics are unified. People with different characteristics are excluded. School ethnic composition has been shown to greatly influence social homophily in complex ways (Titzmann & Silbereisen, 2009). Benner and Graham (2009) argued that children in a minority within the ethnic pool at secondary school are particularly more vulnerable in transition. Race can impact the transition to secondary (Anderson et al., 2000; van Rens et al., 2018). ASC and its close construct, self-esteem, are negatively associated with social homophily (Yuan & Gay, 2006). When one's personal identity is threatened, the possibility of losing face or incurring shame arises.

The presence of one's own ethnic group has many positive outcomes, including reducing the culture shock between home and school. The dissonance between the home and school expectations and values for Aboriginal students has been described as "culture shock" (Kaplan & Eckermann, 1996; Mander et al., 2015; Trudgett & Franklin, 2011).

School adds a new influence on the formation of identity of Aboriginal students, particularly in transition (Mander et al., 2015). The benefits of friends from one's own ethnic group may work as a moderator of this culture shock for Aboriginal students (Ho, 2020; Phinney et al., 2001; Scharenberg, 2016). Prehn et al. (2020), in an analysis of the ASCs of Aboriginal students aged 9.5 to 11 years, found that students were more susceptible to the opinions of community and peers than to non-Aboriginal people. They argued that Aboriginal students place more importance on their peer and family self-concepts.

According to Berman and Paradies (2010), Asian students are socialised with messages about being a cultural straddler (Carter, 2006). Being bicultural, willingness to adapt across two cultures has benefits in many areas of personal development in adolescence. Many Asian students show the ability to identify with their racial-ethnic heritage and to identify with the school culture of academic achievement. In this way, there is a natural consistency between the messages from home and school because of the shared message of the importance of academic achievement (Choi et al., 2020; Ho, 2020). In addition, Cheah et al. (2013) identified other forms of socialisation from cultures with Confucius values. In motivating their students, they identified a parental strategy whereby social comparisons were made with other children who were academically superior to their own. Valuing academic achievement in this competitive way may be contributing to the increased impact of the BFLPE in classrooms with high Asian immigrant populations. E. McGee (2018) found in her research among college STEM (science, technology, engineering, and mathematics) students that

High-achieving Black students seek to defy stereotypes of intellectual inferiority while Asian students strive to uphold the racial stereotype about their intellectual superiority,

yet both racial groups expend extra labour—both materially and psychologically—as a result of being stereotyped and marginalised. (p. 2)

### **Culturally Safe Schools**

Not only does a strong racial–ethnic identity have positive effects for self-esteem and achievement, there is evidence to suggest that it can also be a buffer against racial discrimination and racism (De Cuir-Gunby, 2009; Kickett-Tucker & Shahid, 2019). Roberts and Ali (2013) found that students who had a weak ethnic identity or who assimilated into Australian culture were more likely to be victimised by bullies. While diversity and inclusiveness need to be equally valued, social homophily has important benefits for developing Aboriginal adolescents.

The importance of culture in maintaining social and familial connections and the strengthening of identity (Dillon et al., 2020; Prehn et al., 2020; Usborne & Taylor, 2010) has resulted in clear national policy directives around the development of teaching Aboriginal perspectives in the curriculum and also in the Teaching Standards (Heaton, 2019). Therefore, the Australian Curriculum (ACARA, n.d.-a)

support teachers in providing a more culturally responsive curriculum experience for Aboriginal and Torres Strait Islander students resulting in increased engagement and better educational outcomes. They also provide an opportunity for teachers to engage all students in respect and recognition of the world's oldest continuous living cultures. (ACARA, n.d.-a, para. 7)

School leadership may be diverted by messages of diversity at the expense of acknowledging the First Nations peoples' heritage and experiences:

The folklorisation of multiculturalism and culture results in public schools not only trivialising Aboriginal content and perspectives, but also conflating multiculturalism with Aboriginal education. This means that there is a very narrow space left for

including Aboriginal education, and particularly for understanding what Aboriginal content might be included and how. (St. Denis, 2011, p. 134)

Little has been done to study the specific characteristics of high-ability Aboriginal students even though research has determined specialised identification tools and interventions (Chaffey et al., 2015). Little is known about why gifted Aboriginal students are underrepresented in opportunity classes (OC) and SHSs. Craven et al.'s (2014) research explored the underlying factors influencing the underrepresentation of gifted Aboriginal students in OCs and SHSs and the drivers of decision-making on whether or not to participate. The findings highlighted the need for intervention at several levels. Strategies were implemented by the NSW Department of Education to ensure that gifted Aboriginal students are identified and apply for selective education offers.

Schools are important. They provide not only the resources available for students' education but also because of the peers with whom students interact (Epple & Romano, 2011). SHSs and OCs in NSW public schools offer support for GAT students (Goss et al., 2018). According to Biddle and Edwards (2017), selective schools potentially sort students according to SES as a result of households that from an early age invest and value education and are able to pay for the preparation for the selective school examinations. The consensus was "NSW is great at stretching advantaged students in secondary school, but not so good at supporting disadvantaged students" (Goss et al., 2018, p. 3). Biddle and Edwards (2017) found that one third of the conditional difference in growth rates between Aboriginal and non-Aboriginal students was explained by the characteristics of the school that they attended: "Between Years 7 and 9, students in South Australia, Western Australia and Tasmania have higher growth rates in academic achievement than in New South Wales" (p. 12).

One conclusion from the literature, as well as national and state policy, is the priority of teachers of Aboriginal students maintaining home–school relationships focused on student learning and incorporating culturally responsive pedagogy. Creating selective classes in Aboriginal community schools may be a support that can be given to Aboriginal students to make it possible for them to have equal access to educational opportunity. The theory underpinning this study explains why Aboriginal students may accept or not accept the challenge and competitiveness of a selective setting.

### **Chapter Summary**

The review of literature in this chapter has attempted to link, synthesise, and clarify the immense bodies of theoretical and empirical literature that span social–cognitive processes. An overview of key theories was provided: BFLPE theory (self-perceptions), growth mindset theory (self-beliefs), expectancy–value theory (self-goals), and ethnic congruence theory (sense of belonging). Throughout the discussion, the associations between selective streaming and students’ self-perceptions were explored. This was done to identify how the research supports and extends recent advances in self-concept theory, Indigenous thriving, and research in relation to the secondary education transition. Vital and urgent implications arising from current psychosocial and sociological perspectives were the catalyst for this research. The following chapter outlines the specific aims, hypotheses, and research questions that forged the direction of the present investigation.

## Chapter 4

### Aims, Research Questions, and Their Rationale

#### Introduction

The purpose of this chapter is to present the nature of the problem being addressed, the overarching aims, a statement of the specific research questions, and the rationale for the research questions posed in the context of extant theory, research, and practice. This study examined high-achieving Aboriginal and non-Aboriginal students' academic outcomes and psychosocial wellbeing across transition from primary school to different secondary school contexts, including selective settings and mixed-ability classes. The study aimed to examine the impact of transitioning to different types of secondary schooling contexts (mixed-ability or selective settings) and the psychosocial determinants of high-ability Aboriginal and non-Aboriginal primary and secondary students' educational outcomes and wellbeing in different geographical settings (rural and urban). Self-concept (academic), classroom composition (ability grouping and socioeconomic situation), and cultural diversity (Aboriginal and non-Aboriginal) were important factors within the major focus of secondary education transition. Aboriginal ( $n = 6$ ) and non-Aboriginal students ( $n = 6$ ) in Year 6, parents ( $n = 11$ ), teachers ( $n = 9$ ), AEOs ( $n = 5$ ), AECG members ( $n = 3$ ), assistant principals ( $n = 3$ ), and head teachers ( $n = 3$ ) and principals ( $n = 7$ ) from four schools (three urban and one regional) in NSW were invited to participate.

This study employed a qualitative research design to enrich and focus on particular phenomena and processes and their unique contexts. It utilised in-depth student interview responses to reveal the role of and interconnections between factors. The student-level

variables include academic achievement, self-concept, and psychosocial wellbeing. The external influences include parents, teachers, AEOs, AECG members, assistant principals, and principals. This complex interplay of influences shapes students' school life experiences in the transition to secondary school. A longitudinal design was chosen as changes and impacts in student outcomes, and their environments, are dynamically related over time (Grammer et al., 2013). This research was multilayered and examined the impact of transition across a number of variables, in particular rural and urban geographical contexts.

### **Aims**

This study aimed to critically examine and compare and contrast Aboriginal and non-Aboriginal students' and stakeholders' (parents, teachers, AEOs, AECG members, assistant principals, principals) perceptions about four key themes:

- Students' hopes and apprehensions before entering secondary school;
- The strengths and limitations of Year 6 induction programs to secondary schooling;
- Factors contributing to a successful transition to high school and factors constraining a successful transition; and
- Factors contributing to longstanding secondary school educational attainment and factors functioning as deep-rooted obstacles.

Research questions were framed to reflect the four facets that contribute to the successful transition to secondary school: experiences of transition, strengths and limitations of the education setting, the influence of the stakeholders on educational outcomes, and why some Aboriginal students do and do not engage successfully in high-ability settings. As interview questions were asked across three time points with four

different stakeholder participant groups, they were adjusted for variations in time and participant experiences to address the research questions (Table 4.1).

**Table 4.1***Guide for Interview Questions 1*

<b>Themes</b>	<b>Year 6, Term 4, 2015 Students: Time 1</b>	<b>Year 7, Term 1, 2016 Students: Time 2</b>	<b>Year 7, Term 2, 2016 Students: Time 3</b>	<b>Term 4, 2015 Parents</b>	<b>Focus Group: Term 4, 2015 AEOs/Teachers</b>	<b>Interview: Term 4, 2015 Principal</b>
Experiences of transition	<p>What are you looking forward to about starting high school?</p> <p>What are some of the things that worry or concern you about going to high school</p> <p>Prompt: Are there any other things that you are looking forward to/concern you?</p> <p>Do you think that you will handle the transition to high school well? Why/why not?</p>	<p>What have you liked most about moving to high school?</p> <p>Can you tell me about any challenges you have had since starting high school?</p> <p>Was the move from primary to secondary school what you expected?</p> <p>Prompt: In what ways was your experience what you expected/not what you expected?</p>	<p>Now that you have been in Year 7 for a little while, how would you describe your experience of moving from primary to high school?</p> <p>Prompts: What has been good? What has been difficult? What was hard to adjust to?</p> <p>Do you talk with others about the increasing demands and successes of high school?</p> <p>In what ways have the demands increased since starting high school?</p> <p>What have you learned about yourself since starting high school?</p>	<p>How prepared do you think your child is for starting high school?</p> <p>What sort of things concern you about your child starting high school?</p> <p>Prompts: Making friends, new people, different teachers?</p>	<p>What do you see as the biggest struggles or challenges for students moving from primary to high school?</p> <p>Are there any difficulties that you see as unique to Aboriginal students?</p>	<p>What do you see as the biggest struggles or challenges for students moving from primary to high school?</p> <p>Are there any difficulties that you see as unique to Aboriginal students?</p>

Themes	Year 6, Term 4, 2015 Students: Time 1	Year 7, Term 1, 2016 Students: Time 2	Year 7, Term 2, 2016 Students: Time 3	Term 4, 2015 Parents	Focus Group: Term 4, 2015 AEOs/Teachers	Interview: Term 4, 2015 Principal
Strengths/ limitation of education setting	<p>What do you like about your school?</p> <p>Is there anything that you do not like about your school?</p> <p>How has your school helped you to get ready for high school?</p> <p>Are there things your school could have done better to prepare you for high school?</p>	<p>What do you like about your new school?</p> <p>Is there anything that you do not like about your new school?</p> <p>What has your school done that has helped you to settle into Year 7?</p> <p>Is there anything the school could have done better to help you settle into Year 7?</p> <p>How is learning in high school different from learning in primary school?</p>	<p>Can you tell me about fitting in at high school?</p> <p>Prompt: Can you think of a time this term when you felt you belonged here?</p> <p>Have you found that there is more work to do in high school compared to primary school?</p> <p>How has your attitude to learning changed since the last term?</p> <p>Prompt: What might have caused this?</p>	<p>What do you see as the strengths and limitations of your child’s school compared to other types of schools?</p> <p>What could the school do to improve the way it supports students?</p> <p>How has your child’s school helped to prepare them for moving to high school?</p> <p>How well have the lines of communication been opened and established between the school and home?</p> <p>Prompts: What has been helpful? What could have been done better? How well have they communicated your child’s progress? Did you have to contact them?</p>	<p>What do you see as the strengths and limitations of this school compared to other types of schools?</p> <p>What could this school do to improve the way it supports students?</p> <p>How well do you think your schools prepare students to transfer to high school?</p> <p>How does this school help to prepare students for the move to high school? Is it any different from Aboriginal students?</p> <p>How well have the lines of communication been opened and established between the school and home?</p> <p>Prompts: Frequency, student progress, and mode of contact?</p>	<p>What do you see as the strengths and limitations of this school compared to other types of schools?</p> <p>What could this school do to improve the way it supports students?</p> <p>How well do you think your schools prepare students to transfer to high school?</p> <p>How does this school help to prepare students for the move to high school? Is it any different for Aboriginal students?</p> <p>How well have the lines of communication been opened and established between the school and home?</p> <p>Prompts: How do you encourage teachers to communicate students’ progress</p>

Themes	Year 6, Term 4, 2015 Students: Time 1	Year 7, Term 1, 2016 Students: Time 2	Year 7, Term 2, 2016 Students: Time 3	Term 4, 2015 Parents	Focus Group: Term 4, 2015 AEOs/Teachers	Interview: Term 4, 2015 Principal
Influence of parents, teachers, and community members on educational outcomes/that seed success	Who are the people who have helped you to do well at school? Prompts: In what way have they helped you? Has anyone else helped you to do well at school? Examples might include - parents - teacher - community - friends - a mentor - AEO	How have the following people helped you to do well since starting high school: - parents - teachers - community	How do you think the following people will help you to do well in high school? Prompts: - parents - teacher - community - friends - a mentor - AEO	Have teachers called you to clarify or inform you of issues?  How have the following people influenced your child’s academic achievements up to this point? Prompts: - You and your family - Your child’s teachers - Your community - Aboriginal support staff - Peers	In what ways have the following people influenced the academic achievements up to this point of Aboriginal students: Prompts: - Parents and family - Teachers - Community - Peers	with parents? Frequency and mode of contact?  In what ways have the following people influenced the academic achievements up to this point of Aboriginal students: Prompts: - Parents and family - Teachers - Community - Peers
Partnership with Aboriginal community members				In what ways does the school engage with Aboriginal community members? How helpful or unhelpful was it for your child?	In what ways does the school engage Aboriginal community members? Prompt: In what ways is this beneficial for Aboriginal students?	In what ways does the school engage Aboriginal community members? Prompt: In what ways is this beneficial for Aboriginal students?

<b>Themes</b>	<b>Year 6, Term 4, 2015</b> <b>Students: Time 1</b>	<b>Year 7, Term 1, 2016</b> <b>Students: Time 2</b>	<b>Year 7, Term 2, 2016</b> <b>Students: Time 3</b>	<b>Term 4, 2015</b> <b>Parents</b>	<b>Focus Group: Term 4, 2015</b> <b>AEOs/Teachers</b>	<b>Interview: Term 4, 2015</b> <b>Principal</b>
Why some Aboriginal students do not engage in high-ability settings	What school are you moving to next year? How did you decide on this school? Prompts: Who did you make this decision with? What appealed/deterred them from different settings? Any dilemmas?	Since starting high school, have you found the school work too easy, too hard, or just right for you? Why? What do you like/dislike about the classes you are studying at school? During this term, did you compare your results with other students in Year 7?	Are you happy with the school that you are attending now? Why/why not? What do you like/dislike about the classes you are studying at school? During this term, did you compare your results with other students in Year 7?	How have you and your child decided on what school they will attend next year? What happened to influence this decision? Prompt: Did you experience any dilemmas?	Why do you think some high-ability Aboriginal students do not engage in high-ability educational settings such as gifted and talented classes? Prompt: - Fitting in? - Loss of support? - Lack of expectations? - Relationships?	Why do you think some high-ability Aboriginal students do not engage in high-ability educational settings such as gifted and talented classes? Prompt: - Fitting in? - Loss of support? - Lack of expectations? - Relationships?

*Note:* Interview questions asked across three time points with four different stakeholder participant groups' participant experiences.

## **Problem**

The United Nations (2020) *World Social Report* (“Executive Summary”) states that the gap in educational outcomes is rooted in lack of equal opportunities and discrimination:

Disparities in secondary school attendance by ethnic group, wealth quintile and educational level of the household head have increased since the 1990s in developing countries with data. Gaps in learning outcomes are large and persistent as well.

Such inequalities have historical roots, but often continue even after the conditions that generated them change. Ethnic minorities, for instance, often remain disadvantaged even in countries where special efforts are made to promote their inclusion. Members of groups that suffered from discrimination in the past start off with fewer assets and lower levels of social and human capital than other groups. While prejudice and discrimination are decried around the globe, they remain pervasive obstacles to equal opportunity. (p. 4)

Four salient factors distinguish Aboriginal students from other ethnic minority groups in Australia (Gillan et al., 2017; SVA, 2019b). The vulnerability of their health impacts their education. As a group, these children experience racism and separation from their culture and language. They experience trauma passed from generation to generation through colonisation and the separation of families through removal. Finally, they often attend schools with limited proficiency in Aboriginal culture (SVA, 2019b).

Further research is necessary to understand high-ability Aboriginal students’ views of their participation in transition as an important part of the process of engagement in secondary selective academic settings. For example, how does one explain the success of high-ability Aboriginal students who face competitive educational environments in which few know their culture? Do some high-ability Aboriginal students feel in the outgroup of the mainstream life of a secondary school? What facilitates Aboriginal students’ sense of

alienation, and does a student have difficulties in achieving at secondary school as a result of this sense of disenfranchisement. These questions attempt to grasp the accomplishments and resolve of “invisible” students (Merrotsy, 2013) in a racially segregated group in NSW public schools (Bonnor, 2018). The transition process itself (i.e., the environment) as well as individual factors (e.g., self-perception changes) interact with changes in students’ ASC (Evans et al., 2018). I contend that understanding students’ ASC may be the key to understanding how particular forms of social and academic experiences affect Aboriginal students.

### **Statement of Research Questions and Their Rationale**

The new National Aboriginal and Torres Strait Islander Education Strategy (Education Council, 2015) differs from the first strategy (2010–2014) by the designation of the new focuses on attendance and transition to secondary school. Also, it differs in acknowledging the varied situations faced by Aboriginal Australians across different locations (Gillan et al., 2017). Although the importance of primary to secondary school transition is widely acknowledged (Australian Government DoE, 2015; SCRGPS, 2015), little research has investigated Aboriginal students across rural and urban locations. In particular, there is a paucity of research regarding a sense of school belonging when transitioning to secondary school for Aboriginal students and if (and how) a successful transition is associated with academic performance (Kickett-Tucker & Shahid, 2019; Mander et al., 2015). How a young person responds to secondary education transition can have long-term effects on personal development, educational outcomes, and enabling human potential. Our understanding of this phenomenon in the lived reality of Aboriginal students is limited due to the gap that exists in what little research has been carried out in Australia in this area (Kickett-Tucker & Shahid, 2019; SCRGPS, 2015). Research questions were formulated to specifically address the aims of the study. Priority was placed

on listening to students, educators, and teachers' voices and allowing for in-depth analysis of a rich data set based on divergent geographical contexts and settings that cater for high-ability Aboriginal and non-Aboriginal students. Results for Aboriginal students were also compared and contrasted to results for non-Aboriginal students to identify similarities and differences in relation to the interpretation of the research questions posed.

### **Research Question 1. The Development of Self for High-Ability Aboriginal Students**

What do multiple stakeholders (students, parents, teachers, Aboriginal education officers, Aboriginal Education Consultative Group members, assistant principals, and principals) perceive are the consequences for the development of self for students transitioning into a streamed academic process for secondary school? To what extent are these similar and different for Aboriginal and non-Aboriginal high-ability students?

**Rationale for Research Question 1.** The impact of Aboriginal students' development of self, in particular in relation to high-ability students, has not been adequately researched in Australia (Kickett-Tucker & Shahid, 2019; North et al., 2018). The current study differs from previous studies in that it utilises in-depth interviews in identifying the strengths associated with Aboriginal high-ability students (Merrotsy, 2016) including their sense of autonomy, strong affiliation to siblings and peers, and sophisticated understanding of collaborative action and norms of reciprocity. A key finding in a Belgium study of transition, Boone and Demanet (2020) found "differences in perceived control and engagement originate in primary education and are indeed structured along prospective track lines (streaming)" (p. 15). The impact of students' perspectives of transition and their preparation for and management of the demands of secondary school is thought to influence whether transition will be a positive experience (Evangelou et al., 2008).

Students' and stakeholders' perceptions of secondary school could help explain the way in which this stressful period may be different for non-Indigenous and Aboriginal adolescents. This study sought to delve deeper to critically analyse the possible response behaviours to the perception of new demands and challenges faced prior to and after transition. UNESCO (2015) advocated that "the formidable increase in the volume of information and knowledge available [regarding school education] requires a qualitative approach to its transmission, dissemination and acquisition, at individual and collective levels" (p. 7). In this investigation, in-depth interviews aimed to explore students' perceptions of self-concept pertaining to transition. Self-concept theory (Baumeister, 1999; Marsh, 1990) is useful in critically analysing the performance inhibitors that centre on self-concept: forced-choice dilemma, acceptance and trust, stereotype threat, and low ASC (Merrotsy, 2016; see Chapter 3 for an overview). Hence, Research Question 1 was posed to identify how experiences of transition impact the self-concepts of Aboriginal and non-Aboriginal students in different secondary school contexts.

### **Research Question 2. Social and Ethnic Classroom Composition and Tracking**

What do multiple stakeholders (students, parents, teachers, Aboriginal education officers, Aboriginal Education Consultative Group members, assistant principals, principals) perceive as the impact of transition on social and academic outcomes for students transitioning to different educational contexts (i.e., selective settings, mixed-ability) for secondary school? To what extent are these similar and different for Aboriginal and non-Aboriginal high-ability students?

**Rationale for Research Question 2.** Previous research has identified that the transition phase can cause academic difficulties and declines in student achievement (Doyle, 2015; McCourt, 2017). Walker et al. (2014) identified the complexity of issues for Aboriginal youth when they stated, "The transition from primary to secondary can be

stressful for Aboriginal youth [as] there are cultural issues . . . and the need for schools to recognise this as a transition to adulthood requiring new ways of relating to Aboriginal young people in such instances” (p. 388). Evangelou et al. (2008) identified issues that could be related to “success” in transition for Aboriginal young people. Initiatives that support students to form social connections are vital and mitigate the stresses of transition. Transition can be particularly problematic for minority students. Finally, low socioeconomic background can impact transition. Those Aboriginal students who experience these factors are at risk of disengagement and may need strategies to be put in place that place a focus on how to support them during transition.

A battery of research has established that creating opportunities for participation, developing social and cultural capital, and creating a sense of belonging in school are factors that support high-ability Aboriginal students (Bodkin-Andrews, Seaton, et al., 2010; Kickett-Tucker & Shahid, 2019; Marsh & Craven, 2006; Merrotsky, 2016). This research sought to discover the impact of factors that support or undermine transition for Aboriginal and non-Aboriginal high-ability students. My realist view of the transition process and the experiences of students, parents, and educators informed my decision to take a phenomenological and qualitative approach to gather the research data. To answer the research questions, I designed and undertook this research to listen to the voices of those in transition and the educators who experience these changes on a yearly basis.

### **Research Question 3. Effort, Achievement, and Sense of Self in Selective Academic Environments**

What do multiple stakeholders (students, parents, teachers, Aboriginal education officers, Aboriginal Education Consultative Group members, assistant principals, and principals) perceive are the relations between effort, achievement, and sense of self for

high-ability students transitioning into streamed classes in the first year of secondary school?

**Rationale for Research Question 3.** An increasing body of studies have focused on school level or structural effects (e.g., Demanet et al., 2018; Gamoran, 1986, 1992; Hattie, 2002; Ireson et al., 2001; Scharenberg, 2016; Schofield, 2010; Van Houtte, 2016). There is a gap in the literature as to the interaction of variables that create the vicious and virtuous cycles of social and academic outcomes in selective classrooms (Muenks & Miele, 2017). It was necessary to examine the students' perceptions to reveal the effects of different aspects of classroom composition, such as GAT and mixed-ability compositions and the possible impact, such as the BFLPE (Marsh, 1987; see Chapter 3 for an overview). Other negative impacts on self-concept occur through social isolation, financial hardship, and marginalisation as they limit access to support and are compounded by the perceived or real effects of racism (Sahdra et al., 2019). Although often holding a unique sense of identity as a First Nation person, many Aboriginal adolescents experience disenfranchisement and low self-esteem as a result of discrimination, structural racism, stereotyping, and harassment (Riley & Ungerleider, 2012; Walker et al., 2014).

Some Aboriginal students attending urban schools participating in the research changed schools during Year 7, illustrating the complexity of interacting influences in the school environment. Some studies have found that students who transition multiple times are more vulnerable to steeper declines in academic achievement than those who do not (Alspaugh, 1998; Dinnen et al., 2020; Schwartz et al., 2017). This is because a change of schools during transition represents a substantial discontinuity in the social and academic development of students (Evangelou et al., 2008). To examine this phenomenon, two more research questions were added to examine the rationale for and effects of this second transition (see Chapter 7 for results), which are presented below.

**Research Question 4. A Second Transition to a Selective Academic Environment**

What do multiple stakeholders (students, parents, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Assistant Principals, and Principals) perceive are the factors that contribute to a second secondary school transition?

**Rationale for Research Question 4.** This research question is of scientific interest as empirical studies reported earlier showed a decline in motivation towards school because of track placement, adjustment to school, classmates, and classroom learning environments in NSW schools (Bonnor, 2018; Johnston & Wildy, 2016; SVA, 2019b). Self-concept theory (see Chapter 3) was deemed the most appropriate theory to test how streaming, adapting to new teachers, peers, and the cultural density of classrooms have an increasing influence on students. This theoretical perspective, because of its relevance to constructs such as sense of belonging, is fundamental to identifying factors that contribute to best practice when developing and implementing successful transition processes. This study investigates whether ethnic congruence—the percentage of co-ethnics in a school—connects to school outcomes in transition (Demagnet et al., 2016; French et al., 2000). There are no previous reports in the literature on how congruence effects impact Aboriginal students across different schools (with differing percentages of co-ethnics) in selective academic environments.

**Research Question 5. The Consequences of a Second Transition in Year 7**

What do multiple stakeholders (students, parents, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Assistant Principals, and Principals) perceive are the outcomes in the second selective academic environment after changing schools in Year 7, for Aboriginal high-ability students?

**Rationale for Research Question 5.** The challenges confronted in transition must be explored, together with the procedures of secondary school life such as timetables, assessment schedules, and room changes, to understand the scope of problems that students confront. In particular, when students undergo a second transition to another secondary school, a holistic approach is needed to improve planning, intervention, and programs to address these challenging issues. Previous research has analysed the effects of transition on various outcomes such as school achievement (Demetriou et al., 2000) or peer relationships (Ellis, 2009; Poorthuis et al., 2019). An appreciation of how students solve predicaments or alternatively accomplish success is important, especially in overcoming the obstacles that students encounter in the tiered settings of some selective academic and ethnically diverse environments. This research aimed to explore the “self” as operationalised by adolescent identity development (Harter, 1999) to account for experiences of transition in a different context of person–environment fit (Demanet et al., 2018; Demanet et al., 2016; Eccles & Wigfield, 2020; Eccles et al., 1993).

The present study builds upon the research that identifies a strong Aboriginal identity is a fundamental requisite for empowering students so that they have the capacity to feel in control and resilient (e.g., Bodkin-Andrews, Dillion, et al., 2010; Dobia & O’Rourke, 2011; Garvey, 2008; Kickett-Tucker & Shahid, 2019; Swan & Raphael, 1995). This body of literature acknowledges that social and cultural capital needs to be progressively built and developed over time (ERO, 2016; Merrotsy, 2016).

The in-depth interviews also aimed to explore self-concept theory to test the usefulness of this theoretical approach in critically analysing the need to develop a strong sense of personal identity and self-esteem in adolescence. All young people share this universal milestone to adulthood with their age group. However, this study is unique in that it analyses whether identity construction, as a more complex journey for Aboriginal

youth involving distinctive cultural capital, may be a source of additional pressure or confusion during transition. This research question was asked to identify the psychosocial determinants of success in a second “transition to secondary school” period of development for adolescents.

### **Chapter Summary**

Based on the theoretical foundations as well as empirical studies explicated in Chapters 2 and 3, this chapter presented the problem, aims, research questions, and rationale for each of the two studies that encompass the current synergistic investigation. In capturing and evaluating emic accounts of the context-specific features of the transition to selective academic environment phenomena in NSW public secondary schools, a qualitative approach was deemed the most appropriate method to address the overarching aims given the array of issues at hand in the present study and the strengths that arise from a longitudinal, qualitative approach. The following chapter presents the research methodology employed in each of the two studies to address the research questions and rationale posed in the current chapter.

## **Chapter 5**

### **Research Methodology**

#### **Introduction**

The purpose of this chapter is to present the methodological approaches undertaken to answer the research questions as outlined in Chapter 4. First, the research design, approach and methodology, and data collection for this investigation are presented. Second, the qualitative methods used in the research are discussed. These include document analysis, stakeholder engagement, field observations, and longitudinal qualitative data collection through in-depth interviews with students and semistructured interviews with other stakeholders over three time points (before transition, after transition, and at the end of the first year of transition). Third, a discussion of the ethical considerations addressed for this research working with Aboriginal students is presented. Finally, an overview of the rationale for the chosen methodology, being a qualitative approach, is discussed.

This study qualitatively investigated the differences between high-ability secondary Aboriginal and non-Aboriginal students in differing educational settings (urban and rural) in terms of their academic achievement and psychosocial outcomes. The investigation crossed three time points using a longitudinal design. This chapter demonstrates that a robust and suitable methodology was utilised to address the research questions and extricate the research findings effectively. Moreover, this study is described comprehensively so it may be reproduced in future research by other researchers.

## **Research Design**

The research was conducted in NSW Department of Education schools in Australia and adopted a longitudinal design focusing on the phenomenon of secondary education transition. The study collected data through recurring interviews, observations of student behaviours, and records of critical incidents (Flanagan, 1954). A critical incident contributes, either positively or negatively, to a phenomenon, in this case secondary education transition. An event is described from the perspective of the participant. The cause, description, and outcome of this event provide a source of rich information about a context and the participant. Examples of critical incidents in this research include changes in family situation such as dislocation or divorce, gaining awards or student leadership positions, or disruptions in learning such as changing schools or suspensions. A case study of a specific phenomenon is a purposeful tool for analysing and examining questions and to build theory (Eisenhardt & Graebner, 2007). This tactic permitted for the examination of the authentic experience of transition over time, allowing the participants to recollect upon transition at different points in time.

### **Multiple Case Study Approach**

This study was primarily concerned with exploring the experiences of a group of students in transition. The meanings they attached to these experiences were considered necessary for the development of their identities. The broad research paradigm, which includes multiple cases and multiple stakeholders, acknowledges that it is not merely the skills and strengths that enable individuals to thrive, but also their social context (Hayes et al., 2015). A positive psychology lens underpinned the focus of research in this study of secondary education transition (Craven et al., 2016).

The research design employed was a longitudinal, multiple case study approach (Yin, 2012). The study of transition reported in this study was from the outset conceived as a longitudinal investigation (Merriam, 1998; Yazan, 2015). Case studies are rigorous, comprehensive stories that describe contemporary events involving many variables that have strict boundaries. Far from being loose and speculative, these case studies are soundly based in realist theory (refer to Chapter 3) and are built from a systematic analysis of contextual relationships within the setting, participants, and transition events over time (Maxwell, 2012). Systematic methods of narrative analysis, such as connecting analytic strategies, are required to understand research interviews as well as coding and other categorising strategies (Marshall & Rossman, 2016; Rubin & Rubin, 2012). The whole is greater than the sum of its parts. Not only is the emphasis on interconnected relationships among the elements, but there is also an awareness of the parts and the whole as essential to the story (Ridder et al., 2014). The final product, the case study story, is a thorough, holistic analysis of a group situation and contains detailed narratives and descriptions of phenomena, ideas, and changes (Yazan, 2016).

**A Complex, Bounded Multiple Case Study.** As happens in all naturalistic investigations, case studies are bounded by independent and dependent constraints. In this study, the phenomenon (transition), the participants (high-ability Aboriginal and non-Aboriginal students), and the domain (rural and urban primary and high schools) constituted the independent boundaries of the project. However, the type of streamed classes were dependent boundaries because the researcher was limited by the type of class, selective or mixed-ability, that the participants and their parents chose to join in Year 7 and whether their chosen school offered such a class. I, as a researcher, constituted a dependent boundary because I was limited by knowledge, skills, commitments, finances, and time.

Case studies are the best way to deal with phenomena that continue to change shape and continually evolve (Gerring, 2007). Real-life events such as secondary education transition are complex and involve multiple variables. The reality of specific contexts, such as a school or classroom environment, requires analysing psychosocial mechanisms and relationship dynamics that change over time (Alvesson & Skoldberg, 2009). This type of approach suited the study as I examined how specific social behaviour interacted with different school environments. The interplay of multiple variables in detail, such as in a case study, is often used by researchers to better theorise about a greater collection of cases (Stake, 2005).

**Student Voice.** The particular focus was students' perceptions of their experience of transition. A sociocultural approach was taken to understand the experiences of the development of self in high-ability Aboriginal students during this experience. Interestingly, two Aboriginal students changed schools through the course of the transition to Year 7. This critical incident provided a unique opportunity for understanding at a deeper level if movement from one educational environment to another could possibly impact motivation negatively or positively.

The project is a descriptive study because it aimed to provide a detailed description of transition to secondary school. Vivid descriptions of the documented events and situations speak for themselves, rather than relying solely on the researcher's evaluation. This approach is designed to result in data that illuminate a piece of reality, exploring the experiences that make up the everyday lives of participants (Wright & Kickett-Tucker, 2016). Perceptions and understandings that students had about their secondary school transition practices and their coping strategies also provided enriched understandings of the classroom practices that operate behind the effects of transition to Year 7 in selective academic settings.

**Multiple Stakeholder Perspectives.** As a researcher, I followed participants and their parents and teachers as they planned and enacted on the preparation, movement, and interaction between the primary and secondary contexts and consolidation into the secondary setting. Participants reflected on their behaviour change and decisions since the previous phase of each of the three time points in the study. The study is inductive because the interpretations involve inductive reasoning. The longitudinal view was used to illustrate enablers and barriers of lasting success and a consolidation of their selective, academic placement in secondary school.

The advantage of multiple case studies is explaining and interpreting causal inference (Gibbert & Ruigrok, 2010). Causal inferences are made possible through the added mechanism of comparison (of context and unit of analysis) in which different catalysts are either present or absent (Yin, 2012). Specifically, they “are able to explicitly address the counterfactual of what would have happened without the presence of the presumed cause” (Shadish et al., 2002, p. 501). The sampling strategy in this research involves multiple case studies and therefore tests and refines the theory and increases the trustworthiness of findings (Emmel, 2013).

**Rural and Urban Schooling Contexts.** The present investigation presents the reader with illustrations and examples of critical factors that led to the successful implementation of transition programs in one rural and two urban school locations. The study is heuristic because it seeks to elucidate the factors of success in transition across geographic locations. By generating and analysing data from multiple school locations, broader explorations of the study’s research questions were permitted.

The methodology for each of the multiple case studies was a “micro to macro” framework (Kail & Cavanaugh, 2010). From this framework, based on human ecology theory (Bourke et al., 2000), the values and objectives guiding the research context are

explained, as well as strategies for enhancing rigour. Bourke et al. (2000) identified four levels of factors that influence Indigenous students' worlds: the individual students, school and staff, parents and the community, and the school system. Lester (2016) legitimised and employed this framework in his study, labelling the model "the four factor model". In this study, it was similarly used and labelled. A description of the participants, measures employed, the administrative procedures, and research design for the clear elements of each case study are described in this research. A detailed description of the rural and urban case study contexts follow in Chapter 6 and Chapter 7.

### **Participants**

Year 6 students were sourced from three schools: a large urban school, a small urban school, and a large rural school (see Chapter 6 and Chapter 7 for detailed school site information). The NSW DoE identified and contacted schools with Aboriginal students in Year 6 who were in the top three bands for National Assessment Plan Literacy and Numeracy (NAPLAN) test results in Year 5 and had an Aboriginal education worker.

The NSW DoE research coordinator made initial contact with the primary school principal, providing information about the research and an invitation for their school to participate in the study. Nine Aboriginal students and nine non-Aboriginal students were matched by gender, ability based on NAPLAN tests, and school. Five Aboriginal students and six non-Aboriginal students were identified as key informants based on their agreement to participate. Permission notes were sent to parents and consent received for the three interviews over the 12-month period. The students were followed to their respective secondary schools. Their secondary school principal was provided with information about the research and an invitation for their school to participate in the research. Participation by students involved undertaking a 1-hour individual interview on

three occasions (Time 1: in Year 6 of primary school prior to transition; Time 2: 4 weeks after transition; and Time 3: 5 weeks before the end of the year).

### **Primary Schools**

The one rural primary school had a population of 150 students with 30% being Aboriginal. One urban primary school was based in Sydney and had a very high percentage of minority ethnic children. This school had a population of 1,000 students with 2% being Aboriginal. The third urban primary school was based also in Sydney and had a population of 100 students with 25% being Aboriginal.

Each interview was usually with the classroom teachers or one of the Year 6 teachers designated as the teacher in charge of the transition. Occasionally, the teacher had another post such as assistant principal. Each primary school was a feeder to a case study secondary school.

### **Secondary Schools**

An overview of the case study secondary schools is given in the Table 5.1. There were 10 secondary schools involved: eight government NSW DoE schools. One rural secondary school was situated in the New England region; the other seven government secondary schools were located in south Sydney, western Sydney, and the Central Coast. Small groups were required for specialist staff who worked in the same school and were employed by the NSW DoE. Personal interviews (Hammersley, 2008) guided by semistructured interviews (Appendix A) were undertaken with the school executive, teachers, and Aboriginal educators employed in each secondary school such as AEOs. An AEO supports individual Aboriginal students and their families within the school and preschool community. A total of 41 interviews were conducted with 31 school staff, with primary principals being interviewed once and secondary school principals being

interviewed twice as shown in Table 5.1. These interviews were conducted with DoE school executive staff included principals ( $n = 8$ ), assistant principals ( $n = 3$ ), and head teachers ( $n = 3$ ), comprising 11 males and 11 females, and specialist teachers ( $n = 6$ ) (three of whom were Indigenous, three female). Seven Aboriginal staff members of the schools employed as AEOs were also interviewed.

### **Parent/Community Participants**

Five Aboriginal parents and five non-Aboriginal parents in the study volunteered to participate. This group of participants included Aboriginal staff employed in the schools primarily because of their composite role as, for example, AEO and Indigenous community representative. This was especially relevant where the participants were both an employee of the DoE and an executive member of the local AECG.

The pool of community participants included four Elders from the local AECG, one from each of the regions (south Sydney, western Sydney, the Central Coast, and New England). One Aboriginal community worker, Melita, was interviewed as she was employed by the agency to conduct a transition support project in two local high schools. This project involved delivering workshops with parents/carers to explain the importance of their child transitioning into high school; encourage parents/carers to attend parent/teacher interviews, sports carnivals, and any other school event days; and assist parents/carers, along with school staff, with developing and designing their child's Personalised Learning Plan. The program delivered workshops within each of the partner schools around life skills including preparing for high school, Elders' stories, researching totems, bullying, social media, health, and social and emotional wellbeing. The program delivered weekly school sessions that were educational and linked with community support services and Aboriginal Elders and mentors. A camp was integral to the program.

Assistance was provided for parents in liaising with schools as well as assistance for students in the event of suspension.

**Ethics Approval.** Ethics approval (Appendix B) was sought and granted by the Australian Catholic University Research Ethics Committee. Subsequently, approval was obtained from the NSW DoE via the State Education Research Approval Process. The DoE undertook the required child protection screening for all researchers involved in the present study.

The study was conducted with the informed consent of participating principals, teachers, educators, Elders, parents, and students. Parental permission was obtained for student participation, and all the students were free to withdraw from the study at any point. All data were stored securely and reported anonymously. Participants were given a code to conceal their identity. Pseudonyms are used for all schools and participants (see Table 5.1).

**Table 5.1***Matrix Profile of Participants*

RURAL							
School	Type	Aboriginal Student	Non-Aboriginal Student	Aboriginal Parent	Non-Aboriginal Parent	AEO	Teacher/Principal
Denponse Primary	Coed Govt	3	3	3	3	1	2
Denponse High	Coed Govt	3	3	3	3	1	3
<b>Total participants</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>5</b>

URBAN							
School	Type	Aboriginal Student	Non-Aboriginal Student	Aboriginal Parent	Non-Aboriginal Parent	AEO	Teacher/Principal
Somerset Primary	Coed Govt	3	3		1	1	2
Belby Primary	Coed Govt	2	3	2	1		3
Fisher High	Coed Govt	1		1		1	3
Tarium High	Coed Govt		2		1		2
Drahner High	Coed Govt	2				1	4
Lewis High	SS Govt	1	2		1	1	3
Lotown High	Coed Govt	1		1		1	1
<b>Total</b>		<b>5</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>18</b>

*Note.* Time 1 participants are in red. In Time 2, only student participants were interviewed. Time 3 participants are in blue. Parents and secondary school government principals participated in both Time 1 and Time 3. One community worker was interviewed. There were five Elders from the Aboriginal Education Consultative Group interviewed, one from each Aboriginal community. Coed refers to a coeducational school. SS refers to a single-sex school. Private school participants were removed in Time 2 and Time 3.

### **Purposeful Sampling Strategy**

The basis of the research was to give a comprehensive representation of Year 7 students. The students were matched on gender, ability, and Aboriginality or non-Aboriginality and were drawn from two urban primary schools and two rural primary schools in NSW. Students whose parents consented to be in the study participated in a face-to-face, 30-min in-depth interview: at the end of Year 6, in Term 1 in Year 7, and during Term 4 in Year 7. This was done to elicit further information about their transition experience. Twelve principals (primary and secondary), four teachers, and four AEOs participated in interviews to discuss their perceptions of the issues involved in the transition of students from primary to secondary school.

### **Development of Case Study Locations**

In the second year of the study (Year 7), the students dispersed into 10 different secondary schools, including single sex, coeducational, and selective and mixed-ability settings. Of the two regional case studies, all of the Year 6 students moved to the same local coeducational secondary school, both of which offered a selective streamed class for GAT students (high-ability classes). Both schools required a placement test in Year 6 in order to be accepted into the class. Of the three urban contexts, seven moved to coeducational schools (high-ability classes, Years 7–12), two moved to a government single-sex school (high-ability classes, Years 7–12), one to a private single-sex school (K–12), and one to a private coeducational school (high-ability classes, Years K–12). Sampling included secondary schools with high-ability classes. This theoretical sampling (Yin, 2018) was important in testing developing ideas about the participation of Aboriginal students in different selective settings.

There were 10 different secondary schools, but the 11 Aboriginal students engaged in the study were the key informants. The students that dispersed into five government schools became the focus of the study. Government schools were able to provide rich local data from school staff, Aboriginal students' perspectives, and finally from the Aboriginal communities' points of view. School curriculum, policy, and demographic data were gathered during school visits from school documentation available—for example, school annual reports. The annual report is a summary of the happenings, results, budget, and plans for the year past and is an authentic account of school records. Principals are required to certify that information in this report is the result of a rigorous school evaluation process. Capacity to access these resources proved invaluable to the holistic approach used in the study.

One Aboriginal student changed locality in the second week of Term 1 in Year 7, and one Aboriginal student changed district in the last week of Term 3. There were multiple case study domains, rural and urban, focusing on the Aboriginal student participants.

### **Instrumentation**

Semistructured, in-depth interviews were used to document the perceptions of students and teachers. Interviewing offers important advantages over questionnaires when considering perceptions because it allows participants to provide spontaneous viewpoints (Rubin & Rubin, 2012). Interviews had the likelihood of producing higher quality data since they allowed me to identify and address participants' misunderstandings and to probe inadequate and vague answers. According to Seidman (2013), interviews allow for context and question order to be controlled. It was hoped that the extent to which students' experiences of change were similar or different according to their context would identify key relationships that tied the data together into a sequence for determining naturalistic

generalisations (Creswell et al., 2007). The interaction with significant others (peers, family, teachers) would also be linked to the broader patterns (Creswell et al., 2007). Finally, it was expected that aspects of psychosocial determinants of success (confidence, perseverance) would arise from the explicit analysis of these contextual relations.

The primary data of in-depth interviews are quotations (Seidman, 2013). Audio recordings provided a verbatim account of the interview, thereby increasing the accuracy of data collection and allowing me to be more attentive to the participants' verbal and nonverbal behaviours. I was able to monitor responses for contradictions, ambiguities, inconsistencies, or misunderstandings and anticipate follow-up and probing questions.

A schedule guided all student, teacher, and principal interviews (see Appendix A). The questions were designed to fulfil the descriptive, structural, and contrast functions (Mockler & Groundwater-Smith, 2015). The questionnaire was designed to collect information about the experiences of secondary school transition and included four sections. The first section explored the experiences of transition. The second section elicited perspectives of the present school situation and the strengths and limitations of this. The third section focused on sources of support for the challenges that arise from transition. The fourth section brought together all the perceptions of the stakeholders at the end of the formal transition process. In particular, this section examined students' knowledge and experience of their different educational settings (mixed-ability or selective) as well as their perceptions of how and what characteristics had helped them achieve academically.

The schedules for the interviews were consistent in structure for students, teachers, and principals. Interviews opened with an explanation of the purpose and the format that would be followed. Participants' confidentiality was reinforced, and permission to record was requested (Rubin & Rubin, 2012).

Questions throughout the interviews were semistructured and open-ended. I was free to stray from the schedule at any time, to follow additional issues raised by the participants, or to explore key ideas in response to interview content. To moderate for consistency and to ensure that the interviews remained on track, a second facilitator double-checked the guide as the interview progressed. If a question was missed during the interview, they asked that question. The generalisability of results was maintained by balancing the demands of consistency across interviews and the freedom to collect organic data from issues arising from an interactive setting (Rubin & Rubin, 2012). Interviews closed with a reminder about the scheduling of the next interview and thanking participants for their participation. The semistructured interview schedule is included in Appendix A.

Focus groups were another way of generating data. The purpose of the focus groups was to gather a range of views about transition from Aboriginal educators. Focus groups have higher ecological validity because they are less artificial than interviews (Fusch & Ness, 2015). Participants can interact with each other, justify their position, contradict others, and even change their minds (Packer-Muti, 2010).

The AEOs had the greatest amount of insight on the transition of Aboriginal students and therefore were information-rich participants. They did extend and develop each other's thoughts. Because of the nature of their role, they work across the stages of learning in the Australian Curriculum. In NSW there are four sequential stages of learning in primary school, and each stage refers to the sets of skills and knowledge a student is aiming to develop at a certain stage in their education. As the AEOs work across these different groups, they have a long-term perspective on transitional effects. With the expectation of differences in perspectives, the strategy was to generate new ways of looking at student experiences. The viewpoint of the AEO might uncover new factors that influence opinions, behaviours, and motivations.

When analysing the focus group generated data, care was taken. As some group members were more dominant than others in the group, the frequency of the comments was not tabulated as indicating greater importance. An awareness of group dynamics was important in the analysis of data.

## **Procedure**

**Data sources.** Data were collected from three main sources, which were open-ended interviews, archival documents (e.g., ACARA, n.d.-c) and direct observations, annual school reports and school strategic plans. The school strategic plan is an essential component of a school's accountability and provides a means for a school to identify and communicate how the school is working to improve outcomes for its students.

The students were interviewed at three time points; the parents were interviewed at the end of primary school and the end of the first year of secondary schooling. The teachers and principals were mostly interviewed once at the end of primary school or the end of the first year of secondary schooling as they belonged to different schools (primary and secondary). The 43 archival documents that I collected were publicly available and included strategic planning, annual reports, newsletters, school, and AECG Facebook and website pages. These documents constituted a valuable source of data. Information that I received about the transition process from interviews was able to be cross-checked and to control for retrospective bias.

Table 5.2 summarises the type and amount of data collected. The data gathering methods also included documents (DoE policies, school strategic plans, transition workbooks), reports of critical incidents, and school observations.

**Table 5.2***Summary of Data Gathered*

Type of Data	Hours Spent Collecting Data		Single-Spaced Typed Pages	
	Rural	Urban	Rural	Urban
Observation in the school	6	14	12	18
Interviews – formal/transcribed	~20.5 hrs 39 interviews	~ 29.5 hrs 59 interviews	220	415
Transition documents	n/a	5	–	20
Analysis of NAPLAN scores	2	6	–	–
Strategic planning, annual reports, newsletters, school Facebook pages	~10	~18	80	480
Land Councils' reports, AECG, Facebook pages	~15	n/a	40	n/a
<b>Subtotal</b>	<b>51.5</b>	<b>72.5</b>	<b>352</b>	<b>933</b>
<b>Total</b>	<b>124 total research hours</b>		<b>1,285 total pages of data</b>	

I focused on documents that discussed school budgets, transition planning, and implementation. These included school strategic plans and annual reports. Over the 2 years, of the data collection phase of the study, I recorded observations from each school site, informal encounters, and conversations; monitored school Facebook sites; visited local Aboriginal community centres; and observed Year 7 camp planning meetings. I recorded field events from all nine school sites.

The data collection began in two urban government primary schools and one rural government primary school. It included nine Aboriginal high-ability students (four girls

and five boys) and nine non-Aboriginal high-ability students (five girls and four boys) who made the transition from Years 6 to 7 (Table 5.1). The data collection finished in three urban secondary schools and one rural high school. The definitions of “gifted and talented” and “high-ability” used in this study were both conceptual and operational (Moon, 2006). More detail regarding the case study sites is detailed in the respective “Results” chapters for each case study (Chapters 6 and 7).

**Data collection.** Schools of interest were identified by the DoE to ensure cohorts of high-achieving Aboriginal students were represented in the comprehensive primary schools. The DoE identified schools to invite based on the selection criteria of students’ Year 5 NAPLAN results. The average band across years was calculated for both reading and numeracy. Groups of high-ability Aboriginal students were identified from their scores and then matched with the same band pattern with non-Aboriginal high achievers in their primary school. The DoE research coordinator contacted each school principal, or their delegate, agreeing to participate in the study to organise a time and date for the visit. Additionally, the principals were advised of the names of students who had been purposefully selected for the interviews and helped organise parental consent. Principals also helped to match non-Aboriginal participants with the Aboriginal participants. The students, parents, teachers, and AEOs were then invited to participate in interviews by the school principal.

The collection of data from questioning was conducted via 20- to 40-min semistructured interviews—the structured format of the questions allowed for particular themes to be explored. Open-ended questions permitted any discussion to occur around the themes, but the semistructured process standardised procedures across all participants (Rubin & Rubin, 2012). I took on the role of facilitator and conducted the student and teacher interviews. As a classroom teacher with a friendly disposition, I tried to build

rapport with students. During the Time 2 regional visit, an Aboriginal researcher took on the role of facilitator with the Aboriginal student participants (Kickett-Tucker, 2009). This was in response to students' succinct interview responses in this context during Time 1. Every student brings to school particular language and experiences from their Aboriginal culture. In the case that some Aboriginal students may be able to better relate to an Aboriginal adult, it was thought that students may share more openly with an Aboriginal researcher about their experiences in transition. This variation did not impact the data collected and is discussed in more detail in the findings.

A second researcher, the DoE research coordinator, was also present as a moderator and checked that each question was discussed with participants in the course of the interview (Nathan et al., 2019). The interviews were recorded via the computer-recording program, Audacity, and a second digital recorder was used as a back-up copy (Nathan et al., 2019). It was standard procedure in the interview process to give a brief summary of the purpose of the study at the commencement as well as reminding participants that their participation was voluntary, and they could withdraw at any time. A three-phase collection of data was organised, as shown in Table 5.3. The same three phases were carried out at the case study locations.

**Table 5.3***Summary of the Three Phases of Research*

<b>Phase</b>	<b>Participants Involved</b>	<b>Data Collection Activity</b>
Phase 1 December 2015	Students Parents, key primary staff, principal AEOs AECG members Primary schoolwide and transition relevant documents School environment: interactions in classrooms, library, meetings, playground	Semistructured interviews Document analysis (ongoing) Observations and field notes of critical events (ongoing)
Phase 2 End of Term 1, March 2016	Students Secondary schoolwide and transition relevant documents Interactions in the secondary school environment	Semistructured interviews Document analysis (ongoing) Observations and field notes of critical events (ongoing)
Phase 3 December 2016	Students Parents, key secondary staff, principal AEOs AECG members Secondary schoolwide and transition relevant documents School environment: interactions in classrooms, library, meetings, playground	Semistructured interviews Document analysis (ongoing) Observations and field notes of critical events (ongoing)

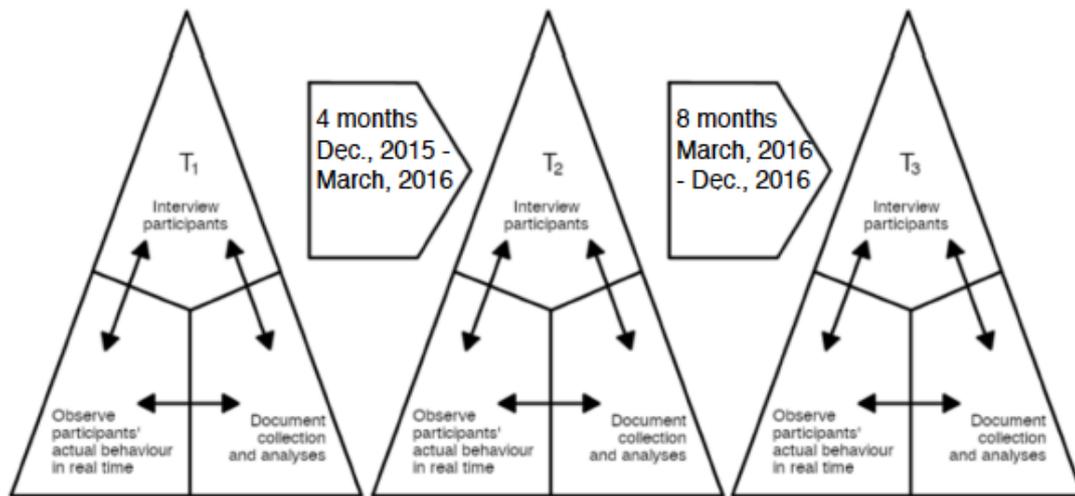
Phase 1 consisted of 48 semistructured interviews, as described. I used multiple informants and cross-checking information against school documentation to avoid retrospective bias in the interviews. Strict case study protocol was followed. All the interviews were transcribed and entered into a case study database.

Phase 2 focused on the initial student response to secondary school. By the end of Term 1, students would have developed new friendships and were getting used to new routines and school organisation. The focus of the data collection was how the provision of orientation and wellbeing programs supported students in the new setting.

Phase 3 concluded the data collection with reflections from all stakeholders. Multiple stakeholders identified their perceptions of the major enablers and barriers to transition and what impact, if any, transition had on the social and academic outcomes of high-ability students. Students were also asked to reflect on what people had supported them during transition and whether, and how, they felt a sense of belonging at secondary school.

A discussion about the interviews, as recommended by Rubin and Rubin (2012), followed each visit with the DoE coordinator and myself discussing our thoughts. After each regional visit, we spent time separately writing down our ideas, interpretations, and observations that had emerged from the interviews into a personal diary. A synthesis of these entries formed the basis of an “initial impressions” report back to each school.

**Triangulation of Methods.** One of the key strategies to enhance the dependability and credibility of this research was the triangulation of analysis and methods (Figure 5.1). The use of dissimilar multiple methods and the addition of multiple study objectives is a well-established approach for increasing the value of case study research (Creswell et al., 2007). By approaching the phenomenon (transition) through different approaches, the aim was to understand how the data converged and diverged. This technique has the advantage of opening up new understandings (Maxwell, 2012). The main method was interviews with stakeholders. Conversing with participants in an interview is the most effective way to access rich description of their lived experiences. Interviews also can check the accuracy of the observations made in a context.

**Figure 5.1***Triangulation of the Longitudinal Study*

The second method in the triangulation of data collection is generating interpretations of someone's behaviour from descriptions of critical incidents (Flanagan, 1954). Analysis of quantitative data is often combined with document analysis, stakeholder perspectives, and underpinned by theory to explore the dynamics of children's experiences. For this research, these personal observations from the field and the researchers' debriefings were recorded in a research journal. Observations about the operations of community and schools were also collected from public social media sites. Official documentation from the DoE and ACARA provided information about contexts, events, and actions. These methods of gathering data provided a more complete and accurate account than anyone could alone (Patton, 2002).

Finally, themes were identified in a "theoretical or deductive or 'top-down' way" (Braun & Clarke, 2006, p. 6). The transcripts were presented, organised, and coded in the coding book to discover order (Charmaz, 2020). In this theory-generation process (King et al., 2018), it is acknowledged that the questions I asked of the data, my methods, and my personal and theoretical background shaped the research process. A second coder also was

using this process. The intercoder reliability was one. The discovery process consists of discovering the ideas the researcher has about the data after interacting with it (Charmaz, 2020). Hence, a directed content approach underpinned by theory guided the coding of transcripts (Hsieh & Shannon, 2005). Findings are discussed in light of theory. Current theory can be studied, interrogated or reinforced, or refined through extending concepts using this approach.

Rich description about transition was analysed through critical incidents involving students' grades, attendance, behaviour, friendships, and achievement. Isolated categories and the relations between each category allowed themes regarding the stakeholders' experiences of transition to emerge from the triangulation of data across the three time points, as shown in Figure 5.1.

A longitudinal case study enabled the collection and analysis within and across the three primary to secondary transition sites (Yazan, 2015). It was a story built as a result of the recount and interpretation of each student's recollections. Their identity was the result of relationships and interactions with other people. The decisions and actions of students could not be considered without the context, the school, and the power hierarchy (Yin, 2018). These people belong to the subsystems within the four factor model: systemic, school, parent/community, and student.

A multiple case study design provides multiple points of perspective and comparison in the four sources of influence: home, peer group, school, and community. Yin (2018) encapsulated the complexity of these case study contexts by stating, "The case study inquiry copes with technically distinctive situations in which there will be many more variables of interest than data points, and as a result, relies on multiple sources of evidence" (p. 439). To maintain a reasonable scope, a case study will depend on the

triangulation of data and a strong theory base to guide data collection and evidence (Yin, 2012).

Embedded multiple case studies build theory as part of a unified multisite effect that has multiple units of analysis (Yin, 2018). The advantage of a case study is that it is able to describe the reactions and experiences of a small number of people in a detailed way while maintaining external validity (Eisenhardt & Graebner, 2007). By creating a chain of evidence and providing a rival hypothesis for the theoretical underpinning, external validity was extended (Eisenhardt & Graebner, 2007; Gibbert & Ruigrok, 2010; Yin, 2012). The case studies have enhanced rigour from converging triangulation of data obtained from the involvement of three types of stakeholders, including the students, the parents, and the educators. Further, the experiences and perspectives were compared and contrasted for Aboriginal and non-Aboriginal participants to identify similarities and differences pertaining to the interpretation of research questions posed.

### **Analysis of Content**

The digital recordings from each interview were transcribed verbatim. To authenticate the transcripts, I checked the accuracy of the transcription with the recording. I ensured familiarity with the transcripts before commencing analysis of the data, and any post-interview reflections from diary observations were added to the notes. An independent coder and I identified new response categories. The coding of transcripts was adopted to gain a detailed understanding of what was identified as the most frequent factors of concern. Then, this close reading was applied for each of the five sets of questions raised with stakeholders. The transcripts were divided into units of analysis. The participant's description was defined as an event. If the focus of thinking changed direction, a new event was tabled. My methodologies varied depending on the size, text type, and content of the data subset. In general, I initially read texts closely to determine

which type of analysis would be most useful to identify trends. Close reading is, therefore, throughout both chapters in the findings of the study.

I employed five main methodologies for data analysis: content analysis, document analysis, word frequencies, thematic framework analysis, and narrative analysis. Content analysis involves labelling passages of text according to themes that emerge from the text in relation to each of the research questions. Word-frequency counts are a text-mining practice that determines the most significant words within the data set using the relative frequencies of words. Theoretical framework analysis is an inductive process whereby theory from other scholarship is used to make sense of the text. Narrative analysis attends to deep details of a person's story to construct a narrative about the individual's experience. A fuller explanation of each method follows below.

**Content Analysis and Close Reading.** Initial coding was prepared according to the procedure used by Charmaz (2020) known as open coding. Samples were analysed by an independent coder (rater) and me agreeing on the categories. We adjusted the coding scheme until we could ensure that both coders held the same understanding of the coding scheme and would code the data consistently. We worked together for the entirety of the process. The raters had different approaches based on their degree of involvement in relevant research findings. One rater worked from a grounded theory approach (Zhang & Wildemuth, 2017). The second rater's approach was summative content analysis and reflected on the words used in an inductive manner (Zhang & Wildemuth, 2017). Comparing these two independent approaches of meanings, themes, and patterns found in the transcripts identified an initial classification. We began by establishing a coding book with a common coding scheme to ensure that the coding and classifying of data were occurring in a consistent manner.

Any revision of the coding scheme was reported, and a record was kept of all decisions made throughout the process. The intercoder reliability was calculated by taking the number of codes that the researchers agreed on and dividing it by the total number of pieces of data coded. An intercoder reliability of .8 was found (Zhang & Wildemuth, 2017). Categories that did not reach this level were removed from the analysis. If the frequency of the categories coded fell below 15%, these categories were excluded. After removing final categories due to insufficient reliability and frequency, a final list of categories was developed. Tables of frequencies were created and coded according to whether a response fell within a category (Braun & Clark, 2006).

Once these two independent analyses were completed, all the categories, definitions, and relations between them were discussed with colleagues familiar with the conceptual areas. The aim of this discussion was to ensure the adequacy of the assigned categories. We used caution when identifying quotations that did not align with the literature. Unclassified segments were assigned to new classifications. Theoretical memos recorded the researchers' lines of reasoning, as emergent themes appeared (Braun & Clarke, 2006). The resulting classifications were then compared with the relevant literature. The intention was to identify the central themes and relations between emergent concepts and categories. Through a process of continual refinement and analysis, the emergent concepts were established. This clear coding process and intercoder corroboration was intended to safeguard the reliability of findings.

Axial coding was completed after calculating reliability (Charmaz, 2020). Axial coding is focused on coding where there is a selective reduction in the process. The process involves an analysis of the patterns contained in the code categories to reduce overlap or make redundant categories (Yin, 2018). As a result of the context of a particular phrase, new categories emerged and were classified. There was careful consideration of the

meaning of the grammar. The context of a phrase in the interview transcript was analysed to determine the most accurate and trustworthy representation of the participant's intent. Time was taken for the discussion of unclear or ambiguous statements.

**Computer-Assisted Word-Frequency Counts.** To determine the words that were most significant within each theme and each student's transcript, I conducted an analysis of frequencies of words using a simple computer-assisted text-mining program. These frequencies were then compared across the three time points. Computer-assisted searches were conducted for occurrences of the terms, "effort", "gifted", and "improve" as well as related words in the transcripts (Camprubí & Coromina, 2016; Hsieh & Shannon, 2005). Word-frequency counts for each of the two DFSEC (Muenks & Miele, 2017) related terms ("effort" and "ability") and BFLPE (Marsh, 1987) associated performance-oriented terms ("compare", "improve", "top", "highest", and "rank/ed"). I processed the data twice to double-check the analysis (Braun & Clarke, 2006). High raw frequency in the data collected highlighted the unique patterns of student thinking at the time of each interview, and then how this thinking changed over time.

**Theoretical Framework Analysis.** Theory-building case study that ties emergent theory to the data collected enhances the internal validity and generalisability of case study research (Eisenhardt & Graebner, 2007). Initially, patterns of meaning were identified from events, school procedures, interview transcripts, and themes. Then, a comparison of the emergent concepts from the data was made with a broad range of literature. This evidence was used to construct a descriptive and theoretical explanation of their secondary school transition (Rubin & Rubin, 2012).

I investigated the relations of meaning between the codes, between the themes, and between different levels of themes. Initially, my objective was to explore secondary school transition as the focus for the project. However, it emerged from the stakeholders'

perspectives that “streaming”, a system characterised by dividing students into groups by academic status, impacted the functioning of Year 7 students. From transcripts, streaming was a form of stratification and meaning making in secondary school practices and discourses. The data revealed the existence of two groups in each secondary school, high- and mixed- ability groups. High group-level achievement is known to have negative effects on a person’s achievement. Hence, construct definitions were carefully defined. The next step was to constantly compare theory and data. I continued to find data from one source, which was corroborated by the evidence from another.

Other perspectives gathered from the literature were able to identify concurrent themes that resonated with the interview data and observations. The theoretical framework of DFSEC (Muenks & Miele, 2017) informed the two analytical perspectives to analyse the interview data: (1) What are some of the effort–ability comparisons that may influence the development of self for students? (2) What contexts or learning environments generate particular patterns of reasoning that may influence the development of self for students?

The analysis also involved different types of comparisons based on Aboriginality. Associated with this reorganisation of theme data (Braun & Clarke, 2006) was the creation of visual displays to represent the comparisons more accessibly (Zhang & Wildemuth, 2017). Both the thematic map of each research question and the comparative analysis data provided a detailed description of transition. These methods were also used for peer scrutiny of the data to further build credibility in the data analysis (Maxwell, 2012; Zhang & Wildemuth, 2017).

**Narrative Analysis.** The five elements of narrative genre were used to piece together each case study story: character, setting, point of view, conflict, and theme. The students themselves became the main characters, and the transcripts of interviews generated particular points of view. Points of view from the key stakeholders and the

characteristics of each school were essential to describe the settings. “Conflict” as a dynamic evolved in the case studies as positive and negative opportunities of secondary school were experienced by students. The themes developed in response to the other four elements and descriptions of phenomena, ideas, and changes (Yazan, 2015). The final product is the case study story, which is an intensive, holistic analysis of a group situation.

### **Rationale for Chosen Methodology**

As the first stage of the research was to explore the factors that contributed to how students perceived and experienced the transfer from primary schooling to secondary schooling, a phenomenographical design was used to capture the essence of the experience. The focus was how the student participants experienced the phenomenon of transition. From the identification of significant statements, development of structural and textual description formed the essence of the experience for all students.

### **Phenomenography: Micro Framework**

For the internal and external validity of the study, multiple sources of evidence were compiled, including a combination of subjective and objective data and different sources of descriptive data (Eisenhardt & Graebner, 2007). This approach allowed the corroboration of collected data because it was gathered through different techniques. In addition, the research was longitudinal, collecting data over a period of time to trace operational links. Finally, as a teacher, I was moving away from my usual position as “doing” to a new and different perspective by studying individuals through a phenomenographic framework (Giorgi, 2009). It was a fresh start, with a different set of approaches: puzzling, questioning, wondering, and not knowing.

### **Case Study Design: Macro Framework**

A case study design was chosen because a case study has embedded within its approach a deep understanding of contextual features. Such an intensive investigation is able to best describe and interpret the environment of study and at the same time capture the sensitivities and subtleties of the situation being researched (Yin, 2018). As Yin (2018) stated, case studies are able to investigate a complex social phenomenon within its real-life context. In particular, case studies are useful for institutional research and program evaluation, an enhanced understanding of practice. The research questions focused on four settings of influence: home, peer group, school, and community. The case study approach allowed sufficient access and insight to both the method and overall reporting of both the micro and macro settings. The reader can contextualise the research, make sense of it, and draw their conclusions and interpretations.

### **Rationale for Observing and Creating Categories of Behaviour**

In the present study, a naturalistic approach using qualitative research techniques was used to describe and examine the processes occurring in real, local contexts. Collecting instances of types of behaviour—for example, fighting—from the data and categorising it with other instances allows theoretical generalisations to be made (Yin, 2018). The purpose was to seek a deeper understanding of the social phenomenon through observations, description, and finding repetitions in the data. These methods allowed perceptions and real experiences of participants to be shared and understood by the researcher. Realist philosophy, as noted by Maxwell and Mittapalli (2008), makes causal analysis the central focus: “This position’s emphasis on understanding processes, rather than on simply showing an association between variables, provides an alternative approach that is particularly well suited to qualitative research” (p. 323).

The case study involves real-world settings. As such, this bounded system can make a naturalistic generalisation to solve problems, improve programs, or develop policies. It has been shown to be a skilful and reasonable way to find out what is happening in programs and settings (Maxwell, 2012).

The inquiry process and data that build from these multiple sources of information converge in a triangulating fashion (Yin, 2018). Triangulation of data type sources strengthens the interpretative paradigm and can balance the so-called weakness in qualitative data (Maxwell, 2012). The aim is not specifically to yield the same evidence but demonstrate consistency across the case studies (Yin, 2018). Observation, for example, is sensitive to real-world nuances and therefore provides different results than an interview. Inconsistencies, as well as consistencies, offer opportunities for deeper insight (Maxwell, 2012).

### **Rationale for Describing Cause and Effect**

Emphasis was placed on exploring the Aboriginal and non-Aboriginal students' perception of transition. Student perceptions of transition as they mediated the impact of the secondary school situation were of central importance. Participants' interpretations of the context determined their behaviour and attitudes in that situation. From listening to their perspectives and then documenting their behaviour from observations and other sources, a causal analysis could be construed.

The epistemological suppositions that support the study are paramount. In the broadest sense, the study was informed by social psychology, which "is the scientific study of how people's thoughts, feelings, and behaviours are influenced by the actual, imagined, or implied presence of others" (Allport, 1985, p. 3). Student perceptions are important in driving learning about transition (van Rens et al., 2019). Student perceptions are also central in determining behaviour that realises the potential in humans (Craven & Yeung,

2015). “It is often what Indigenous students perceive rather than what happens that is powerful in driving engagement in class” (Mooney et al., 2016, p. 20). Therefore, phenomenological focus on capturing the essence of people’s experiences and life continues to be an important focus.

### **Rationale for Linking Patterns of Behaviour with Beliefs**

From research diaries and triangulation of data sources, the behaviour of student participants was another indicator in the research. Patterns of similar behaviour across case studies became key sources of evidence. Behaviour was explained phenomenologically by highlighting the individual and how they construe situations. The stance taken by this research is that entities and phenomena, both concrete and abstract, are real and constitute reality. The world is knowable and can be empirically studied and explained in both its mental and physical forms. Worldviews, values, motives, meanings, beliefs, and thoughts can be identified, documented, and known by interpretation as physical phenomena such as events, situations, and ceremonies (Emmel, 2013; Maxwell, 2012). In particular, realism assumes that culture is a real phenomenon possessed by individuals and that these beliefs are held over time and with others. It is not an abstraction but a source of solidarity and diversity in groups that can only be understood at the local level and by connecting to people in real relationships.

### **Rationale for a Realist Approach**

The focus of social psychology is the individual and the effect of group processes on the individual. It is concerned with not only behaviour but also the emotional and motivational aspects of a student’s thinking. It draws on different philosophical and epistemological traditions to inform their inquiry. As Patton (2015) stated, reality can be theorised: “Realism places and interprets those constructs and construals within a specific

theoretical and particular real-world context” (p. 114). Theories in social psychology give the research with a means of arranging the information and aligning data with current thinking. The adoption of a theory permits the researcher to expect the enigma and interpret previous analyses. The use of a certain theory, such as the BFLPE (Marsh, 1987), directs thinking towards particular questions and answers.

### **Assumptions and Limitations of Study**

It is most common in Aboriginal education to direct research towards developing policies, curriculum, and pedagogy about teaching Aboriginal students. Rarely has the focus and strategy been targeted at a crucial rite of passage moment in the lives of adolescents to understand how to support them through this transition successfully. Therefore, this research differs from previous studies as it gives a rich analysis of multiple stakeholder perspectives of transition from Year 6 into streamed Year 7 classes for both Aboriginal and non-Aboriginal students. Also, the focus remains on students’ perceptions of their values and attitudes, skills, and commitment to learning, as well as subjects and teachers, in secondary school.

There has been a lack of continuing finance for programs that support successful transitions for Aboriginal and Torres Strait Islander students into secondary school, particularly for those with high abilities. Many transition programs are one-off research projects or short-term pilot programs with limited follow-up. They are not integrated into the local context or come from a strong evidence base. Recently, one particular study by Donovan (2015) extended care and research into listening to Aboriginal students’ voices, aged between 15 and 16 years, as to their views about their education. The study was one of the rare examples of privileging Aboriginal students’ voices with student voice having a limited history in Australian educational research (Donovan, 2015). Hence, this research differs from previous studies. It is a rare, longitudinal qualitative study that presents a rich

analysis of multiple stakeholder perspectives of transitioning students to selective secondary classes. The focus was student voice, particularly high-ability Aboriginal students' perceptions of their secondary education transition.

Until recently, Mander's (2015) qualitative study of remote Aboriginal boarding school students had been the only intensive program of research into Aboriginal students' transition to secondary school. This research validates the elements formerly recognised by Mander (2015) and Lester (2016). Also, my study builds upon the findings of impact evaluation (Pope, 2015) and the Victorian Attorney-General's Office report (Doyle, 2015), by further clarifying the attitudes and values from within the urban and regional education institutions and by interviewing students from the earliest years of secondary schooling. In particular, this transition study separates itself from others in that it uses ASC from a qualitative methodological perspective.

### **Insider Perspective**

As an experienced primary and secondary teacher, I have insider knowledge of both settings. This insider knowledge has enabled me to delve deeper into the perceptions of students. My empathetic listening through semistructured interviews, as well as my ability to astutely observe and analyse, is a strength of this qualitative research process. During the research process, my two high-ability sons transitioned into selective classes at their local high school, also adding to my insider knowledge of the potential to thrive and strive through this type of educational change and selective academic setting. Because of my daily experience with this age group, I was able to gain a rapport with the participants quickly. Collecting data as an insider has advantages and disadvantages; it made the data analysis more efficient and rapid. However, continuing scrutiny of all perspectives and a broad range of literature have provided a fuller final picture of the puzzle (Rubin & Rubin, 2012).

An essential consideration in this research is my responsibility as a non-Aboriginal researcher, working as an outsider but participating in Aboriginal communities (Craven et al., 2016). Collecting data as an outsider has advantages and disadvantages; it is easier to make comparisons between systems and contexts if you know more than one. Being an outsider requires the researcher to work harder at listening as well as adapting biculturally. When working in a non-White space, it is sometimes conceptualised as a third space, a space shared by Aboriginal and non-Aboriginal people (Craven et al., 2016). New perspectives and alternate solutions arise in the third space operating between different worldviews. I have found fulfilment in this space, working together towards the shared aims and commitment to understanding, acceptance, and problem-solving. Wright and Kickett-Tucker (2016) expressed this position of the non-Indigenous researcher eloquently:

Weaving narrative into practices of working together with Aboriginal people requires sensitivity, persistence, stamina, and a reflective self that will allow one to become conscious of the present realities. It will require an individual to be more aware of time and place, which will assist in the deeper attentiveness to Aboriginal feelings and behaviours (Kondrat, 1999). A self-reflective practice is encouraged for it not only makes mindful of the rhythms of community, but is also attentive to the unique challenges confronting Aboriginal people. (p. 164)

A careful assessment of the implications of my personal beliefs for my methods and conclusions has significant consequences for the validity of those conclusions. Being aware of personal subjectivity and relationships in research requires being conscientiously reflective and realistic about the fact that a researcher is part of the world that they study (Hammersley & Atkinson, 2007).

Difference is fundamental, and from acceptance of disparity in a community builds solidarity. Consistent with other realist theory (Emmel, 2013; Maxwell, 2012), social

solidarity is understood as a result of both similarities and contiguity. Community organically forms from the likeness, interdependence, and people in close contact and proximity with each other in time and place. The realist researcher understands that traditional cultures, such as Aboriginal communities, are based on ties of continuity from birth.

A limitation of my study is generalisability to the broader Aboriginal and Torres Strait Islander population as it is not a randomly selected sample and is a small sample size (Walter et al., 2017). Notwithstanding this, the study does in practice reflect the real experiences of Australian Aboriginal students. Further limitations of my study are discussed in Chapter 9 “Discussion and Conclusion”.

### **Summary**

This chapter provided a comprehensive overview of the methodology employed to successfully investigate the research questions posed in Chapter 4. The characteristics of the participants, measures used, administrative procedures, and the contextual components of each case study were described.

The chapter demonstrated that the methodology employed was stringent in addressing the qualitative research design. A realist stance has been presented as being able to contribute to theory as it assumes that culture is a real phenomenon, not an abstraction, and that causation is an actual process that can provide support for explanations and outcomes. The rationale for using a multiple case study design was explained, showing that it provides validity and reliability to address the research questions and identify the research findings. The research was designed to test the impact of transition policy and practice in each of the case studies. It sought to engage with high-ability students to understand their concerns and celebrate their successes. Therefore, this

chapter demonstrated that a comprehensive methodology was devised and evaluated within an organic research design, pragmatic to real-world needs, and complexity.

The following chapter presents the findings from the semistructured, in-depth interviews and questionnaires based upon the methodology outlined in this chapter for the rural participants.

## **Chapter 6**

### **Results Case Study A: Critical Analysis of the Impact of Transition in a Rural School**

#### **Introduction**

This chapter presents participant views from the findings of the first case study from a NSW rural secondary school with a Year 7 transition program. First, a description of the setting is provided with an overview of the institution and the selective streaming context for Year 7 GAT classes. Second, the participant responses from high-ability Year 7 students, parents, teachers, AEOs, AECG members, assistant principals, and principals are analysed for each of the research questions posed (see Appendix A for in-depth interview schedule; see Chapter 4 for a full explanation of aims, research questions, and their rationale).

As detailed in Chapter 5, the research used a longitudinal, multiple case design that used the replication logic of a set of cases (see Chapter 4). The study includes comprehensive sources of information, such as from students, teachers, parents, and AEOs to gather multiple perspectives. The emphasis of this research is the importance of heeding student's opinions in an effort to advance their education and quality of life. Data from the semistructured interviews were coded to generate categories and emergent themes. Two coders reviewed the data to generate the coding scheme. Both coders tested coding on a sample text, assessed reliabilities, and reviewed coding rules. Other themes and patterns from word-frequency counts and discourse analysis identified variations in perspectives among case studies and over time. After each time point, there was triangulation of data to

enable the overlap of results from different groups of participants and different sources of data. Documents provided by the schools during transition provided insight into the transfer phase. These teacher comments helped to report student progress across the time points. Finally, the three-time-point research design allowed examination of cross-sectional associations of students' perceptions over time, which is a clear strength of the study.

Drawn from multiple stakeholder perceptions, the chapter elucidates the experiences of six students (two female Aboriginal, one male Aboriginal, two male non-Aboriginal, and one female non-Aboriginal) as they moved from a mixed-ability rural primary setting to a streamed secondary GAT school context. It identifies themes from the data arising from the in-depth interview questions and observations with multiple stakeholders. In the rural case study, students experienced two different classroom climates: the local GAT class (Lisa, Kiarni, Jarrod, Tyrone) and mixed-ability classes (Briony and Sam). Lisa, Briony, and Sam are Aboriginal participants. Kiarni, Jarrod, and Tyrone are non-Aboriginal participants. The local GAT class is an ability grouping, made by a high school and based on primary school grades and reports. The placement in the local GAT class is not permanent and is dependent on the ongoing achievement and performance of students. The mixed-ability classes are where students of the same chronological age with varying abilities are grouped together. A third type of classroom climate, the selective GAT class, was not offered at this rural high school. A selective GAT class offers placement to students as a result of a formal test.

The chapter is set out under the three research questions presented in Chapter 4: (1) What do multiple stakeholders perceive are the consequences for the development of self for students transitioning into a streamed academic process for secondary school? (2) What is the impact on social and academic outcomes for high-ability Aboriginal and non-Aboriginal students transitioning into a streamed academic process for secondary school?

and (3) What do multiple stakeholders perceive are the relations between effort, achievement, and sense of self for high-ability students transitioning into streamed classes in the first year of secondary school?

For each research question, the perspectives of students, parents, teachers, AEOs, AECG members, assistant principals, and principals are analysed. First, the perceptions are presented for Aboriginal students and then for non-Aboriginal students. Second, the perspectives of Aboriginal and non-Aboriginal students are compared and contrasted. Third, the perceptions of multiple Aboriginal stakeholders and the non-Aboriginal stakeholders are presented. Fourth, the perspectives of multiple Aboriginal and non-Aboriginal stakeholders are compared and contrasted.

The results of Research Question 1 reveal how placement in a mixed-ability or selective setting shapes student reasoning and experiences. Streaming forms differences in student–teacher relations and peer relationships to impact self-concept via academic performance and efforts. Research Question 2 results are organised to explore the two distinct classroom climates, the GAT class and the mixed-ability (comprehensive) classroom, which shape student perceptions that in turn impact social and academic goals. The results of Research Question 3 reveal how the differences between the two classroom climates impact the thought processes and attitudes of Aboriginal high-ability students. Finally, a discussion of the key findings and themes arising from the results are presented.

### **Institution**

The institution is a large public secondary school situated near a substantial regional Aboriginal population and caters for 690 students. It is located in a rural area and has a 26% Aboriginal enrolment, drawing Aboriginal students largely from two distinct Aboriginal cultural and community groups. The descriptor on the My School website

(ACARA, n.d.-b) highlights that 56% of the school's families are identified as having low SES (also see Chapter 5 "Methodology").

### **Participants**

At three time points (Time 1: in the last week in Year 6 of primary school prior to transition; Time 2: 4 weeks after transition to Year 7; and Time 3: 5 weeks before the end of the year, 10 months after transition), six in-depth interviews were held with a total of six students (two female Aboriginal, one male Aboriginal, two male non-Aboriginal, and one female non-Aboriginal) participating over all three time points. Parents were also invited to participate in this study and were interviewed once at the end of Year 6 (Time 1) and once at the end of Year 7 (Time 3). This resulted in participation in this component of the study by three parents and one grandparent (one male and one female non-Indigenous parent, and two Aboriginal females—a parent and grandparent). From each of the participating schools, one teacher (both female, both non-Aboriginal), one AEO (Aboriginal and female), and one vice-president of the NSW AECG (female) were interviewed. One principal from each school (primary and secondary, both male, both non-Aboriginal) were also interviewed.

## **Results Research Question 1: Impact of Transition on Self**

### **Introduction**

Research Question 1 posed, "What do multiple stakeholders (students, parents, teachers, Aboriginal education officers, Aboriginal Education Consultative Group members, assistant principals, and principals) perceive are the consequences for the development of self for students transitioning into a streamed academic process for secondary school? To what extent are these similar and different for Aboriginal and non-Aboriginal high-ability students?"

## Overview of Issue Explored

Three key aspects of the development of self during transition are social cognitions of self-perceptions, beliefs, and goals. Being placed in an ability group systematically shapes students' reasoning, which in turn impacts self-concept through academic behaviour, effort, and achievement. The following sections present the results pertaining to each of these themes from the perspectives of students, parents, teachers, AEOs, AECG members, assistant principals, and principals. As advised in the introduction, results are presented for (a) Aboriginal students, then non-Aboriginal students, and are compared and contrasted and (b) multiple Aboriginal stakeholders, then non-Aboriginal stakeholders, and the results are compared and contrasted. Finally, a discussion of the key findings and themes emanating from the results are presented.

One of the clearest ways to identify the changes in the development of self for students moving into a streamed environment is to compare how they describe themselves before and after the transition. ASC is bidirectionally related to achievement motivation and academic performance. Therefore, a strong ASC will be able to be correlated with the potential drivers of AWB. The Multidimensionality of Indigenous and Non-Indigenous Students' Wellbeing Model's (Craven & Yeung, 2019) four potential drivers of AWB are school value, academic planning, academic engagement, and academic persistence (refer to Chapter 3). School value refers to the self-analysis about the use of their education and meeting performance expectations. Academic planning refers to the habits and organisation to meet behavioural expectations. Academic engagement refers to self-assessments of interest in school and school work. Academic persistence refers to the set of self-beliefs about effort relating to their education. These drivers were used as themes to analyse students' self-perceptions and beliefs across the three points of time: before

transition, after transition, and at the end of the year. These comparisons are compared to explore the consequences of streaming on academic identity and wellbeing over time.

### **Aboriginal Students' and Parents' Profiles and Self-Perceptions**

#### ***Vignette 1: Lisa's (Aboriginal Female Student) and Her Grandmother's***

***Perceptions Prior to Transition.*** One female Aboriginal student, Lisa, decided to enrol in the GAT class in secondary school. In making this choice, she described her goal to become academically engaged in high school and her belief in the value of school:

I am in the GAT, the GAT at “Denponse” High, the GAT, so I had to try out for that, . . . for the GAT class, so if you want to try more things and get into other things that most kids probably wouldn't want to, and if you want to be focused about your school work. So, I chose to choose that folder, and then we had to write like a little speech about why you would want to be in the GAT class, and then your teacher did, and your mum.

This decision was at the cost of some social networks: “[Either] you hang out with your own peers, so like if you want to hang out with the naughty peers, it's your choice” (Lisa, Aboriginal student).

Lisa's comment, “I had to try out for that”, indicates personal confidence and pride in her ASC. A clear decision was made to excel academically at the cost of something “most kids probably wouldn't want to”. In primary school, Lisa described herself confidently as “I'm persistent. And I'm organised. And I'm really friendly”. Two core drivers of AWB are planning and persistence.

Her grandmother “Margie” perceived Lisa as being “very well-rounded” during the first interview as Lisa was good at sport, hardworking, and friendly. Margie, Lisa's carer, and the person Lisa calls “mum”, also described Lisa as being well liked by other students and teachers: “She's very easy to get along with and pays attention. When the teacher's

talking and that seems to why she retains a lot, and got a lot of interest in sport, and, information”.

The driver “academic planning” correlates with Lisa’s strength, which was organisation. In regards to organisation, Margie stated, “If she’s got homework or if she’s got an assignment or anything due, no way do I have to sit on her butt. She just does it . . . and is positive about it”. Lisa confirmed that she had good study habits:

At home, my [mum] encourages me to do my homework, so like, I do that. We, I had my own study area and all that, and when I get projects or something from school, I can’t, like, I want to do it straight away. So, I don’t leave it until the next night. I get home and do it.

Margie, Lisa’s Aboriginal grandmother, also perceived Lisa as intelligent as “she doesn’t really do homework much after school because she retains a lot of information that she’s been given”. She felt that Lisa’s confidence as a learner was making good friendships, having good role models, and the fact “the children know they can get rewarded for achieving, and they will and they do so that’s probably one of the biggest strengths [of the primary school]”. In the perception of Margie, her love and success in sport was due to “that she likes being part of a team [and] she may be kind of competitive”.

According to Margie, Lisa had an opportunity to apply for a scholarship at the local Catholic high school but chose to attend Denponse High “because she realised all her friends were going to the high school. More so that the friends were going there, she didn’t really know what they [Denponse High] had to offer”. Lisa’s friendships gave Margie confidence that Lisa would cope well with high school. When asked whether how prepared Lisa was for high school, Margie replied, “I think she’s ready for it and . . . she’s got some friends that she’s going to high school with”.

Lisa's family and teachers instilled the value of school, another driver of AWB. Margie believed that Lisa valued learning, not just because she had good friends and good study habits at home, but also that Margie herself had been a role model for the empowerment of education in a person's life. "She has seen me change my whole career, 'cause I went and studied, went into fulltime work" (Margie). In Year 6, Lisa was one of seven students in the school to reach the school reward of Gold Certificate. Margie said, "The children know they can get rewarded for achieving, and they will and they do, so that's probably one of the biggest strengths, and what they have to offer".

In primary school, Lisa shined in sport. Sport was important as she built strong friendships with all parts of the Denponse community, and particularly connected her with Kiarni, the school captain. Her talent provided respect and recognition within the school community that her grandmother described "as a bonus". She represented the school in state soccer called "Northwest". Her League Tag coach described her as "a key scorer" and stated that Lisa "kept a close defence on her opponent and used her newly acquired skill of outside arm defence to force several crucial turnovers". The report stated, "Opponents and opposing coaches commented on our [Lisa's team's] sportsmanship and the persistence, perseverance, and cooperation of all players". In Year 6, Lisa was singled out for her rugby skills in the local newspaper and her netball skills in the school newsletter. Sport was one aspect of high school that Lisa looked forward to in transition. She stated, "[In high school] you can be involved in netball, dancing, there's cross country and athletics, so I'm looking forward to that. There's soccer, and you can still make it to Northwest".

***Lisa's (Aboriginal Female Student) and her Grandmother's Perceptions After Transition.*** By the time she had experienced the GAT class, she saw herself as "organised, awesome, and determined". After one term at high school, she had significant successes. She was elected as a student representative on the Student Representative Council (SRC).

The SRC is a student-elected body that provides student voice and enacts initiatives in the running of the school. She was chosen for a Good Start Award by the Year 7 teachers.

Good Start Awards are awarded to only 18 students who have made a positive start to Year 7 across a range of courses. She was awarded a Certificate of Excellence for her poetry.

Lisa had a strong belief in the driver of AWB—academic planning. With her study, her self-evaluation was “I’m updated with all my assignments”. She maintained her perception of herself as organised by “keeping track of all my work, and Miss reads out what, like who’s on track and who still has to hand in things”. In regard to her perception of her ability,

*Interviewer:* What is it about other people in the GAT class?

*Lisa:* Some people are more smarter, I guess you could say.

*Interviewer:* And compared to them?

*Lisa:* I think probably about the same level.

*Interviewer:* Do you pick up things quickly?

*Lisa:* Yes.

By the end of Year 7 Lisa described herself as “organised, awesome, and determined”. “Friendly” becomes “awesome” in the transition. “Organised” and “determined” are Lisa’s perceptions of herself that remained constant over the transition period and are important drivers of AWB.

***Lisa’s (Aboriginal Female student) and Her Grandmother’s Perceptions at the End of the First Year of Secondary School.*** By the end of Year 7, Lisa had a strong ASC, as illustrated by her evaluations of the effort, attitudes, and habits towards her academic abilities. Lisa’s reflections on the first year of high school revealed an attitude of acceptance about academic expectations, that “you get used to it”. She accepted the trade-

off between more work and being in the special GAT class: “I think we get more work than the normal other classes”. She accepted being judged relative to others: “We get, on our report cards, we get what position we’re in”. This was public information: “We get told who got the highest mark from Year 7” and where everyone sits. In most subjects, Lisa thought she ranked “probably around four or five”, but in mathematics, she was “around a seven, or a six”. Lisa had clear habits of study, which was organised around her dancing classes. Revealing her academic persistence, a driver of AWB, she defined the key to her success as “because I pay attention in all subjects” and completed all assignments.

In her personal view, the most demanding part of Year 7 was Lisa’s first experience of examinations: “I’ve found the half-yearlies harder because we’re having our yearlies right now and, I don’t know, I’ve learned more stuff for the yearlies”. Lisa had an exceptionally successful year. She achieved the award of Junior Champion for athletics. She was elected SRC member by students. By sheer application and determination, she moved from being a high-average student in primary to sitting at the top of the GAT selective class.

***Vignette 2: Briony’s (Aboriginal Female Student) and Her Grandmother’s Perceptions Before Transition.*** Briony was suspended from school on our first visit before transition. In Time 2 (Term 1, Year 7), we interviewed her using the Time 1 questionnaire and then the Time 2 questions. Therefore, her perceptions about pretransition are retrospective. Briony was an excellent sportsperson and thrived when playing sport. “The only thing I liked when I went to [primary] school, most days I was good when I always had sports training. There I was in sports teams”. Lisa and Briony played in the same League Tag team that won the school’s Grand Final with Briony “relentlessly tagging faster opponents”. She and Lisa starred in a newspaper article about their rugby talent. During the interview, Briony gave short replies to many of the questions.

However, while she perceived herself as popular, “I have heaps of friends here”, she admitted to being aggressive towards others: “I always got into fights last year, everyday”. She used aggressive behaviour to exert her social overconfidence. Perhaps, in attempting to counter a negative self-concept, Briony’s self-doubt led to further declines in self-concept as she missed out on participating in activities; she was good at (e.g., school sporting teams) because her behaviour resulted in suspensions.

For transition preparation at primary school, Briony missed every orientation for high school except one because she “was normally suspended”. Despite that Briony said she did not enjoy primary school, she achieved above-average grades. She had been shortlisted for dux. Briony was neither happy nor confident during the interview but was honest and gave the impression of being lonely. While explaining that she did not have any siblings, she added, “I *only* [italics added] have little cousins”.

***Briony’s (Aboriginal Female Student) and her Grandmother’s Perceptions after Transition.*** After 4 weeks at high school, because of suspensions Briony described herself as “naughty, not cheeky to all the teachers and like sporty”. She struggled to find these words. Family factors are linked to chronic stress for adolescents (West Australian Aboriginal Child Health Survey [WAACHS], 2005b). Pat, her Aboriginal grandparent, reported that Briony’s parents were “really bad alcoholic[s]”. Pat said there was conflict between her mother and daughter as “they’re jealous of each other”. In addition, Pat explained that Briony’s (Aboriginal student) “dad lives up in Queensland because he’s not allowed to come near her unless he’s got supervision”. As a result, Pat said that her granddaughter Briony “forgot over the years what he looks like” and wanted to visit him. Briony was living in a single parent family in the custody of Pat who stated, “I’ve got her”. Another source of stress is moving homes. Briony had been living in Sydney with her mother’s new family until 12 months before the first interview (Researcher’s Journal

Entry, 02/12/2015). Another form of stress was intergenerational trauma, signalled by Pat: “And one little girl, I feel sorry for her, her mother killed my brother 21 years ago on Christmas day”. In addition to these events, Pat’s partner had been diagnosed with cancer 2 months before the first interview.

Briony’s grandmother Pat reported that Briony had strong leadership qualities, was very confident, and prioritised social status. Although appearing overconfident in school, online, and in class, her grandmother observed immature coping strategies and anxiety: “Briony would hide herself in her room”. Pat her grandmother recounted, “I’ll say, what did you do today [Briony], and she’ll walk straight in her room and say, whatever. And then she’s got to come out and tell me what’s going on”.

***Briony’s (Aboriginal Female Student) and Her Grandmother’s Perceptions After Transition.*** Briony (Aboriginal student) admitted to physically fighting in the playground in primary school and secondary school, overestimating her level of social influence (Marsh et al., 2001), and engaging in cyberbullying. Briony had a heightened consciousness of racial differences stating that she was also caught in a vicious cycle where she became a target for racial microaggression: “I thought there will be like heaps of heaps of whites in there [high school] because like there’s like half the people I know are Black. And like I’ve been in like four fights already”.

The racial composition of the school seemed to be a moderating factor that was shaping Briony’s perceptions. As there are status and ability differences between the different tracks at the school, students may attribute these differences to cultural deficits in Aboriginal culture, or others may seek to protect their self-worth against such views. This comment reveals the link between race and aggressive behaviour in Briony’s perceptions. Of the 10-week term, she had only been at school four of those weeks due to suspensions.

Her self-assessment of academic engagement, a driver of AWB, was low: “I don’t do homework; I don’t really want to do it”. She preferred “high school”. In her self-perception in class, she was going well compared to other students, particularly in mathematics and physical education (PE), but the level of difficulty varied week to week, even in the same subject.

In this case study, the high-ability Aboriginal participants vocalised an entity belief about intelligence. For example, Briony believed that the people in the GAT class were smarter than her: “They’re heaps smart”. Then when asked if there were other qualities that helped them succeed, Briony said, “They’re all real good and smart”. Briony’s perception of the GAT students as “real good” is a contrast to her own self-perception as “naughty” and her honesty about being cheeky to teachers. Her self-concept of academic interactions reveals she believed there was a large difference between her home culture and the expectations at school. A self-concept of academic interactions involves the belief of getting warm interactions from teachers in the school.

***Briony’s (Aboriginal Female Student) and Her Grandmother’s Perceptions at the End of the First Year of Transition.*** Briony’s attitude towards school changed during the year. The valuing of school is a driver of AWB. She was no longer enjoying high school by the end of the year. A communication breakdown resulted in students being unfairly accused. For example, Pat described a time when Briony was being labelled a thief by an educator. There was a feeling that “some of them”, the teachers, were not fair. Again, in the Time 3 interview, Briony vocalised an entity belief about intelligence. For example, Briony believed that the people in the GAT class were smarter than her:

*Interviewer:* If you went to another school, they might be posh and stuck-up too. Surely not everyone else in that class is posh and stuck-up?

*Briony:* Most of them are, like all real smart.

*Interviewer:* Do you understand that you're really clever?

*Briony:* No. No.

A poor ASC, the stigma of intellect, or “being a nerd” could marginalise her from her friends. Although her self-concept was not threatened in the mixed-ability class, her social standing was negatively associated with academic persistence a driver of AWB and success. As her grandmother Pat explained, “She doesn't understand that she's as smart as she is. She just goes on with the rest of the kids. Doesn't understand”. From Briony's self-report, personal self-worth appeared to be derived from a self-concept that was apparently at odds with an ASC (the GAT class girls were “posh” and “stuck-up”—Briony). When Briony was asked, “Describe yourself”, she answered, “Naughty”, a word also used by her primary principal and her carer (grandmother). Any change to her identity, such as from “naughty” to “posh”, was prohibitive to her social goals and could be seen as adversely impacting her popularity with friends.

***Vignette 3: Sam's (Aboriginal Male Student) and his Mother's Perceptions***

***Before Transition.*** Sam was another high-ability Aboriginal participant who chose not to participate in a GAT class. Sam explained, “It's boring . . . you've always got the same people in the same class, and you don't get to hang with other friends because you've always got the same people in the class”. In our first interview before transition to secondary school, Sam described wanting to go to high school because it was going to be “funner” and gave a profile of himself as “sporty, smart, I guess, and probably an achiever, because I achieve all my goals that I set for myself”. Sam had an expectation in primary school from his older siblings that “the big bad thing is that it is just a lot of work and they don't really like it”. In the first 2 min of the interview, Sam mentioned the workload at high school three times, and twice the fact that he did not want to go.

His self-concept of academic persistence was low. His perception of primary school was that “It got harder [because] I didn’t do it as much as I used to”. Cody, the Aboriginal mother of Sam, verified in Time 1 that “my boy does no homework, nothing, but when they’re talented like that, they can . . . they think they can just use their talent and live on it, whether it be sport or academically”. Cody described the workload of the GAT class as “phenomenal”.

Before transition, Cody described that Sam had already had a forced-choice dilemma, a conflict over being able to achieve both social and academic goals. He had been accepted into an OC in Year 5. “He wouldn’t go [because] he didn’t want to leave his friends”. She explained that all three of her children had experienced this dilemma

because my kids are sporty as well as . . . naturally talented in every which way, but can’t make up their mind which . . . what they want to do and what to stick to and that, and the importance of doing one thing at a time.

***Sam’s (Aboriginal Male Student) and His Mother’s Perceptions After Transition.***

Similarly, the second interview with Sam revealed his fear of the workload in high school had eventuated: “This year it’s like more into it and you have to do a lot more than you did in primary school like last year”. His sister’s advice was to “try to do as much work as you can”. He continued to have a low self-concept of academic effort, wanting to work in groups and in pairs.

Aboriginal boy, Sam, was confident enough to stand up for what he thought was unfair. In response to the question “What did teachers do that was unfair?”, he replied,

This has happened in one of our classes, that a couple of people have actually said the work’s too hard . . . And they haven’t really moved, there’s like a person, two people in our math class that don’t really know how to do the work and they’re still in our class.

This comment reveals that not only was Sam central to his group, he was conscious of the increasing demands of the high school work. He added, “They’ve said, like one of the teachers have said, that they [students] have to do the work and they weren’t allowed to move classes because like they’re in order to one, two, three and like smartest, yes”.

Sam felt it was unfair because he believed the issue was about the ability level of his classmates, not the level of effort that students were expending for homework and in-class activities. These comments suggest that perhaps a fixed entity belief of intelligence (Dweck, 2006; 2017) was at the core of the response and logic. He described the reason why he did well at school as his brain “is capable”. In primary school, Sam described himself as “sporty, smart, I guess, and probably achiever, because I achieve all my goals that I set for myself”. By the end of Term 1 at Denponse High, Sam described himself as “sporty, funny and probably intelligent”. His self-concept was so weakened that he now felt “I have to prove I am capable”.

***Sam’s (Aboriginal Male Student) and His Mother’s Perceptions at the End of the First Year of Transition.*** Sam was not as confident about his achievement at school at the end of Year 7:

*Sam:* [My sister’s] in the Year 9 GAT class . . . but I think I’d rather stay in mainstream classes.

Interviewer: Why?

*Sam:* Well, I just think that I’m doing alright in mainstream classes and if I change then I might struggle a little bit and then I might go downhill, so I just want to stay in mainstream for a little bit longer.

Sam also had strong leadership qualities, was very confident, and prioritised social status. Seeking social reinforcement, status, and popularity at school, he appeared very confident. However, in the mornings before school, Sam would physically vomit. Cody

was the Aboriginal mother of Sam. Cody recounted, “He was physically vomiting and anxious every Sunday night, Monday morning when you’re going to school”. Sam said he felt the teachers were not fair to students who were mismatched in classes and were not at the academic level of the rest of the class.

In this case, Cody explained after transition that Sam’s brother had been diagnosed “with ADHD and ODD”. This older brother had been diagnosed with attention-deficit hyperactivity disorder (ADHD) and oppositional defiance disorder (ODD) while in Year 8 at Denponse High. Not only can having an older sibling increase the development of antisocial behaviour (Brody, 2004) and poor self-regulation (Backer-Grøndahl et al., 2019), teachers’ expectations for younger siblings can negatively impact students’ school engagement (Harris, 2018; Jussim & Harber, 2005). This bias has been found to be more salient when an older sibling has been diagnosed with a label (Rubie-Davis, 2015).

The alignment of a possible emotional and behavioural disorder (EBD), with a physical reaction to going to school, illustrates that there was a culmination of stressors occurring for this student: “I get that from what he tells me. When he comes home and talks about his day, every day because we’ve had to make that a habit” (Cody). The duration of symptoms and severity of the behaviour in relation to the situation are the identifiers of a behavioural or emotional disorder (Owens et al., 2016).

Cody reported that this boy had experienced major life stress events in the previous 12 months. Sam was in the care of a sole working parent in a school (“It’s pretty hard when you’re on your own. [And caring for] another 150 kids”—Cody). This parent was working in the school as an AEO. Sam felt deserted by the male role models in his life: “No, he [my brother] left. He lives with dad now”. This life event had occurred 12 months before the transition.

Across the mixed-ability group, variation of teachers and subjects was found in all the classroom climates. Sam elaborated, “If you get along with your teacher it’s easier to talk about stuff and go over things that you struggle with”.

Despite having new resolutions towards changing his self-concept of academic effort in Time 2 (Term 1) where he admitted, “I’ve been not really on track. I’ve been like a little bit playing out in the [class]. If I could I’d go back and be good”, Sam did not change. By the end of Year 7, he had multiple suspensions and had large gaps in his learning as a result of absences and the consequences of his playing out in class.

### **Non-Aboriginal Students’ Profiles and Self-Perceptions**

*Vignette 4: Kiarni’s (Female, Non-Aboriginal Student) and Her Mother’s Perceptions Before Transition.* Kiarni was also in the talented League Tag team with Lisa and Briony in Year 6. She was the school captain and the dux for their cohort. In her interview in Time 1, she discussed various aspects of ACS that indicated she was confident with the academic culture of school. Her initial perception of high school was that “it’s going to be a bit challenging sometimes, because there’s going to be a lot more work. But [not more] than what we get now”.

She was confident in her academic persistence, a driver of AWB, explaining that the Year 6 teachers had given “harder work to prepare us for some of the work that we would have done there”. She revealed academic engagement a driver of AWB stating, “I like learning about lots of things”. She revealed valuing of school, a driver of AWB:

If we’ve just had a maths test, and like sometimes we go out onto the oval and just talk about it. And like, so any of the questions that we found hard, we talk about them, and how we got our answers.

She also valued academic planning, revealing, “I’ve planned most things out. And I’m gonna write down when assignments and everything have to be in by, and make sure that I do them”.

Kiarni’s parents were involved and supportive in their child’s life as evidenced by their willingness to participate in the research. Sally, Kiarni’s mother, was proud of her achievements in primary school. Kiarni described herself at the end of primary school as “fun, energetic, and caring”. After arriving in the GAT class at Denponse High, she described herself as “organised, athletic, and fun”. Significantly, “caring” was replaced by “organised”, indicating the change in culture between the two settings. “Organised” was the first word that came to mind when describing herself in secondary school, revealing that she understood how she must meet the new behavioural and performance demands. Sally, before transition, identified two of Kiarni’s traits that made her successful: “conscientious” and “competitive”. Sally said, “She really does want to try and be the best in the class”.

***Kiarni’s (Female, Non-Aboriginal student) and Her Mother’s Perceptions After Transition.*** She was very confident in the social support of teachers, explaining on eight occasions that the teachers were “really nice” and “help you out”. In addition, she had her friends and parents as support mechanisms: “If I don’t understand something, then I text my friends, and, yes, and we text each other and then we talk about it” and “I like have homework and I don’t quite understand, then I just go and talk to them about it and ask them”. She revealed academic engagement stating, “Everyone there wants to learn” and “I pretty much like all of them [subjects]”. She had a strong attitude of academic planning revealing, “I think I’m doing pretty good”, and “I’m pretty organised” with an attitude of “you just need to do your work and get it done”. In Lisa’s perception, the GAT class had a

collective attitude of “try their hardest”, which reveals a belief in the importance of effort, confirmed by Sally her mother as “her attitude of wanting to do the best she can”.

*Kiarni’s (Female, Non-Aboriginal Student) and Her Mother’s Perceptions at the End of the First Year of Transition.* At the end of Year 7 Kiarni’s attitude was “just do your work and be confident and happy with yourself on how you’re doing”. In Time 3, she discussed various aspects of AWB: “Usually when you get your reports back they have your placing. In a couple of my classes I was placing first out of Year 7s, only in maths I placed third”. Despite her academic success, she felt “you know that for next time you could do better”. Sally described Kiarni as a perfectionist who gave 110%: “That’s probably a [Kiarni] thing more than a general kid thing”. Sally said, “They push her above and beyond; she’s just got a positive attitude to learning. So, yes, it’s like a big sponge, which is great”.

Kiarni had good interactions with teachers. She explained, “The teachers, they’re usually detailed in where you went wrong and how you could improve it”. She revealed her determined attitude at the end of the year advising, “Stay focused and just remember that it’s not all about just having fun”. This was a strong contrast to the beginning of the year when she was enjoying learning. In Term 4, there was a focus on exams and performance. She had a confident belief in her academic planning revealing, “It [the exams] were pretty easy” and “the only hard part, remembering it all”. School was valued and its performance expectations met. In Term 4, Kiarni said, “The half-yearly and the yearly exams give you a chance to show how you’re going in school and what you’re learning and that and whether you’re actually learning it”. Kiarni felt her only challenge with study was “reviewing everything that you’ve been over and the fact that you not knowing what will be in the exam”. Kiarni believed, revealing her academic persistence, a

driver of AWB, that “you just have to get them all done and just try your best in every class”. Sally, Kiarni’s mother confirmed, “She just does it [work]”.

However, at the end of the year, Kiarni was still conscious of the need to maintain balance: “You do have to do your work seriously, but don’t spend too much time overdoing your work, because then you’ll forget to have the social side of your health”. At the end of the year, Sally believed Kiarni “has really enjoyed not having to mix with mainstream kids that maybe could have interrupted her learning”. Her views were also notably more performance oriented than a year before:

I feel they are pushing her beyond Year 7 level which is good for her, that it keeps her excelling, so when she does get to those higher years she’s going to be well above where she has to be. So, she’s going to find it a lot less stressful and lot easier to get the results she wants.

***Vignette 5: Jarrod’s (Non-Aboriginal Male Student) Perceptions Before Transition.*** Jarrod described himself at the end of primary school as “smart, funny, and creative”. After arriving in the GAT class at Denponse High, he described himself as “intelligent, funny, and all round average”. He had good relationships with all the other students and his perception of himself was maintained throughout the transition.

In his interview in Time 1, he discussed various aspects of ACS that indicated he was a confident with the academic culture of school. His initial perception of high school was that “my sister already goes to the high school; every week she comes home with a tonne of assignments”. His sister had explained to him how high school functioned, and the understanding of the increased workload in high school did not intimidate Jarrod. He said, “I’m pretty sure I will be able to handle it”.

Jarrod had good interactions with teachers, explaining, “If I’ve got something wrong I can’t figure out, they’ll [the Year 6 teachers] come and help me”. His mother

revealed that he had been academic from a young age, absorbing any information and reading all the time. She explained, “He loves just learning new information all the time, asks questions, just loves to learn”. He revealed his academic engagement, a driver of AWB, regarding hands-on learning, stating, “I really like cooking in the kitchen, weeding, and gardening” at primary school. He was planning on becoming an electrician one day, “like my dad”. He considered himself “smart” and “sort of [organised], if there’s something important I’ll go and write it in [my diary]”.

Jarrold was interested and engaged in learning, a driver of AWB. His mother explained that “he always has a book that he enjoys”, suggesting that he was a self-motivated learner and focused on “gain[ing] more knowledge; if I don’t know he’ll find it out”. Jarrold’s parents were supportive in their child’s education as evidenced by “my mom and my dad, my nanna and my pop” were willing to help with homework.

*Jarrold’s (Non-Aboriginal Male Student) Perceptions After Transition.* Although in the first interview Jarrold had appeared confident about transition, he admitted after transition that he did have some worries: “It was better than I thought it end up being” and “[I was] scared about going into it [high school]”. This reveals that some feelings students had towards school they did not feel comfortable sharing openly at our initial interview.

Jarrold was confident in receiving help from teachers and others, explaining that the people who helped him academically were “teachers, some of my peers, like my friends and, yes, my sister”. He revealed academic engagement, stating, “I like German, learning a new language. And English and science”. He revealed some self-doubt when considering his rank in the class: “I’m going pretty well, yes. It’s not perfect, but I’m not down at the other end of the scale. I’m sort of in between”, and “I’m doing fairly well against some of the kids. Most of them”. Generally, he felt that high school was “not really that hard”. Jarrold believed, revealing academic persistence, that although he liked “to get everything

done and not have to come back and finish”, he thought that the reason why some students were at the top of the class was that “maybe they might put a bit more time than I do into their work”.

*Jarrood’s (Non-Aboriginal Male Student) Perceptions at the End of the Year.*

There was a significant difference in the strength of Jarrod’s AWB from Term 1 to Term 4, with a more determined and confident approach to valuing academic learning that was epitomised by the change in his aspirations during the year from being an electrician to aspiring to go to university to become an architect. Jarrod was confident in being supported to academically persist, stating that “my sister” and teachers were “just expecting more of us to be better and try harder”. He said, “My parents, mum and dad because they’re making sure that I’ve done all my work”.

Jarrood again revealed academic engagement, stating, “I like English and history and music. I’m really good at history because I do a lot at home”, revealing autonomous learning at home. Moving from being in the middle of the class in Term 1, he now had a strong general ASC: “I’m about the top 20% usually”. He was significantly more aware of his position in class: “not really that hard”. Jarrod believed, “I’ve learnt that I can do better and I can try harder than what I’ve done before. I can be challenged more”, revealing his academic persistence had strengthened, repeating five times he could always “do more, try harder”. His approach to work was “just actually don’t leave things to the last minute, do it so that it’s over and done with”. In Term 4, he had increased his valuing of school. His approach to examinations was “I’ve done a fair bit of going over my notes and then the questions usually of what we’ve done in class”. His strong belief in the use of his education, a driver of AWB, can be summed up by his statement “[High school] has been a door opening so [it’s] given me more perspective on different things”.

*Vignette 6: Tyrone's (Non-Aboriginal Male Student) Perceptions Before*

**Transition.** Tyrone described himself at the end of primary school as “I’m usually pretty focused, I do pretty good in class, and, I don’t know, it’s hard to think of three specific words to kind of describe myself”. Despite having many achievements in primary school, he seemed very proud of his involvement in the buddy program. The buddy program involved each Kindergarten student having a Years 5 and 6 buddy, who spent time with them. The older students helped and supported the younger students with reading. This involvement supported his father Bill’s description that Tyrone “has a very generous and caring, kind spirit in him”.

Unlike many of the other students, Tyrone did not have a self-perception that was distinguished by humour, popularity, or sport. However, in contrast, the school newsletter revealed that he had many talents. He represented the school and zone in swimming and the spelling bee. He was a state (North West) representative for basketball. The school had presented him with the award for “Outstanding contribution to a school by a community member”, considering him

an outstanding role model within the school and part of the student leadership team. He is a high achiever across all aspects of school—academic, social, cultural and sporting. He is an asset to Denponse Public School and Public Education. (School Newsletter)

Similar to Sam and Jarrod, he was looking forward to hands-on learning at high school: “I’m also looking forward to some technology classes and get in the kitchen and doing some of the activities where you get more involved in the things”. A strong attitude of academic engagement was focused on the practical subjects that high school provided. He did not give the impression of having a close relationship with his Year 6 teacher, stating simply, and unenthusiastically when asked, that teachers “[have] helped me” in primary school.

Perhaps the reason for Tyrone feeling little social support from teachers in primary was that he was considered “academic” by teachers. His father explained that he was allowed to work on his own projects: “more self-reliant, and able to do self-learning, with minimal guidance”. Bill revealed that he had been bullied at primary school and was worried that he would be targeted at high school: “As for socially, I think that’s probably going to be his bigger challenge”. His father described him as “naturally curious”, “a very open mind”, and “a very level head”.

Similar to the other male rural participants, Tyrone’s self-concept of academic effort was low. Academic effort self-concept means the set of self-beliefs about effort relating to his education. His sister “told me that I’d have to put more effort, I’d have to put effort into it, more effort than I did. I’d have to put more time into homework and projects and I’d have to get more into that”. He was the only rural participant to understand the significance of performance expectations of high school before transition, saying that “more important tests and that type of stuff, suddenly get more important”. Relevant to his beliefs and attitudes, Bill explained that “he’s never had what you would call the competitive spirit in him to actually, got to win, got to win at all costs, sort of thing”. Tyrone’s preferred sport was the swim squad because “it’s easier for him that he’s swimming against himself”. His sister had just finished the Higher School Certificate (HSC), was his role model, was “very academic”, and “put in a lot of hard work with her studies”. In Bill’s opinion, “We think that he is very smart, very intelligent. Whether he’s Einstein material or whatever, I don’t know”.

***Tyrone’s (Non-Aboriginal Male Student) Perceptions After Transition.*** After arriving in the GAT class at Denponse High, Tyrone described himself as

very persistent about things, pretty academic, and energetic, and like sad most of the time. I try not to get too upset about homework and work and that type of stuff, that's right. [I] try to stay on the positive side of things. Try not to get too dull in the class".

Tyrone's parents had separated during the transition, and he had found the experience traumatic. His father explained that it had been a difficult time, which may explain why he described himself as "sad most of the time". During interview, he admitted that he had had trouble adapting to the increased workload of the GAT class. He described multiple deadlines arriving together, which had challenged his organisational skills. His parents had become aware of the problem and were supporting him, particularly insisting he use a diary. He was also conscious of fitting in within the GAT class by "stay[ing] on the positive side of things. Try[ing] not to get too dull in the class".

***Tyrone's (Non-Aboriginal Male Student) Perceptions at the End of the Year.***

Tyrone's overall impression of transition was "the first couple of terms it was hard to keep track of all my homework and it [the work] is harder". His evaluations of his self-emotions, attitudes, and habits towards academic abilities had become more crystallised in the past 12 months. He seemed to have a sense of belonging at high school: "I know people here and I know the teachers, I know other students". In particular, he had greater involvement with others, stating "Teachers are really helpful with when I need information when I need to ask them about something I'm doing that they're really helpful and they'll let me know they'll help with assignments". Tyrone again revealed academic engagement, stating, "In high school there's been a lot more new things I've been learning. And it's more interesting and useful", repeating the word interesting five times during the interview. Moving from being in the middle of the class in Term 1, he now had a greater understanding of the importance of academic planning:

I've needed to be a lot more organised because there's a lot more work to do for different classes and I have to try and be able to do assignments for each class as well as the work and each class is harder than what we did in primary school.

He repeated the word organised 10 times. Tyrone believed, "The work's a lot different it's a lot more assignments", revealing his academic persistence had strengthened. His approach to work was "just thinking out how long I have when I need to do things and when I need to hand things in".

By Term 4, he had developed an appreciation of academic planning, feeling that the approach to study was to "make sure that I'm checking what I'm doing. And making sure that I understand what's going to be on the exams". His perspective was more oriented to performance by the end of the year: "There's also higher expectations which pushes for better results [in the GAT class]". His evaluation of his performance was that "they [the exams] weren't too bad I guess there was a little bit of pressure to do well on the exams".

The only GAT student who avoided identifying his rank in class, Tyrone's self-belief was based on being in the academic class: "I'm alright, I'm higher in class A". Bill his father said that "he got two Ds over like, the two Ds were separated by a great period of time. And the first one, well, he was devastated, because that's the first time he's gotten such a low mark". Bill felt the ranking system was good and bad: "I think it's good to know where he sits in his class, and among his peers. And, for him, it's a good reference point for him", and "it seems to give him that motivation and drive". His self-doubt regarding his academic ability was revealed by not being able to say with certainty that he would remain in the GAT class: "I'll be staying in the A class hopefully". Bill said that during the year "He struggled a few times and got a bit anxious and worried". Tyrone explained that "the teachers do make sure that we know that we have to do well in the class

to stay there” and “there are other people that want to get into the class and that it is a privilege not a right”.

Despite Tyrone’s focus on becoming more organised and getting better marks, his goal in life was to play basketball professionally or become in some way involved in sport as a career. It was perhaps for this reason that he singled out being disappointed with his results for PE: “I didn’t get as good of a mark as I was trying to get”. Bill explained that another reason why Tyrone had struggled during the year was that “he has been putting probably a fair bit of effort into his sporting aspects. Which has meant that Tyrone may be at risk of disrupting some of his academic achievements”. Overall, Bill felt that Tyrone “does have a very good work ethic and a good strength of character, and I think that’s gone a long way towards his success so far in high school”.

### **Aboriginal and Non-Aboriginal Students’ and Parent/Guardians’ Perceptions Compared and Contrasted**

There was evidence of a relation between students’ self-perceptions, in terms of their identity and ability, and the influences of background experiences, family, social networks, and relationships with teachers. Different Aboriginal students were born into different structural disadvantage. From the reports of the adults in their lives, Briony and Sam (Aboriginal students in the mixed-ability class) had family situations that were more stressful than Lisa’s (Aboriginal student in the GAT class). Sam and Briony seemed more susceptible to the perceptions of their peers and community than Lisa or the non-Aboriginal high-ability students. Aboriginal students in the mixed-ability class felt isolated and perceived racial stereotyping towards themselves. These students became less likely to engage in school and experienced a weakened self-concept by the end of Year 7. In contrast, Lisa (Aboriginal student) found being in a GAT class was optimally challenging for her personally, and by her self-report, she progressed academically.

A welcome finding was the interconnection between a positive ASC and greater degrees of enjoyment, motivation, and competency for Lisa, the only Aboriginal student in the GAT class. She felt accepted and supported by her peers, achieved favourable grades, and thrived in the reflected glory of the “higher class”. However, the two Aboriginal students in a mixed-ability class found frustration in the perceived indifference of some teachers. At other times, impulse and peer pressure resulted in clowning in class (Sam) or being cheeky to teachers (Briony). By the end of the year, Briony was perceived as trying to protect herself and her feeling of incompetency by retreating into the Re-Engagement Centre. The Re-Engagement Centre (RE class) was a place students could go to destress or get help and support when they had emotional or academic issues. The teacher in charge was a young Aboriginal teacher.

Sam from his perspective was trying to motivate himself by “proving” that he was competent. Both students appeared to be reacting to, or feeling, a loss of control in the school situation and were perceiving that the implication from those at school was that they were lacking in capabilities.

For the non-Aboriginal high-ability students who had stable family backgrounds, there was also a connection between positive self-concept and interest, engagement, and achievement in school. Not all non-Aboriginal students thrived in the GAT class. Tyrone, who was experiencing the complexities of broken family relationships, had the added pressure of getting used to the increased workload of the GAT class. However, the fact that both his parents were aware and supportive of his struggle in the class strengthened his resolve to persevere in the classroom climate.

In the GAT class, non-Aboriginal students reported a mutual respect among students, and meaningful tasks were provided by teachers. However, the class had a demanding workload, was characterised by public ranking of students’ efforts in class, and

teachers reminded GAT students that underachievement would result in them being dropped from the higher class. The consequence of joining the mixed-ability class, as some in the GAT class perceived, would be trying to learn with students “who did not want to learn” (Kiarni). In contrast to Aboriginal high-ability students, no non-Aboriginal students chose to join the mixed-ability class either before or after transition. Tyrone’s differing experience of the GAT class was an indication that the class, although engaging, was perceived as too competitive from his perspective. Those students who ranked at the top of the class with ASCs were naturally flourishing. For those students like Tyrone, who faced the threat of being dropped from the class, the competitive atmosphere was not conducive to their self-concept or wellbeing. For example, Tyrone admitted to feeling “sad most of the time”. His self-concept of ability had been threatened and undermined by being in the class.

### **Perceptions of Multiple Stakeholders in Relation to Aboriginal Students**

In regard to the cohort of seven participants from the rural school, educators made the observation generally: “The students that you’re tracking are all sporting and academic” (Mr P, Aboriginal teacher). In primary school, it was clear that all participants had academic and social goals for their lives. This is significant in understanding their developing sense of self and their choices in transition. Will an ASC or sport/social self-concept take priority? Is it possible to achieve a balance while working under the demands of a selective academic setting?

The Aboriginal community worker Melita was employed by an agency to conduct a transition support project. From years of experience, she saw a pattern. She commented generally about high-ability Aboriginal students: “Some are quite capable of getting to the higher levels into the higher classes but choose not to, now whether that’s peer pressure or not, or they doubt their abilities, and they shouldn’t”.

These students preferred the mixed setting rather than competing with similar high-ability peers in GAT classes (a small fish in a pond of lots of big fish). She explained social homophily as Aboriginal students not wanting to stand out.

The Denponse High principal supported the view that peer pressure was influential. In his perceptions of the academic development of Aboriginal students, the principal felt, “The home life and the peer group have a big impact. And I would even argue that the peer group has the bigger impact”. One Aboriginal teacher, Mr P., suggested that Aboriginal boys engaged in visible rule-breaking behaviour to establish and retain their power in the school social environment: “They just feel they have to be the leader of the pack”.

Similarly, an AECG member explained,

I think the Aboriginal boys, in particular, have come out of their shell since coming from primary school. I think they don't like being the little fish in the big bowl, so to speak, so they feel they have to be overly confident to keep up with what's happening.  
(AECG member)

This comment suggests that Aboriginal boys act out to attract social reinforcement from their peers. These adolescents try to dominate the members of the group and use different types of strategies to attain and establish their social rank and status. They use bravado in class to impress or intimidate others in the new “big bowl” of secondary school. Elevated peer standing was given to these teens because of their bold and daring behaviour.

One Aboriginal teacher, Mr P, explained that teachers might label students: “[For] the large proportion of Aboriginal students all the labelling ‘you’re such and such’ and ‘I can remember when your brother was here a couple of years ago’ so you just get that family target”.

Other snapshots of implicit racism, as well as overt prejudice, were uncovered in the data. The Aboriginal carers felt that the teachers were antagonistic to their children and themselves (Sarra et al., 2018). Pat (Aboriginal grandparent) mentioned delays of several days before the school returned her phone calls. Pat explained that “some of us [referring to Aboriginal students] are targeted”.

Aboriginal teacher Mr P said that the Aboriginal teachers at this school were needed to mediate between the school and community:

It's either because the parents requested that I be a support person for them or the senior executive felt that it's going to be a big issue and would like me to sit there and try and mediate and keep things calm. I don't have a problem with that, especially if the parent has requested that I sit in with them. And sometimes it's myself and the AEO so sometimes they've got two people. Yes, it's a bit of a problem when it happens regularly, and I feel that it could be dealt with without me being there. Because sometimes if you walk into a room and there's 10 people in there so you've got your senior executive and sometimes a youth liaison officer and the AEO and then myself it's a bit daunting for a parent. But at the end of the day, if they want me to sit in there I'll sit in there with them.

**Interpersonal Discrimination.** Regarding attendance, the Denponse Liveable Communities Assessment Aboriginal and Torres Strait Islander Consultation *Final Report* (2011) found that “bullying and racism were also commonly cited as barriers to attending school regularly” (p. 102). Briony's grandmother Pat identified alienation from relationships at school:

*Interviewer:* Do the teachers tell her she is [clever]?

*Pat:* No, they run her down, yes, a lot of them do. It's who you get around with, they just pick one mob.

One Aboriginal teacher, Mr P, explained relationships took a back seat to rules: “Or just the little everyday things that shouldn’t really be a problem but turn into a big issue when the teacher says why haven’t you got your textbook? Because I moved house don’t backchat, anything like that”.

Sam’s mother Cody described stressful events related to bias:

*Cody:* When they know you’re Aboriginal and you’re copping the flak.

*Interviewer:* So you’re saying, discrimination, you see discrimination?

*Cody:* Yeah, it hasn’t gone. It hasn’t gone. There’s no way.

*Interviewer:* And that’s from the, the teachers at the school?

*Cody:* Yeah, teachers and students.

Briony’s grandmother Pat also described stressful events that may be related to bias against her granddaughter: “A teacher pushed her in a temper” and the teacher “threw [de-identified] out the room and said, you’re a thief, you steal money”. Students’ academic and affective needs cannot be separated. By making the interactions between teachers and students negative, there is an undermining of student’s self-esteem, which also implies low expectations are held of Briony. The way situations were dealt with is reflective of beliefs, and the perception of negative attitudes did not support and enable Briony and Sam’s development of self. The academic and affective needs of students cannot be met separately. Both needs must be met in a holistic manner for a student to function normally and succeed at school.

**Racism.** Implicit racism and overt prejudice also cause trauma between family and language groups as well as between families and institutions (WAACHS, 2005b). One Aboriginal teacher, Mr P, saw some of the disagreements between families within the

Denponse community causing problems within the friendship networks inside the school community:

I think the outside influences the fractions in the communities and the families are a big issue here at the moment so if families outside are having a disagreement or an argument on the way in then it's filtering in. And the students at school are carrying on with that during the week so I think that's probably a common issue in other places. But in the moment the riff-raffing and the gangs in our community has just made it quite difficult.

Trauma can flow down the generations in close communities, particularly Aboriginal communities where stories are remembered beyond one generation (Kostenko & Merrotsky, 2009). The principal believed that dysfunction and "drama" was a reason that some Aboriginal students were not supported in their education:

They want their kids to get an education, but while people are playing politics, and that's not happening, so, there are a lot of people out there angry. You know, leave the grudges of the past behind, and let's work with schools and families, and get the kids to the schools and get them an education.

Although the school administration felt that they were meeting the needs of the whole school community, the principal was aware of some parents who had negative experiences. The principal said, "I have some big battles with [Aboriginal] families here, and if they're not working with us, then they are working against us, and the kids can't be successful" (RGP7). The response from the community towards this educator was negative. He explained further, "I really feel I've encountered, there is racism in certain elements in the community, and [when] the kids are getting the message from home, that that school's a racist school". A member of the Denponse AECG also recounted this situation (Researcher's Journal Entry, 04/03/2016).

### **Perceptions of Multiple Stakeholders in Relation to Non-Aboriginal Students**

**Primary School Educators.** The non-Aboriginal students were given trust and respect by teachers. By instructing students in the classroom using an approach that fit students' academic needs, teachers revealed their confidence in these students. This is one way that teachers can build a strong ASC in their students. The non-Aboriginal participants were perceived as more interested and motivated. Therefore, the teachers adopted a student-centred approach, such as inquiry-based learning that led to students' exploration of new knowledge. In primary school, they were given independent, self-directed tasks and projects, and students were trusted to complete them. Kiarni was described by her teacher as "enjoying working independently". Also noted by her teachers was Kiarni's perseverant nature, commenting that she had a "resilient" attitude to new and challenging work.

By providing positive reinforcement regarding student progress, teachers also revealed their opinion of the ASC of the non-Aboriginal participants. Teachers supported students' potential by giving them good grades and glowing reports. The personal interactions with teachers set high expectations for student learning. Parents reported positive reports, parent-teacher interviews, and communication with the school. Jarrod's teacher thought he was "an enthusiastic learner who enjoys new challenges", is "mature" and had "excellent ideas" as well as being "capable". Tyrone's primary school teacher described him as "exceptional" with "a high level of maturity and commitment to academic success".

**High School Educators.** At the end of the year, there was a range of views about the high-ability, non-Aboriginal students from the high school principal, ranging from "top kids . . . [we] try to keep them moving forward academically" and "good kids who want to be at school, want to go well at school". He perceived that "if they're not coming to my

attention for being in trouble, and the GAT class is running well, and they're in the GAT class, I've got to think they're going fairly well".

In his perception from dealing with the families and children, there were three crucial differences that separated the non-Aboriginal students from Aboriginal students. First, he said, "If there's a solid family life, where it's a settled family, and they're supportive of education, and they value education". Parents who value education and provide enculturation of academic norms and habits into family life will develop the AWB of their children. Second, he perceived that "strong peer connections" with other "good kids" were a reason for the academic motivation of these students. Finally, he perceived, "They would have a balance of what they would do at school and what they do outside of school, sport and other recreational activities involved there and strong community connections". In his opinion, engaging in extracurricular activities enabled students to build their self-esteem and confidence without impacting the investment of time and effort required for academic goals. In contrast, the year adviser said that she believed Aboriginal and non-Aboriginal students were "exactly the same".

### **Aboriginal and non-Aboriginal Multiple Stakeholder Perceptions Compared and Contrasted**

#### **Multiple Stakeholder Perceptions About Aboriginal High-ability Participants.**

Aboriginal parents were engaging with their high-ability children to develop healthy relations but were hindered in their ability to provide such relationships because of the multiple and structural disadvantages they were facing. Parents, Aboriginal teachers, and Aboriginal community members were aware that rapport with teachers filtered over into students' self-perceptions of their abilities. They expressed their concern that teacher criticism or racism was causing students stress and negative self-esteem. The principal also mentioned racism and felt that the school was implementing correct practices, saying some

parents complained that “us Black fellows don’t get a fair go, and you get picked on”. He was clear that there were no demoralising or racist beliefs or behaviours in his school. He felt that there was a lack of social skills in the Aboriginal community that flowed down to students: “They’re the ones with unstable home environments, not supportive. There might be a clique of friends who are either good at fighting within the group, or fighting with other groups, so the social skills aren’t there”.

### **Multiple Stakeholder Perceptions About Non-Aboriginal High-ability**

**Participants.** There was no mention of poor student–teacher relationships from non-Aboriginal parents and teachers. Apart from the workload of students, the non-Aboriginal parents were happy with the education their children were receiving.

### **Discussion of Key Findings and Themes**

**Social Overconfidence and the Stigma of Intellect.** Three key aspects of the development of self during transition are social cognitions of self-perceptions, beliefs, and goals. Being placed in an ability group systematically shapes students’ reasoning, which in turn impacts self-concept through academic behaviour, effort, and achievement (Johnston & Wildy, 2018). The necessity, centrality, and importance of community networks for high-ability Aboriginal students were revealed in this case study, as well as the salience of the forced-choice dilemma (Jung et al., 2012). Sam and Briony, both high-ability Aboriginal students, chose not to participate in a GAT class to be accepted by their peers. Sam explained, “It’s boring . . . you’ve always got the same people in the same class”. The influence of peers in shaping the academic identity and academic outcomes of Aboriginal students was a common theme among all stakeholders.

The mixed-ability class was not a threat to the social self-concept of Briony and Sam. Within friendships, a frame of reference is established for evaluating their social performance as well as others’ social networks (Marsh, 1990; Marsh & Craven, 1997).

Huang et al. (2014) found students who were more mature cognitively and physically than their peers engaged in risky behaviours and occupied well-connected and powerfully influential positions in the social network at the beginning of Year 7. As influencers and influenced, female students are also likely to be “deviant leaders” (Cappella & Weinstein, 2006; Rodkin & Ryan, 2012).

### **Fixed Beliefs About Intelligence and Psychological Wellbeing**

Grouping students by perceived ability implies that ability is a fixed entity and cannot be changed or adapted significantly. It is likely that students who are streamed into ability levels may adopt entity beliefs. The results of this case study reflect those of Tarbetsky et al. (2016) who reported low-ability Aboriginal students also held entity beliefs. From our interviews, it appeared Briony and Sam had concluded that the GAT class students were more intrinsically motivated than they were, so they must be more intelligent. This sense of inferiority could be an indication of low psychological wellbeing but is mutually reinforced by the logic of ability grouping that “implies a fixed view of ability” (Hodge, 2019, p. 9). Hence, these results support the research of Clark and Merrotsy (2008) who identified a fixed view of ability as a characteristic of high-ability Aboriginal children. Research has also identified that Aboriginal students are typically placed in low-track classes (Bonnor, 2018; Luke et al., 2013).

The data revealed that the association between students’ social interactions and self-cognitions were moderated by their Aboriginality and the racial composition of the class. The structuring of schools into high- and low- status streams is related to psychological wellbeing (Bonnor et al., 2018). Boone and Demanet (2020) identified the climate of low-track classrooms in transition as one in which academic futility thrives. The context in which streaming occurs is known to limit some Aboriginal students’ academic motivation in the transition to high school (De Castella et al., 2013; Johnston & Wildy,

2016). For example, the perception of an inverse relationship between effort and reward may be a disincentive to engage in the type of high-ability settings offered by secondary schools (Muenks & Miele, 2017).

There were status and ability differences between the different tracks at the school. Students may attribute these differences to cultural deficits in Aboriginal culture, or Aboriginal students may seek to protect their self-worth against such views. Shame, with its multiple meanings for Aboriginal students, is central to understanding what Aboriginal students experience in competitive classes with high fear of failure climates (McKnight et al., 2018). Sam's (Aboriginal student) comments seem to suggest that high-track or selective classes were avoided by some Aboriginal students to circumvent failure. The threatening experience would potentially "put one's entire self on the line" (McGregor & Elliot, 2005, p. 229).

Through the lens of the quadripolar model (Covington, 1992), Sam was trying to protect his ASC and maintained the old absolute academic performance instead of working harder in the new environment. His low success orientation and high fear of failure were indicated by self-handicapping and defensive pessimism (Covington, 1992). Staying in a mixed-ability class with its lower success orientation (Self-protecting) may be a strategy for safeguarding ASC whereby GAT students were high-ability students in mixed-ability classes (big fish in a little pond). Briony admitted, and was described as, not understanding "how smart she was" (Pat). Sam said, "If I change [to GAT] then I might struggle a little bit". The reason may be peer pressure or self-doubt, or a combination of both. The proximity of the high-ability and mixed-ability groups appeared to shape the academic self-perceptions and buoyancy of these students (Salchegger, 2016).

## **Chronic Stress**

There is evidence, as described in Chapter 2, to suggest that Aboriginal young people, with the overlay of intergenerational trauma and the impact of life stressors, are more at risk of developing behavioural and emotional problems than non-Aboriginal students (Hopkins et al., 2018; Williams, 2018). Mental health concerns in the Aboriginal community of Denponse featured in a Land Council's report (source identifiable on request, see Kaiser, 2009), with one particular recommendation advocating for teacher training to include greater recognition of depression, abuse, and problems at home.

An EBD is distinguishable from conventional behaviour by the length and severity of the actions and is recognised as a disability by the Australian Clearinghouse on Education and Training (ACET, 2020). A number of life stress events experienced by a person in the previous 12 months defines EBD clinically (WAACHS, 2005b). The examples of life stress events are family and household factors, specifically dysfunctional families, being in the care of a sole parent, having lived in five or more homes, being subjected to racism in the past 6 months, and the physical ill health of the child and carers. It is thought that stress-inducing issues impact Aboriginal students, which potentially place them at increased risk of emotional and behavioural problems than their non-Aboriginal counterparts (Owens et al., 2016). Of the WAACHS (2005a) clinically significant difficulties, there was evidence Briony and Sam had experienced major life stress events including separation from parents and older siblings, severe illness in the immediate family, having reduced income in a single parent family, dysfunctional families, and racism. Both their parents had time-consuming responsibilities. Pat, Briony's grandmother, was caring for a partner with cancer. Cody was working fulltime.

Acculturative stress is defined as having to deal with the racism and discrimination that one might encounter on a regular basis (Williams, 2018). Acculturation stress has been

analysed under the themes of cultural racism, interpersonal discrimination, and microaggression in the classroom (Gale & Dorsey, 2020). Developmentally, as young teenagers, Briony's and Sam's Aboriginal socialisation and racial identities were still emerging (Boykin & Toms, 1985). Aboriginal people have historically remained a recognised out-group in Australian society (Forrest & Dunn, 2006; Howard-Wagner, 2019; Lester, 2016). Their carers (Pat and Cody), as Aboriginal Elders, had experienced unfair treatment and perceived discrimination and had lived through times of historical injustice towards themselves and other Aboriginal people. Both Pat and Cody reported that these Aboriginal students had experienced racism and hence had diminished wellbeing and poor social-emotional functioning. By contrast, there was no indication from the non-Aboriginal participants in the GAT class that teachers treated students unfairly. The non-Aboriginal participants did report stressful relationships with teachers. The concerns of the parents, such as Kiarni's mother Sally, centred on worrying that they did not participate in extracurricular activities on the weekend like horseriding because of homework.

Intentional or unintentional words that communicate derogatory or negative racial slights are defined as microaggressions. These elements of teaching style, content, and low expectations can interact in a cumulative downward spiral in low-track classrooms (De Castella et al., 2013). Across the mixed-ability group, variation of teachers and subjects was found in all the classroom climates. Sam explained, "if you don't get along [with your teacher] it's not as easy to talk to them about it [work that is difficult]".

Negative relationships were also considered to facilitate hostility. Sam admitted his sister repeatedly told him "to stop getting in trouble". Sam said, "There's a couple of teachers that I get along well with". Similarly, Briony stated that she was "naughty, but not cheeky to all the teachers". The connection between disrupted lessons and the teaching style is explained by the fact that "you hardly get any time . . . because everyone hates the

teacher” (Briony). These participants were unable to separate the factors contributing to their disengagement:

*Interviewer:* Do you like that class?

*Sam:* Not really.

*Interviewer:* Is that because of the subject or the teacher?

*Sam:* Both.

Sam said teachers had low expectations of him: “I’ve got to change my behaviour to prove, like, other people are wrong on how they think that I’m not capable of it”. Briony believed, “They [teachers] don’t like me”.

Daily encounters with hidden and obvious perceived racism have been an identified factor causing emotional and behavioural difficulties (WAACHS, 2005a). As Cody explained, “Here, teachers are hounding children for respect, but no, they need to remember they’ve got to speak with respect to the students before they get the respect”. It was identified in the data as well as part of school culture in the Denponse Land Council’s report (source identifiable on request, see Kaiser, 2009). One AEO at the primary school said, “Our cleaners speak with more respect than teachers sometimes to the kids. Our cleaners are really good with our [Aboriginal] kids”. In Australia, the implications of being Aboriginal have significant implications for Aboriginal students’ academic motivation, competence, and academic identity.

### **Impact of Emotional Behavioural Disorders**

Life stress events and acculturation stress, in turn, may be psychologically maladaptive and contribute further towards academic underachievement (Owens et al., 2016; Sarra et al., 2018; WAACHS, 2005a, 2005b; Williams, 2018). Transition, or starting again socially and academically from zero in a new educational setting, was another

challenge presented to these students. The stress of prejudicial experiences in Year 7 was painful and stressful for themselves and their families. The repeated negative experiences with teachers and certain peers shaped their reactions in class and the playground, causing exclusion and, more enduringly, forming a hostile mindset (Bodkin-Andrews, Paradies, et al., 2012). The challenge of school added to an accumulation of difficulties that had evolved in different aspects of their lives. For example, chronic stress and marginalisation are known to undermine self-regulation, self-concept, and coping skills (Cave et al., 2019; Heard-Garris et al., 2018; Macedo et al., 2019). The consequences of EBD for high-ability Aboriginal students are diverse. They may include not valuing school goals as relevant, negative attitudes towards school and teachers, and BFLPE, in particular the development of a poor ASC (Bodkin-Andrews, O'Rourke, et al., 2012; De Castella et al., 2018; Lester, 2016; Sarra et al., 2018).

High intelligence and disability characteristics indicate a student may be considered twice-exceptional (Mayes et al., 2014). Aboriginal students demonstrating twice-exceptional abilities have not been thoroughly addressed in the literature. For example, Briony's story is unlike most published cases, which assess high-ability students with learning disabilities, not EBD. The separation of students with socio-educational disadvantage and emotional and behaviour disturbance, in particular Aboriginal students, into certain academic streams is partly directed by the clear relationship between social disadvantage and poor educational outcomes (Bonnor et al., 2018). Mr P, an Aboriginal teacher that taught a re-engagement class, felt an increase in need from Aboriginal students seeking refuge in his classroom:

I do get a lot of Aboriginal kids that come to me with a timeout card or they're having a rough day and want to lay on the cushions or something for 5 or 10 minutes and that

seems to be more frequent recently. So I'm not sure whether it's getting to the end of the year or there's just so much going on that they can't cope.

Aboriginal students are not only overrepresented in remedial education; they are underrepresented in selective school programs (Goings & Ford, 2018). There are no Aboriginal enrolments in the big 10 selective schools in the Sydney region, and Aboriginal students represent 1% of enrolments in selective schools outside of Sydney (ACARA, n.d-b). There are gaps in what we know concerning how Aboriginal students' twice-exceptional high-ability with behavioural disorders are identified and supported in schools.

The Aboriginal community worker Melita was employed by an agency to conduct a transition support project. She explained social homophily as Aboriginal students not wanting to stand out. Some high-ability Aboriginal students "choose not to" join selective classes. In addition, gifted profiles that include culturally informed characteristics of high-ability students are rarely used for identifying twice-exceptional abilities (Goings & Ford, 2018). These deficit perspectives impact Aboriginal students by contributing to under referrals to differentiated learning and support. Non-Aboriginal students with twice-exceptionality are more likely to be identified, labelled, and educated to address the scope of their learning needs. Biases and stereotypes of Aboriginal students identified with EBD make them twice-invisible as teachers perceived them as "naughty, but not cheeky to all the teachers" (Briony) to be also identified as gifted.

### **Conclusion Research Question 1: Avoiding Shame**

For both Aboriginal and non-Aboriginal students, moving into a selective academic environment had significant consequences as the academic challenges and competitive context of high school GAT class were threats to their self-concept and salient conditions for the BFLPE. Three factors impacted the development of self-threatening for students in the GAT class. First, the amount of assignments from a large number of teachers with

different expectations and deadlines meant that it was difficult to ensure expectations were always met. Second, success was relative, therefore the threat of being dropped from the class was always present. Finally, the status and exclusivity of the GAT class meant that being dropped would be public and shameful, as well as placing oneself in a disadvantaged educational setting.

In particular, students who had older siblings already in senior GAT classes were more aware of the expectations as well as the investment required to develop their education in that setting. Students who were already familiar with the values and expectations of academic norms and “loved learning” were better able to function and meet the performance expectations of the GAT class. Students who were willing to sacrifice other extracurricular activities in the pursuit of top rankings in the GAT class had positive self-perceptions of their ASC. Students who were not competitive in nature, or who wanted to balance their sporting and ASCs, experienced fear of failure and self-doubt.

Initially, the consequence of moving to a nonselective setting supported self-concept because it was a context that did not threaten their perception of self and perception of their abilities. However, over the three time points, interactions with adults at the classroom and school level diminished students’ self-concept, achievement, and confidence in a reciprocal and cyclic manner in line with the BFLPE. Aboriginal students’ performance in school compared to non-Aboriginal students’ performance seemed inhibited by factors such as social overconfidence, low self-concept, and the stigma of intelligence. Scholars have called Aboriginal students “invisible” in schools (Luke et al., 2013; Merrotsy, 2016). This study found that high-ability Aboriginal students with low ASCs rejected entering a situation (the GAT class) where they did not feel they belonged (Bodkin-Andrews, O’Rourke, et al., 2012) and chose a mixed-ability stream indicating the BFLPE. Ironically, by avoiding failure as a shameful experience, students evade challenge

and incidents that facilitate competence and growth. By students evading challenge because of shame (McKnight et al., 2018), students also avoid challenging situations that help them to grow and learn (Dweck, 2006; 2017).

The consequence of being in a separate stream, the mixed-ability stream, initiated a negative cycle of chronic stress and cumulative negative responses from cultural racism, interpersonal discrimination, and microaggressions for Aboriginal students but not for non-Aboriginal students. These factors have a damaging effect on the ASC of high-ability Aboriginal students, as well as their mental health (J. White, 2020) as revealed by BFLPE theory. These teenagers are multiple-disadvantaged and may struggle in figuring out who “I” am and who “we” are, the core developmental tasks of adolescence. Significantly, this is the key difference in the development of high-ability Aboriginal students. They have an accumulation of obstacles in their social and academic development of self (Bonnor, 2018; Luke et al., 2013; McKnight et al., 2018). The findings of Research Question 1 support this research in that Aboriginal high-ability students in comparison to non-Aboriginal high-ability students reported experiencing a forced-choice dilemma, BFLPE, and multiple disadvantages including racism.

Twice-exceptional students, especially high-ability Aboriginal students with disabilities, have not been thoroughly examined in the literature. In addition, most published research regarding twice-exceptionality focuses on learning difficulties, not EBDs (Owens et al., 2016). The interconnected effects of exposure to disadvantage across these domains cause long-term behaviour and emotional difficulties. Their “invisible” condition needs to be researched more thoroughly given persistent stress and marginalisation function to weaken adolescent self-regulation, as well as their resilience and ability to focus.

## Section Summary

The results of Research Question 1 revealed how placement in a mixed-ability or selective setting shapes student reasoning and experiences and, as a result, the development of their sense of self. Streaming influences differences in student–teacher relations and peer relationships to effect self-concept via academic performance and efforts. Being placed in an ability group systematically shapes students’ reasoning, which in turn impacts the development of self-concept through academic behaviour, effort, and achievement. There are relations among streaming, BFLPE, and academic performance.

Students may attribute differences in the status and ability of those in different tracks to cultural deficits in Aboriginal culture. Aboriginal students may seek to protect their self-worth against such views. In addition, the consequences that are less known to inhibit high-ability Aboriginal students in streamed settings are social overconfidence, fixed-mindset beliefs, and EBD. Some high-ability Aboriginal students may be twice-exceptional, invisible, and undiagnosed for many reasons. As these two different school climates, the GAT class and the comprehensive mixed-ability classes, are different, Research Question 2 was posed to compare and contrast experiences of transition in these two types of educational settings experienced on transition.

## **Results of Research Question 2: Social and Ethnic Classroom Composition and Tracking**

Research Question 2 posed, “What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Assistant Principals, Principals) perceive as the impact of transition on social and academic outcomes for students transitioning to different educational contexts (i.e., selective settings,

mixed-ability) for secondary school? To what extent are these similar and different for Aboriginal and non-Aboriginal high-ability students?”

### **Overview of Issue Explored**

The need to understand the various experiences of primary and secondary schools was established to discern any impact on social and academic outcomes for students transitioning into secondary school. First, the pre- and post-transition contexts are described for Aboriginal students then non-Aboriginal students, along with student perceptions of these contexts. Second, the perspectives of Aboriginal and non-Aboriginal students are compared and contrasted. Third, the perceptions of multiple Aboriginal stakeholders and non-Aboriginal stakeholders are presented. Fourth, Aboriginal and non-Aboriginal stakeholder perceptions are compared and contrasted. Finally, a discussion of the key findings and themes emanating from the results are presented.

### **Pre Transition: Primary School Context**

In Denponse Primary, six participants and their parents and teachers were interviewed in their final term at primary school. All six participants moved from the same primary school to the same high school. To understand how these schools differ in classroom climate and academic status, the average NAPLAN results are used (see Table 6.1).

**Table 6.1***Levels and Composition of Classes Across the Rural Primary and Secondary Schools for the Same Cohort (2014–2016)*

<b>Student</b>	<b>Gender</b>	<b>Aboriginal</b>	<b>Primary</b>	<b>Secondary</b>	<b>Transition Between Academic Level of Class Composition: Up/Down Band</b>
			<b>Denponse Primary</b> Two mixed-ability classes One 5/6 composite ( $n = 8$ ; Year 6) Band 7/8 (R = 14 students) Band 7/8 (W = 2 students) Band 7/8 (N = 13 students) Band 4/5/6 (R = 16 students) Band 4/5/6 (W = 46 students) Band 4/5/6 (N = 48 students) School AV = Band 5 in the mixed-ability classes	<b>Denponse Secondary</b> One Years 7/8 GAT composite ( $n = 12$ ; Year 7) Band 7/8/9 (R = 10 students) Band 7/8/9 (W = 4 students) Band 7/8/9 (N = 11 students) Mixed-ability Band 4/5/6 (R = 51 students) Band 4/5/6 (W = 61 students) Band 4/5/6 (N = 52 students) School AV = Band 7 in the GAT class	
Briony	F	Yes	Mixed-ability class ( $n = 28$ ) Class AV = Band 5	Band 5 (Average achievement level in mixed classes)	Same
Sam	M	Yes	Mixed-ability class Class AV = Band 5	Band 5 (Average achievement level in mixed classes)	Same
Lisa	F	Yes	Mixed-ability class Class AV = Band 5	GAT class Band 7 (Average achievement in GAT composite class)	Up
Kiarni	F	No	Mixed-ability class Class AV = Band 5	GAT class Band 7 (Average achievement level in GAT composite class)	Up

<b>Student</b>	<b>Gender</b>	<b>Aboriginal</b>	<b>Primary</b>	<b>Secondary</b>	<b>Transition Between Academic Level of Class Composition: Up/Down Band</b>
Jarrold	M	No	Mixed-ability class Class AV = Band 5	GAT class Band 7 (Average achievement level in GAT composite class)	Up
Tyrone	M	No	Mixed-ability class Class AV = Band 5	GAT class Band 7 (Average achievement level in GAT composite class)	Up

*Note:* Information about the secondary schools was taken from ACARA (n.d.-b). AV = average of the reading, writing, and numeracy score; R = average of the reading band score for the cohort; W = average of the writing band score for the cohort; N = average of the numeracy band score for the cohort.

The average NAPLAN score in numeracy for this cohort of students in Year 5 was for numeracy Band 5 and literacy Band 5. The results are reported using five national achievement scales, one for each of the assessed domains of literacy and one for numeracy. Achievement scores range from 0 to 100 for literacy and numeracy, respectively. The NAPLAN scales enable changes in domain achievements by cohorts of students to be monitored over time. The Year 5 NAPLAN scale is divided into six bands used to report student progress, with four bands (Bands 5, 6, 7, and 8) identifying students above the national average (Band 8 being highest). Each band contains a range of scores. Student gain in NAPLAN scores is one way to measure the impact the school has had on student progress.

The study was directed to this school due to the high NAPLAN scores of this cohort of students. Evidence revealed that primary teachers were meeting the complex needs of their high-ability students in mixed-ability classrooms. For example, Dave, a parent of a non-Aboriginal student, said, “Teachers have been very supportive, and with him being quite academic they’ve provided him with different modes of doing projects and given him the scope to actually choose topics”. The primary school was conscious of the need to extend and develop high-ability students. Dave observed, “He’s developed, become more self-reliant, and able to do self-learning with minimal guidance”. This development of high school study skills was supported by “a fairly close connection between the school and the high school . . . where they’re doing transition days and going up there for inspections” (Dave, Non-Aboriginal Parent).

### **Post Transition: High School Context**

Initially, the most symbolic changes for students were the academic classification and the alterations in status when students are classified into streams in the first year of secondary school, requiring a change in the social hierarchy and relevant self-evaluations.

The continual reference to “GAT” and “mainstream” was endemic in the study (across all participants). It was a label that classified students in a social, physical, and intellectual caste system (Hodge, 2019). All participants acknowledged the status hierarchy between the different academic streams: students, parents, and educators (Bonnor et al., 2018). Decades of educational research (Abraham, 1995; Ball, 1981; Boone & Demanet, 2020; Hargreaves, 2006; King, 2017; Stevens & Vermeersch, 2010) confirm that streaming provides more opportunities for some students, including cultural capital, conformity to school culture, quality teachers, differentiated learning, and strong student–teacher relationships. In this case study of six high-ability students, four students—three non-Aboriginal and one Aboriginal—moved from a mixed-ability primary school environment into a high-ability Year 7 environment. As the challenge increased, so did their speed of growth as identified in Year 7 NAPLAN results.

**Composite Year 7/8 GAT Class.** Four students—Lisa, Kiarni, Jarrod, and Tyrone—moved into the composite Year 7/8 GAT class. Of this group, only Lisa was Aboriginal. Lisa and Kiarni were close friends. They appeared to have encountered a continuity of their social context for two reasons. First, this primary school was one of the main feeder schools into secondary school. Second, as a rural school, there was an increased possibility that people would be connected through the community. As student Lisa explained, “The community is pretty good because it’s a small town, you pretty much know everybody, and there’s always people to help”. Therefore, these students had an optimal situation in moving into a setting that was like what they were used to and provided a similar environment of intellectual challenge and a sense of being accepted by their immediate peers. From the observations and evidence from the primary school, these high-ability students were confident in transition. They maintained their performance and placement in the GAT class throughout the transition.

**Mixed-ability Classes.** In contrast, for the other two high-ability Aboriginal students (Briony and Sam) who moved from a mixed-ability environment (primary) to another mixed-ability environment (secondary), and who were also enthused to go into Year 7, the momentum did not continue. According to their self-report over three terms, their learning decelerated, with suspensions causing nonattendance, even in examinations. Data were triangulated across observations, as well as adult and student interviews. There was a difference in average achievement across the composition of the GAT class and average students in the mixed-ability classes, according to NAPLAN data (see Table 6.1). Table 6.1 reveals that Year 8 GAT students increased the difference within the GAT composite class. This finding would suggest that the classroom climate was significantly different across the top and bottom tracks.

**Absenteeism.** Statistics from the 2016 Annual School Report for Denponse High revealed a steadily declining attendance with increases in age. In the same year, Year 11 students were 22% below the state average in attendance. There is evidence that this school consistently had significant attendance problems. In the academic year that this research took place, this cohort of students was 6.1% below the state average in attendance.

### **Aboriginal Students' Perceptions of Their Context**

**Perceived Social Status: GAT Class.** There is prestige on arrival in secondary school on being included in the GAT class. Lisa was the only high-ability Aboriginal student to accept the placement in the GAT class in her local high school. As Lisa explained, "I'm in the GAT class and it's one of the higher classes". Her view of the status was also revealed when discussing the work of the AEO: "She [the AEO] always comes and helps out in classes . . . Mostly not in our GAT class, but in the other classes like the low classes".

**Perceived Social Status: Mixed-Ability Class.** Briony did not accept the placement in the GAT class. She had a strong self-concept in the social domains and valued social acceptance; she said,

[I'm] stuck with people I knew because most of the kids in Year 7 are all from [another place], but there are some, there are a couple from different schools, like [Name] . . . but the ones I didn't know, yes, we just met in classes. I just hang out with [Name] people. There's a big group of us.

As Briony's comment suggests, she valued her friendship circles. As is typical of most teenagers, she was wary of being where she did not feel like she belonged and rejected entering a situation with people who were not like her. As Briony explained,

*Interviewer:* So, if you kept all of your friends in the playground at recess and lunch and if you changed schools and went into [Name] and [Name]'s class, then you change all the teachers and you wouldn't get bored.

*Briony:* All right, yes, all the kids that are there are all posh, stuck-up.

Sam also did not accept the placement in the GAT class, perhaps because he had a sister in the Year 9 GAT class and had a realistic understanding of the commitment involved. In response to the question "What is it about some people that help them learn?" and with the prompt "Who is the smartest in your class?" Sam, in the Time 2 interview, said, "Most of the smart kids are in the GAT class". This was a view also expressed by Briony in the Time 3 interview. Merrotsy (2016), in his description of gifted Aboriginal students, calls this dilemma of choosing between being accepted by peers or excelling academically as a choice forced upon students.

**Perceived Quality of Teachers: GAT Class.** The GAT teachers took the students out of the classroom to investigate real-world problems and solve them. Inquiry-based learning is an active form of learning that poses questions and triggers curiosity. Teachers

collaborated across discipline areas to increase relevance and depth of learning.

“Sometimes the teachers do it in a creative way, so they get us to do something creative, I guess, and then some do it from textbooks, [and then] class learning like we get other information off students” (Lisa).

The word “creative” was expressed often in describing the teachers in the GAT class. As a result of this style of delivery, Lisa enjoyed learning:

I enjoy most of the subjects; there’s lots of interesting stuff going on in each class.

We’ve done Ancient Greece in history, we’ve looked at Harry Potter in English, we’ve done in maths we’re doing area and measurements and that type of thing.

Lisa explained how the passion of one of her GAT teachers enthused her: “We’re doing a Harry Potter unit, and our whole classroom is decorated with Harry Potter stuff, so it’s pretty cool”. The creative delivery of lessons from this teacher was not limited to the presentation of content but a whole approach. The GAT class was using technology to manage academic goals. For example, Lisa described a Messenger GAT class group that they used for uploading photos and images to help with assignments: “If we miss out on something because we’re always taking pictures of it on our phones to the blackboard. And if you miss out on anything, she [friend] just puts it on the Messenger thing”. From the testimony of Lisa, the work in the GAT class had relevance to the real world and therefore was intrinsically motivating.

**Perceived Quality of Teachers: Mixed-Ability Class.** In describing the style of lessons in the mixed classes, Sam explained, “We [mixed-ability students] don’t do group work”. One notable difference in the classroom climate was that “[In the history class] everyone is really naughty” (Briony). Briony cited the dogma of the mixed-ability classes: “Listen to the teacher and do all your work”. When asked how hard it was to listen and focus on the teacher, Sam said, “That’s pretty hard”.

**Passive Listening.** Apart from “hands-on” subjects, such as industrial technology, teachers maintained their identity as lecturers: “We always do individual work as well; there is no group work like there was last year [in primary]” (Sam). Sam believed that passive listening was the key to success in Year 7, even though he had difficulty doing it: “I think that if you just listen and focus, always pay attention”. From the data, it appeared the dynamics of the mixed-ability classes possibly had more disruptive behaviour.

The classroom climate of the mixed-ability class made it less likely for teachers to change the classroom dynamics as the teacher needed to ensure control from the front. According to Sam, “They [secondary teachers] run it differently [compared to primary teachers]; they run it how they like”. When asked whether it had been worse than she thought it would be, Briony replied, “Only the teachers, everything else was alright”.

Boredom, unsettled students, lack of real-world connections, and relevance were observed from students in mixed-ability classes. Briony explained, “Some of it’s the same, like maths and English”. Sam provided more detail about the style of teaching:

Well, like last year we just did book reading and comprehension. And then this year it’s like more into it, and you have to do a lot more than you did in primary school like last year . . . So they could, you know, maybe divide the class for the people who want to do this . . . And we always do individual work as well, there’s like no group work like there was last year.

The interviewer asked, “What advice would you give to someone about to start high school?” Sam replied, “Concentrate from the beginning and always do your best from the start . . . always pay attention; it will be easier than not listening and struggling in the exams and assignments”.

**More Disruptive Classes.** As a result of “It’s not challenging. You’re just coasting” (Sam), the mixed-ability class students had much greater opportunity to engage

in deviant behaviour. Teachers with less expertise are often those who have not built up a repertoire of strategies to deal with disruptive behaviour.

When asked, “Are you happy with the school you’re attending now?” Briony replied, “No. Because of all the teachers”. In response to the question “Is there anything the school could have done better to help you settle into Year 7?” Sam replied, “They could change the subject around a little bit to fill in the gaps for people . . . and talk to them and help them so that they weren’t so frightened”. Harried teachers can descend into poor relationships through the impact of their adverse responses to students under tension. Students’ reasons for acting badly and not getting involved are often monotony, seeking to be validated, and feeling inadequate in the learning environment.

By the end of the year, the language of mixed-ability participants developed a “them” (teachers) and “us” (students) mentality that separated students from teachers. In describing the learning centre at the Police Citizens Youth Club (PCYC), Briony described two reasons that she enjoyed going there: “The teacher [policewoman] that does it, she’s very good, and there are no teachers there”.

**Perceived Learning Environment: Mixed-Ability Class.** Negative peer-group pressure was a characteristic of the low-track class. As student Briony admitted,

I’ve been not really on track. I’ve been like a little bit playing out in the . . . If I could, I’d go back and be good because I know it’s not like . . . And I’ve got to change my behaviour to prove like other people are wrong on how they think that I’m not capable of it.

Early adolescence is a time when there is increased peer-group pressure.

Mixed-ability participants described the disengagement with school. For example, at the beginning of Year 7, Sam was not at ease with the transition, finding the learning environment not to his liking:

*Sam:* Just how they do it.

*Interviewer:* The way they teach it.

In particular, he found mathematics “a little bit too easy” (Sam). Sam’s mother Cody believed he had been underachieving all year:

*Interviewer:* He is a very bright student, and I just wonder if the fact that he is not being engaged in that?

*Cody:* That’s what I said right from the beginning.

Lack of involvement in learning can transform an engaged student into a trouble-making student (Goss et al., 2018). As Sam and Briony discovered, problem behaviour was punished by suspension. The defensive pessimism of the mixed-ability Aboriginal students affected their level of effort, and a sense of academic futility was observed by the end of year (Boone & Demanet, 2020; Van Houtte, 2016).

**Suspensions.** Suspensions impacted negatively upon the social and academic outcomes of Aboriginal students. A parent felt, “He’s missed a lot of that [learning], through absences, suspensions” (Cody). By the end of Term 1, Sam had been given two suspensions, and Briony had been given one suspension. When excluded from school and while on suspension, a parent thought that this resulted in students building friendships with poor role model peers. They were “on the street to go stealing, or drugs or anything else” (Pat).

Nonattendance due to a suspension system had a knock-on effect including delayed learning, negative peer pressure, and exclusion from school sporting teams. For example, Briony acknowledged, “I signed up for that [cricket] too, but I was suspended then. And for soccer like I signed up for all of them, but I got suspended when the trials were on”.

### **Non-Aboriginal Students' Perceptions of the Context**

**Perceived Status of the Class: GAT Class.** The study showed that GAT class participants had an identity based on its members having similar status and attitudes. One GAT student's main reason why she felt that the move to high school had been good was just being in that class. Kiarni said, "Yes. Just being in with people who want to learn". The broad theme of "people who want to learn" was associated with membership of this class (Luke et al., 2013).

As was shown by Kiarni, "The Year 8s, it's good being in with them and like, mentor us". As this statement shows, the older students were available to support and help the younger students with the transition process. Another student used his friendships with older students as a measure of his sense of belonging. In response to the question "Do you feel that you fit in high school?" he stated, "I've met some new people from different years, I made some friends from Year 8 and a couple in Year 10 so I've been doing well" (Tyrone). These peer role identities assume increasing importance when starting again in a new school, secondary school, as the youngest (Eccles et al., 1993).

In response to a question asking students to describe themselves, many of the children self-identified as "intelligent". This is evidence of perceiving themselves as smart and having a belief in their academic "self" or self-concept. There was also evidence that all the students in the GAT classes were competitive. Comparison of rank was obvious in the daily running of classes, with some teachers reading out placements. The students were able to identify their place in each subject and class. The recognition of their achievements, including public awards in assembly, furthered the creation of a strong ASC. As Kiarni said,

I like the awards ceremony days because even though you don't always win an award it's still exciting to go there and watch any of your friends or just your classmates achieve and their achievements and that, but yes, they always make you a bit excited.

Year 7 students were asked what the most important things were for people to do to succeed in high school. In Term 4, after one year in the GAT class, Tyrone said, "I've learnt that I can do better, and I can try harder than what I've done before. I can be challenged more". In part, these students' self-concepts can be seen to be constructed on the perception of how their parents, teachers, and peers considered their academic ability (Harter, 1990). The development of a strong ASC appears to have contributed to increased motivation.

**Perceived Status of the Class: Mixed-Ability Class.** From the point of view of onlookers, the disruption that occurred in the mixed-ability classes was because students in those classes did not want to learn. Kiarni explained, "I really enjoy being in the GAT class, like being in with people that want to learn and everything. Some of my other friends, they're just in like the normal classes and they find it a bit hard sometimes". The participants did not feel judged about gaps in learning, and nor did they feel that they were inconveniencing the teachers by not understanding the work.

**Perceived Quality of Teachers: GAT Class.** In terms of recent pedagogy, explicit and personalised feedback is an indication of an expert teacher that is having an impact (Hattie, 2009). As one of the students in the GAT class showed, "If we don't understand anything after class, then they're [teachers] like always happy. And we just go up to them like after class, and they explain it and they give us an extra worksheet that explains it better" (Kiarni).

They also felt that teachers were fair in the way that assignments were presented. "My teachers usually explain themselves really clearly with assignments and homework",

explained Kiarni. Overall, the students in the GAT classes were satisfied with relationships with their teachers.

The GAT students spoke of their teachers as knowledgeable in their understanding as well as detailed in their feedback, as Kiarni elucidated:

The teachers, they're usually detailed in where you went wrong and how you could improve it. If you don't quite understand, then yes, you just usually go up and ask them and just ask them what they mean by fixing this part or how could I fix that better for next time. They help you out a lot with that.

Relationships with teachers were close enough for students to be honest and for teachers to be approachable. It was clear from Kiarni who said, "If we're not doing too well, then the teacher helps us and tells us what we've done" that the teachers in the GAT classes were supportive of the students' learning needs.

The passion for their particular subject and discipline was seen by the high expectations that were set for students in this class. These expectations were the most obvious by the steady stream of assignments, as noted by Kiarni:

It just gets a bit stressful because all your different teachers give you all different assignments and then none of your other teachers know what's going on in other classes, so you're just a bit like oh, what do I do, but yes, and you just have to get them all done and just try your best in every class.

The challenge of completing assignments was again reiterated also by Kiarni, who despite being dux at primary school and recently topping the grade in three subjects, said, "Some of it's a little challenging, but it's not too hard". She went on to clarify,

We get different assignments, and some assignments are a bit harder because it's a [Year] 7 GAT class, and sometimes we do them together. And, yes, so I struggle a little bit, but then my teachers and my friends help me out.

From the perspectives of students, there was pressure throughout the year from the higher expectations of teachers in the GAT class.

**Perceived Learning Environment: GAT Class.** Membership of this class required a commitment of effort, revision, and homework. School work was a focus in their friendship groups, as Kiarni attested,

I don't compare them and boast about how well you do or say oh, you need to do better or anything, but we do ask our friends how they went in their result, like in any experiments, exams or that or any assignments and then we try and help each other and see how we went wrong and how we could improve next time. And what we'd done to get, say what I'd done compared to what my friend's done, so where she picked up extra marks and where I lost marks, but yes, and then we help each other that way, but we don't compare marks as in a competitive way.

Another factor that was identified as a challenge for students was getting poor marks for work. The threat of being dropped from this elite class always loomed. A shameful event, the threat put one's sense of self in peril (McGregor & Elliot, 2005).

**High Expectations.** The high expectations of a GAT class were interpreted as providing them with more work: "Amount . . . we get more than the normal classes" (Tyrone, T3). A common view among interviewees was that "the challenges, it would be the homework, the homework is phenomenal" (Cody, Aboriginal parent, mother of Sam, a Year 9 GAT student). The transition had signified changes in the high expectations of teachers, as Tyrone explained: "Homework. There's a lot more homework compared to primary school because we get homework from every class that we're in, so it adds up to all of it going together, and we have to do a lot".

Sally, whose child was in the GAT class, felt that the amount of work given to this class was extreme:

I understand she is in the GAT classes and they do push them a little bit harder, so, therefore, they do get more assessment classes and stuff. And sometimes over this school year, it's probably a bit too much for Year 7. It's not that she doesn't get it done. She makes sure she's got everything done. But I find she's sacrificing other things that she would be doing. Like her horseriding and other chores at home and stuff like that, because she's got so much homework to do.

Tyrone explained these high expectations from teachers as “they're wanting you to be better and try harder” (T3), a theme emphasised by the repetition of “better” and “try harder” three times during the interview. The opinions that teachers held of the children as a “gifted” group impacted the expectations of teaching and learning.

**Self-Regulation.** For students in the streamed setting, the nature of the striving atmosphere within the classes meant they were motivated to move with the pace and workload and focus on improvement and organisation. In the Time 3 interview, two thirds of the participants (four of six students) said that the key to success was listening and doing the work. The other two students, in the GAT class, said that success was in the organisation. Jarrod went on to say, “Just actually don't leave things to the last minute”. In giving advice to someone younger, Tyrone said,

Make sure that they're organised and that they can set dates and days and times to do assignments and homework and to make sure that they get things out of the way, so things don't stack on top of each other. And make sure things get in on due dates.

Tyrone also mentioned the importance of using his school diary. Not only did these strategies require self-control and effort, but they were also within their ability to control.

**Explicit Intentions.** The learning intentions in the GAT class appeared to be clear to students. As explained by Tyrone in the class,

It's just understanding what type of things we have to do. I see what's going on and I've been getting more organised, not much but a little and so I've been able to make sure that I'm checking what I'm doing.

He continued by explaining how from explicit teaching transfer of learning occurs in class: "It's not just that they just ask you to go out and do it. They teach you how to do it first, but then you have bigger assignments, and you have larger expectations of what to do".

This attention to clarify learning goals and make the purpose of learning explicit was corroborated by Jarrod: "They sort of just explain stuff to me and help me with my work and everything that I'm troubled with".

**Clear Feedback.** Effective teachers use clear feedback to instruct their students on the next learning steps. As Kiarni said,

The teachers, they're usually detailed in where you went wrong and how you could improve it. If you don't quite understand, then yes, you just usually go up and ask them and just ask them what they mean by fixing this part or how could I fix that better for next time.

Students' satisfaction with results from assignments perhaps resulted from the fact that feedback and criteria were unambiguous in the GAT classes, as students testified.

**Different Style of Delivery.** The GAT class were trusted to go outside of the classroom to investigate authentic problems. Responding to a question, an interviewee Kiarni from the GAT class said,

In our Geography lesson that we've had—we went around, and we done a survey of all the rubbish and everything. And then like we went out to the basketball courts and there was a fair bit of rubbish out there, and like I think that maybe the SRC could put like maybe a teacher out there in GE [playground], or like a basket, like or more bins.

According to Tyrone, “a lot of the work that we’ve done in L&N [literacy and numeracy] was based around creativity”. Teachers collaborated across discipline areas to increase relevance and depth of learning.

### **Non-Aboriginal and Aboriginal Students’ Perceptions Compared and Contrasted**

In addition to the supportive structures of peers, parents, and a stimulating learning environment, the GAT class had a naturally occurring mentoring program as half the GAT class was in Year 8. The respect students held for the teachers in the GAT stream further developed the image of teachers teaching the top stream as ones with “expertise and interest”.

**Perceived Social Status.** In contrast to the eclectic range of people in the mixed-ability class, the GAT class had a collective identity based on academic orientations and common interest. It had developed collegiality that would threaten those who were not as familiar, equal, and secure with one another (McFarland et al., 2014). In contrast, through self-report and observation of their engagement in school, the data suggest the mixed-ability participants Briony and Sam had their confidence undermined during the year.

**Perceived Quality of Teachers.** Stressed teachers can unwittingly reproduce what defined them in school (Goss et al., 2018; Hodge, 2019). Very stressed teachers can slip into procedural memory and “roles of instructional and regulative classroom discourse” (Rose, 2004, p. 109). Adults and students in our interviews labelled those in these classes as “not wanting to learn” (Sally; Kiarni). This stereotype held across multiple participants. The work in the GAT class had relevance to the real world and therefore was intrinsically motivating.

**Perceived Learning Environment.** The key challenge for some in the transition to secondary school is finding friends with whom they can connect, trust, and be accepted. The three mixed-ability classes, in contrast to the 15 students in the composite GAT class,

provided a broader range of potential friends. The uncertainty of the mixed-ability class, segregated by race, gender, age, and social status, led to self-segregation. Most high school social networks are infamous for such cliques (McFarland et al., 2014).

In contrast to the GAT stream, where students were labelled “wanting to learn”, my findings are consistent with the research. There is growing evidence to suggest that teachers stereotype students from lower status academic tracks as less able, more disruptive, and less interested in learning (Belfi et al., 2012; Hanushek & Wößmann, 2006; Stevens & Vermeersch, 2010). From my data, the tracking appeared to facilitate a “them” and “us” mentality that separated students from students as well as from teachers.

### **Aboriginal Stakeholders’ Perceptions of School Contexts**

**Perceived Social Status: GAT Class.** The parents of students in the mixed-ability classes also identified the benefits to their child if their child had accepted to be in the GAT class. One parent, Cody, whose high-ability child was in a “mainstream grouping” (Cody) made the comparison between the GAT class and a private school education, as if it could potentially be a comparable learning environment: “If he would agree to move, whether it be . . . into the GAT class, or [other] schools. Yet, private schooling, it’s a matter of affordability”. Considering such concerns, it is important to examine the range of practices and procedures in place in the public school system that could put talented adolescents in situations where their self-concept, their future, and wellbeing are put at risk.

**Perceived Social Status: Mixed-ability Class.** Aboriginal stakeholders identified that some students felt threatened by the GAT class either because they were avoiding effort or because they doubted their capabilities and were shielding their self-concept. Melita stated, “Some of them think if you act dumb you’re going to get easy school work”.

**Being Different.** An Aboriginal teacher explained the link between “sticking together” and why Aboriginal parents may not choose selective settings for their children. As one Elder in the community explained,

I think that might go back from a while ago when Aboriginal people were segregated; some parents see these kids in a classroom, even though it's for GAT or special needs, as their child is just segregated and put in a room. So, I know I've had a conversation with a couple of parents and that's what they've sort of indicated, that they don't want their child seen as being different, even though it's even for you know, a good thing or not, they just want their child to be normal and mainstream. (Local Elder)

For close friendships among adolescents, the noticeable features for homophily are typically age, race, socioeconomic background, and gender. There is some research evidence (LaFontana & Cillessen, 2010) that adolescents are more preoccupied with their social status than adults, and that secondary schools are characterised by cliques and social segregations.

**Social Homophily of High-Ability Underachiever.** The high-ability Aboriginal participants in the mixed-ability track did not feel that they belonged in the academic setting. Individuals are more likely to influence those who are similar to themselves. As one Aboriginal teacher explained when asked “What are the issues around them [mixed-ability participants] not settling into school life?”, Mr P said,

I think a lot has got to do with peers, peer pressure, clowning around to make friends, just trying to fit in, see where they fit in . . . they just feel they have to be the leader of the pack or the most important person that everybody aspires to be for the wrong reasons sometimes.

Cody, Sam's mother, explained the social homophily of her son in this way: "I think he's just got the shame factor of being called nerd, or whatever. Yes, he doesn't want to be there, because I've talked about it".

The Aboriginal community worker Melita was employed by an agency to conduct a transition support project. She explained social homophily as Aboriginal students not wanting to stand out: "They tend not to because they don't want to be seen as different from the rest of the group which is crazy. But it's that type of thinking that's holding people back".

When asked, "Why do you think some high-ability Aboriginal students do not engage in high-ability settings such as gifted and talented classes?" Melita answered,

All the way through high school I never sat in the same classroom as an Aboriginal person, yet some of these kids insist they don't want to be in this class or a higher class because they want to be with their Aboriginal friends or family. Now this has to change, that's how we are going to break the cycle.

Her view was that high-ability Aboriginal students miss out on opportunities that they could obtain from achievement at secondary school:

Your [high-ability students] don't want to stand out. I know there are a lot of talented kids out there that would be really great for STEM [science, technology, engineering, and mathematics]. If they wanted to really take advantage of their skills in that area, like there are scholarships galore out there and I'm talking about large ones. They give 60,000 dollars a year just to go to university and have everything paid.

These students choose not to follow an intellectual pathway; their place in the "mob" or group was more important than being different by choosing an academic path.

The AEO worked in all the classes except for the GAT class, indicating the division of classes into silo social groups within the school community. An Aboriginal teacher

(AECG) had listened to parents' reasons about declining a place in a high-ability class, and told us: "I know people are hesitant to take that up because they're in that same class [all the time] and they don't get to mix with their other peers as much".

Another Aboriginal teacher at Denponse High had long-term relationships with students in Year 7 having worked in the primary school. She felt that underachiever participants would have thrived in the GAT class. When asked "Do you think the GAT class has been a good thing for them for the ones that have gone into it?" Mr P responded,

I think it has, I'm a bit disappointed that a lot more of the kids didn't go in there but they see it as being different; I don't know how you change their perception. They don't want to be isolated where they're not really isolated but that's their perception—they don't want to be different and they don't want to be in a special class which is a bit disappointing. Because a lot of the kids that you're dealing with would have really excelled going into there.

Melita had a similar opinion: "Some of these kids insist they don't want to be in this class or a higher class because they want to be with their Aboriginal friends or family". In another reference to social homophily, this Aboriginal teacher believed that the GAT class was perceived by local students as "different", "isolated", and "special". My interviews with parents and teachers corroborated this view. The GAT class suited middle-class aspirations but did not fit with the "cool image" that many students wanted to establish on reaching high school.

**Perceived Quality of Teachers: Mixed-Ability Class.** Defying authority and power were common struggles in the mixed-ability class as students strove to feel significant. Cody said, "The children think they run the show, bottom line. They do. And I don't think teachers have the control to settle them". The clearest picture of those early weeks came from the school records that revealed that both Sam and Briony caused trouble

in the first term, in class, and the playground and received multiple suspensions. Sam was consistently the one to be sent out of class, as his parent Cody explained: “You know, if you threw that piece of paper, get out. Or there’s more, he’s not the only one throwing the paper, there might be half a dozen of them, But, send one out”.

These absences from class left gaps in learning and disqualified them from participating in extracurricular sport. There were also fewer opportunities to join teams because of their behaviour in high school. As explained by Mr P,

So, for a group of kids who have come from the primary school in Year 5 and 6 and representing the school everything with a bat and ball then come to high school and don’t get as much sporting opportunities. So, I think that’s hindered a lot of the kids that I know and deal with personally they haven’t got that to look forward to. And it might be they have to stay out of trouble for 2 weeks, so they can represent the school, and then you get two great weeks out of them. I’ve raised it because the students that you’re tracking are all sporting and academic so there’s going to be under 14s that makes pretty much Year 7 and Year 8 eligible. So, yes, it’s going to change.

One of the highlights of school life for many of the students in this study was participating in sport. Contrary to Year 7 students’ expectations, high school provided limited opportunities to participate in sport. Not having competitive sporting events impacted some students’ enjoyment of school. Some teachers realised this needed to change. Mr P understood the importance of sport to the children, especially having an event to anticipate. He organised for the school to join Under 14 interschool sporting competitions for the rest of the year.

According to the qualitative data, Police mentors from the PCYC were the catalyst for the re-engagement for some high-ability Aboriginal students with their education. Police had developed excellent relationships with students. Pat said, “She [the

policewoman] comes up here and picks them up and takes them down there and teaches them things down there just to give them a break from *here* [high school]” (italics added). Both students at the end of Year 7 had set a personal goal to enter the police force. “She [Briony] wants to be a cop” (Pat). When asked whether anything made Aboriginal children unique, Melita stated, “Only the point that in most [White] homes there’s no racism . . . a lot of people deny it [racism] but it exists. Some people don’t take any notice of it but it exists, yes, there’s that very strong”.

**Perceived Learning Environment: Mixed-Ability Class.** Developmentally, peer relationships and social status become more important in secondary school. Carers of these two mixed-ability participants described the importance of establishing independence from the influence of peers. For those mixed-ability underachievers, their carers felt that more strength of character to “stand alone” would help their child achieve more academic success. Both teachers and carers identified that these students needed support in managing to value both social and academic goals. As Briony prioritised socialising, Pat stated that she had locked Briony in her room to help her to prioritise her homework. Another mixed-ability parent Cody said,

He just needs to sit and focus and block everyone out. Forget everyone else is there.

Walk into class and do your work. That’s all he has to do. Play when you get out in the playground. But he can’t do that.

This comment reveals that parents knew that their children needed support in managing the challenge to coordinate social and academic goals. Social and academic domains of self-concept are compatible goals (Preckel et al., 2013). However, some high-ability students had difficulty believing it.

**Peer Pressure.** Negative peer-group pressure was a characteristic of the low-track class. The principal (RMP7) noted,

I would even argue that the peer group has the bigger impact. Because I've certainly seen, not just here, but elsewhere, as well, kids from pretty much supportive families, fall in with the wrong kids at school, then that goes pear-shaped for them at school.

Cody noted that peer pressure in that mixed-ability grouping was a bad influence: "He's hanging around those boys he knows aren't the right type to hang around. He's not thinking for himself. He's wanting to fit in". Early adolescence is a time when there is extreme pressure to comply with group norms.

**Social Media.** The peer-acceptance influence was further determined by the increased influence of social media in the life of the teenager. A major distraction for students was conversing on digital technology, particularly for girls. The grandmother of Briony (Pat) described it as an addiction:

She can't give up those bloody mobile phones. Same all of them. She gets in a lot of trouble for that. I don't know what she's doing. Snapchat or something like that in classes. Yes, so she's always in trouble for that.

Melita stated, "Cultural identity and strengthening their [students'] identity is the key to all of these [concerns] and there's not enough culture in the schools at all".

### **Non-Aboriginal Stakeholders' Perceptions of Contexts**

**Perceived Social Status: GAT Class.** In discussing the factors contributing to enrolment, the GAT class and the dynamics of its learning environment were described by most participants as one that helped in their transition to secondary school. One father, Dave, felt that his son would "work well" in the peer group of the GAT class: "He's going to be around like-minded students". For example, in response to the question "Do you think you've handled everything well?", Sam responded, "I really enjoy being in the GAT class, like being in with people who want to learn . . . some of my other friends, they're just in the normal classes and they find it a bit hard sometimes".

The progress of academic goals is an important developmental task of adolescence. The relevance of ASC for educational achievement has been well documented (Harter, 1999; Marsh, 2018). Significant others' evaluations help to cement students' self-concepts. Therefore, it is healthy that the parents of the students in the GAT class perceived their children as intelligent, although not "super geniuses" (Sally).

**Perceived Quality of Teachers: GAT Class.** The principal elaborated the distinction between the GAT class and the others:

We're trying to cater for the more academic students in that way. And that's been well received by the community, too. That class exists. I think that a lot of good things that go on in that class, and the programs have continued to evolve. We've changed the staffing structure to try and have people with expertise and interest in that. And cross-faculty programming going on. So, I do think there's a lot of positive things happening there to try to support the academically more capable kids . . . We're definitely trying to do our best with both ends. To try and meet the needs of the top kids and keep them moving forward academically. (RGP7)

Strong student–teacher interactions have a positive effect on academic outcomes. Teachers were approachable and nonjudgemental in the GAT class climate.

Parents of students in the top class identified the GAT class as a very positive factor in their child's success. As one parent indicated, the teachers in this class, "actually they push her above and beyond what some of the private schools may have actually done for her" (Sally). From the evidence, the GAT class was more homogenous in students' values, attitudes, beliefs, and abilities. This class had explicit intentions, clear feedback, different style of delivery, and increased workload.

Dave felt that despite the difficult family situation, "he [his son] has been able to achieve well at school". At the end of Term 4, interviews with the students in the GAT

study revealed satisfaction with their intelligence, satisfaction with effort and organisation, and satisfaction with assignments and, for three of the GAT participants, they also were satisfied with their rank in the class.

**Perceived Learning Environment: GAT Class.** Parents confirmed the broad theme that the learning environment of this particular classroom grouping could significantly help students. When selecting a school, parent Sally revealed that the offer of the selective class had played a significant role in his choice:

[The school] was offering a GAT program there, which by the way we understand it, isn't like GAT super geniuses. This was a GAT program for kids that are actually interested in learning. And have the work ethic to be able to do that . . . It came down to the fact that the public high school here was offering a program that would allow him to continue with the way he seems to work well.

In the view of this parent, the high school would provide continuing high expectations.

However, social media was identified generally as a problem. The quality of relationships between students who were continually accessing social media and messaging during and between classes not only stopped learning but also possibly eroded relationships negatively. The principal (RGP7) acknowledged, formally and informally, that social media was one of the most difficult issues he must deal with. He said, "Other principals were dealing with the same problem with cyberbullying in schools".

### **Non-Aboriginal and Aboriginal Stakeholder Perceptions Compared and Contrasted**

The stakeholder perceptions showed that GAT class participants had an identity based on its members having similar status and attitudes. The broad theme of "people who want to learn" was associated with membership of this class (Luke et al., 2013). The perception from stakeholders was that there were two types of children in the community:

lower versus higher ability students. The lower ability students did not have an “interest in learning” and the higher ability students had a “work ethic” on entering high school. This finding is supported by the work of Browman and Miele (2019), which showed that both members of the public and teachers shared distinct and replicable mental representations of low- and high-ability students. They found that these stereotypic perceptions included additional negative academic traits such as poor work ethic and misbehaviour.

The high-ability Aboriginal participants in the mixed-ability track did not feel that they would belong in the academic setting (McKnight et al., 2018). The differing levels of abilities and organisational skills of students in the mixed-ability classrooms meant that on arrival at high school even classes being taught the same subject were not homogenous (Bonnor et al., 2018). The perspective of stakeholders was that there were many reasons the mixed-ability classes functioned differently from the GAT classes (Hodge, 2019). As discussed, the mixed-ability class was also characterised by disruptiveness and a lecture style of teaching (Goss et al., 2018; Hodge, 2019; Wieman & Gilbert, 2015). Hassled teachers can fall into a vicious cycle through the impact of their negative responses to students under stress (Goss et al., 2018).

### **Discussion of Key Findings and Themes**

In NSW, a stratified system has developed in response to community advocacy for local selective classes. To attract high-ability students to their school, many secondary schools offer local selective classes to market themselves to these families. Families who may have missed entry into selective schools are attracted by an offer to a local selective program as the next best option for their child.

Indirect forms of institutionalised cultural capital, such as parental education and parental educational expectations, can motivate students to learn. For instance, language development (reading), self-regulation, goal setting, and parenting style are processes that

can facilitate learning when modelled in family life. When cultural capital is demonstrated by members of the family—for example, valuing and modelling reading—then those children have an advantage in class. The vocabulary and values characteristics of school are not so far from what they have grown up with (Tan, 2017).

As has been discussed, Aboriginal cultural values and social justice have been a characteristic of the environment in which Sam and Briony have been nurtured. Although Aboriginal cultural capital is different from Western cultural capital, it is not less valuable. Deficit frameworks have been known to influence the framework of thought in education, particularly regarding the culturally rooted learning characteristics and behaviours that Aboriginal children bring to the classroom (Lester, 2017). Behaviours of Aboriginal children that are interpreted as problematic by teachers may be more closely associated with culturally rooted learning characteristics (McKnight et al., 2018). Hughes et al. (2004) noted such characteristics: learning from experience, trial and error, group work, and real-life relevance. Students with the same culturally rooted learning characteristics often cluster together just as ethnic groups are attracted to others who have similar cultures and interests.

**Perceived Social Status: GAT Class.** The school culture developed a two-class system where most of the resources, such as a high-quality learning environment and positive socioemotional climate, were directed to the GAT group of students. As detailed in this chapter, the teachers and students were aware of these differences. The family backgrounds, parents' professions, and financial circumstances of those in the class were factors that supported students in terms of academic help and valuing achievement. Cultural capital can take on different forms, but the most powerful are those that are role modelled by parents (Tan, 2017). The students themselves in the GAT cohort described themselves as being successful in the transition, as having friends and fitting into school.

These social and academic successes were building their personal identity. The importance of this transition (to high school) at adolescence is that it is a developmental period before a person's self-concepts are firmly established (Putnick et al., 2020; Wigfield, 1997).

**Perceived Social Status: Mixed-Ability Class.** The identity of the mixed-ability class was also based on its members having similar status and attitudes. Given this finding of relatively lower ASCs (Hynds et al., 2017; Tarbetsky et al., 2016) and the known fact of a relatively lower SES of Aboriginal people, the educational barriers for high-ability Aboriginal students are worsened by a fusion of social and wellbeing factors. Non-Aboriginal students do not have this extreme culmination of multiple obstacles. These findings seem to indicate the importance of social homophily as triggering a butterfly effect. The choice to remain in the mixed-ability class, although a single occurrence, changes the course of these participants' education forever (Goings & Ford, 2018). Homophily is defined as the inclination of individuals to mix and connect with similar others (Yavaş & Yücel, 2014). Race is the most prominent feature generally for social homophily (McPherson et al., 2001). It is a salient characteristic for people of similar race and ethnicity such as Aboriginal people to associate with one another (McKnight et al., 2018). Social homophily is a catalyst for negative outcomes such as boredom and injustice in the first year of secondary school (Stevens & Vermeersch, 2010).

**Perceived Quality of Teachers: GAT Class.** To attract high-ability students to their school, teachers with expertise and interest had been chosen to teach the GAT class in the rural case study. Many positive strategies, such as collaboration across faculties, had been put in place to support these academically capable students. Despite there being harder work and more assignments in the GAT class, positive teacher–student relationships developed in this class climate. Good relationships, experience, and passion have been shown to positively impact learning outcomes (Blazar & Kraft, 2017; Carbonneau et al.,

2008; Hafen et al., 2015). Regarding what the public education sector could provide, a GAT class could create a high-quality learning environment (Carbonaro, 2005; Demanet et al., 2018; Van Houtte, 2016). The high-track receives better quality teachers (Grissom et al., 2015; Kalogrides et al., 2013; Loeb et al., 2012; Mansfield, 2015).

Strong student relationships with teachers have been linked to achievement (Roorda et al., 2017). Several reports have shown that high-quality relationships are crucial for the engagement of high school students (Allen et al., 2013; Hafen et al., 2015). Engagement has been shown to directly influence achievement (Boone & Demanet, 2020; Blazar & Kraft, 2017). Emotionally supportive classrooms provide for achievement but also develop other outcomes such as positive classroom behaviours and high-order thinking (Blazar & Kraft, 2017). From the testimony of the principal and students, the work in the GAT class had relevance to the real world and therefore was intrinsically motivating.

**Perceived Quality of Teachers: Mixed-Ability Class.** “Teachers’ instruction became more teacher-centred in lower track classes as a strategy to keep instruction moving forward and minimise disruptions” (Hodge, 2019, p. 26). The transmission style, where the teacher talks and students take notes, is used for classroom management (Goss et al., 2018), whereas the GAT teachers diverged from this style to implement group work and inquiry-based learning (Hodge, 2019). Boredom, unsettled students, lack of real-world connections, and relevance were observed from students in mixed-ability classes (Goss et al., 2018).

From the data, it appeared the dynamics of the mixed-ability classes possibly had more disruptive behaviour. In such an environment, teachers adopt a more authoritarian style with increased monitoring of the class (Lau et al., 2017). Teachers with less expertise are often those who have not built up a repertoire of strategies to deal with disruptive

behaviour (Goss et al., 2018). According to students, “they [teachers] run it [class] differently [to primary school]; they run it how they like” (Sam, Aboriginal student). The classroom climate of the mixed-ability students made it less likely for teachers to come off the lectern to investigate and ask questions with students (Goss et al., 2018). Hodge (2019) explained that secondary teachers’ rationale is that “a less regulated approach to discussion would devolve in a lower track class because lower track students are immature” (p. 14). Students’ reasons for misbehaving and not participating are often boredom, attention seeking, and helplessness (Goss et al., 2018; Montuoro & Lewis, 2018).

**Perceived Learning Environment: GAT Class.** Other social capital contributed to a successful transition for this cohort. Friendships had already been formed in primary school, through sharing classes or participating in sports teams. Many of the students in the GAT class had been in the same Year 6 class and had attended primary school years together. The families were also known to each other in this rural community. Because of the small size of the intake into the GAT class (15 students), there was a comfortable familiarity between these same students who would attend the same GAT class before they entered Year 7. It was the consensus of all major stakeholders that the climate of the high-ability stream provided special learning opportunities (Hodge, 2019; Langenkamp, 2010). This small, supportive class impacted the social and academic outcomes of high achievers positively. Researchers Martinková et al. (2020) found that when cognitively demanding curriculum and high-quality instruction were provided, these strategies helped to develop overall competence gains in a high-track. The results of the urban case study support these findings. In a longitudinal study, Guill et al. (2017) found a positive effect for increased intelligence, measured by a standardised aptitude test, for those attending a high-ability academic track in school.

**Perceived Learning Environment: Mixed-Ability Class.** In the context of the school culture, a “them” and “us” mentality develops. The hierarchical nature of tracking leads to a distinction of “GAT” and “mainstream” across relationships, curriculum, and instruction. In contrast to the GAT stream where students were labelled “wanting to learn”, research suggests that teachers stereotype students from lower status academic tracks as less able, more disruptive, and less interested in learning (Belfi et al, 2012; Hanushek & Wößmann, 2006; Stevens & Vermeersch, 2010). As a result of the influence of structure on belief and action, the students in these classes are stereotyped as “not wanting to learn” (Kiarni) or less able to learn or both (Hodge, 2019; Van Houtte, 2016). “Where there are more than 10 per cent of students misbehaving in the same class, Australian teachers spend nearly a quarter of the lesson keeping order” (Goss et al., 2018, p. 35). Negative peer-group pressure was a characteristic of the low-track class. Early adolescence is a time when there is extreme pressure to comply with group norms (Silva et al., 2016).

**Anti-Intellectual Attitudes.** Given that friendship and social standing gain increasing importance at this time of adolescence and transition, certain groups of students frequently develop an anti-intellectual attitude (e.g., Vannatta et al., 2009). The outcome was potentially maladaptive for the ASC (BFLPE), motivation, and AWB of some students. The results suggested that for these students, they prioritised the need to validate a self-image and social status in class. The principal explained it “in terms of peers . . . something makes Year 7 classes more difficult to deal with, or Year 7 students”. These students actively focused on constructing their social acceptance and social assertion among their peers. Parents of children in mixed-ability classes interpreted this lack of effort as the devaluing of educational goals and therefore tried to impose restrictions.

## **Conclusion for Research Question 2: Optimism and Pessimism**

The smooth transition of Lisa, an Aboriginal student in the GAT class, contrasts with the patterns of social and academic outcomes of the high-ability Aboriginal underachievers in the mixed-ability stream (Van Houtte, 2016). These students were identified as achievers during primary school but in transition struggled with school and curriculum, classroom demands, and teacher expectations in the mixed-ability setting. After the choice to join the mixed-ability classes was made, the main difference between Aboriginal and non-Aboriginal students in this stream was the impact on social and academic outcomes as a result of suspensions (Lester, 2016). The identification of causal factors related to achievement and underachievement is difficult to determine, but the relationships between these factors in the mixed-ability classes were more negative than in the high-ability setting, particularly for Aboriginal students (Clarke, 2014; Hodge, 2019; Johnston & Wildy, 2016; Luke et al., 2013; Spina, 2019).

As this was an ability-grouped context, the negative stressor may be the personal underperformance comparisons made with their primary school peers in the special class (McKnight et al., 2018). This finding supports claims that ability grouping impacts students through frame of reference effects. They accurately perceive large achievement differences across different classes. Dockx et al. (2019) found that each track had a unique relationship with different domains of ASC. Hence, these students did feel academically less able than their primary school high-ability peers and were pessimistic about school (Boone & Demanet, 2020).

More research is needed to identify which factors may be the most significant in supporting high-ability underachievers. The next section details the mechanisms underlying the complex social comparisons that contributed to the dynamic equilibrium effect (Marsh, 1984). The results of the Research Question 3 reveal how the differences

between the two classroom climates impacted the thought processes and attitudes of Aboriginal high-ability students.

### **Section Summary**

Results from Research Question 2 showed that students in the GAT class achieved better, behaved better, completed the work set for them, and identified with the values, expectations, and culture of secondary school. Teachers in the GAT class had higher expectations, gave more work and assignments, and provided a strong academic focus. There was some evidence that the GAT class had more interesting and engaging lessons. Parents in the GAT class valued membership in the GAT class, encouraged their children to work hard, and provided their children with support. After the choice to join a mixed-ability track was made, the main difference between Aboriginal and non-Aboriginal students in this stream was the impact on social and academic outcomes, in particular gaps in learning as a result of suspensions. High-ability Aboriginal and non-Aboriginal students transitioning into a GAT class continued to achieve above-average standards. Many factors that correlated with this achievement, including the BFLPE, attitude towards school, relationships with teachers, self-regulation, and positive strategies for socialising. Further research is needed to delineate which factors have the most influence in this complex person–process–context interaction.

### **Results of Research Question 3: Effort–Ability Dynamic**

Research Question 3 posed, “What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Assistant Principals, and Principals) perceive are the relationships between effort, achievement, and sense of self for high-ability students transitioning into streamed classes in the first year of secondary school?”

## **Overview of Issue Explored**

As discussed in the “Results of Research Question 2”, there are numerous elements in a two-tiered streamed school climate that contribute positively and negatively to the reasoning about school work for students in transition. First, students’ reasoning about what motivated them in class is presented for Aboriginal students and then non-Aboriginal students. Second, the perspectives of Aboriginal and non-Aboriginal students are compared and contrasted. Third, the perceptions of multiple Aboriginal stakeholders and non-Aboriginal stakeholders are presented. Finally, a discussion of the key findings and themes emanating from the results are presented.

## **Non-Aboriginal Students’ Perceptions on Motivation**

**Explicit Comparisons of Academic Standing.** The research revealed that in the GAT class, students’ assessments and progress were freely and explicitly known and discussed. One’s academic standing in the class was made obvious by names being read in class identifying those whose work had not been handed in. After examinations, teachers read out the names and grades of the top-ranking students in class.

For those students who were working hard and achieving, perceiving themselves in comparisons favourably with others appeared to be positively reinforcing their credibility, status, and security in the GAT class (Ryan & Deci, 2001). Explicit comparisons of academic standing were made within the GAT class. Jarrod elaborated, “When you get your reports back they have your placing in your, like for the GAT class or it’s just out of the Year 7 part [14 students]”. Kiarni said,

We do ask our friends how they went in their result, like in any experiments, exams or that or any assignments and then we try and help each other and see how we went wrong and how we could improve next time. And what we’d done to get, say what I’d done compared to what my friend’s done, so where she picked up extra marks and

where I lost marks, but yes, and then we help each other that way, but we don't compare marks as in a competitive way.

Kiarni acknowledged that with her friend, they always ranked in the top two. Jarrod appeared to use one particular student in the class as a frame of reference. He checked his grades "just with one other boy who usually got top of the class, so I was always seeing how close I was to him . . . I'm about the top 20% usually" (Jarrod). Tyrone had struggled throughout the year and admitted that he compared himself with others: "A bit but not much". He consoled himself with comparing himself with the mixed-ability classes: "I'm alright I'm higher [because I am] in class A. I think I'm doing a bit higher than average". In the BFLPE literature, this is identified as reflected glory from the collective group (Marsh et al., 2000). The higher perceived status of the GAT class had a positive counterbalancing effect on Tyrone's ASC.

**Development Over Time of ASC.** There is strong support for the BFLPE in the GAT class even though achievement positively predicts individual ASC at the individual level, classroom level achievement, and the constant threat of being dropped from the class, has a negative effect on ASC (see Chapter 3 – Teacher Reference Norms). The small cohort of 14 Year 7 GAT students provided support with social interaction, so positive gains were also found in the social domain. Participants in the study who had a healthy ASC and valued academic achievement were highly motivated to achieve, and they were prepared to put in the effort. Kiarni described the determination with which she completed tasks:

Well, I'm pretty organised at home and everything, and like I try and do as much as I can at school. But then if I don't like, if I don't finish it then I go home, and I finish it on the computer and do a bit more research and just make my work like as best as I can.

When asked about advice they would give to younger students, both Kiarni and Jarrod mentioned working hard. The personal effort was enhanced through study skills, work habits, and organisation.

### **Aboriginal Students' Perceptions of Motivation**

**Perceptions About Motivation in GAT Class.** Lisa explained, "We get, on our report cards, we get what position we're in". When asked to clarify why she thought that she had handled the move to high school well, Lisa measured her success in terms of effort: "I haven't missed out on any assignments". The focus on effort was foremost in the minds of those participants in the GAT class.

**Perceptions About Motivation in Mixed-Ability Class.** Briony explained why she did not put any effort into homework: "I am passing all, and it just gets lost anyway". Later she said, "I don't do homework". At the end of the year, in response to the question "In your assessment, have you done equally well across all subjects?" Briony said, "No. [In] all of them, because I didn't try". She said, "I want to go to the . . . RE class, because some kids go there just for certain subjects, so I'd probably go there for history".

**Little Opportunity to Learn.** With the odds stacked against them, including enforced time out of school, some students begin to "see themselves as losers who are processed, defined, and recycled within the mechanisms of school" (Groome & Hamilton, 1995, p. 47). For Briony, the contrast between herself and students who were achieving academically was so different that the goal had become out of reach:

*Interviewer:* Do you find school interesting?

*Briony:* Not really, because I hardly learn anything.

*Interviewer:* Do you believe that school will help you?

*Briony:* No.

*Interviewer:* Are you happy with the school you're attending now?

*Briony:* No.

Catching up to the standard of others who she knew in primary school did not seem realistic. The sense of futility was caught by her words "I didn't try". Furthermore, a sense of inferiority had taken hold. We were told that this student was considered for dux of her primary school, but by the end of Year 7, she felt most comfortable in the Re-Engagement Centre.

In choosing a low academic track when one has "a brain", Sam protected his self-worth. It was a choice that allowed him to continue to have positive comparisons of achievement and ASC. For example, at the end of primary schooling, Sam had described himself as "probably intelligent" and in Term 1 "intelligent" and "capable of doing it". Throughout Year 7, he had been encouraged to move to the GAT class, according to his mother: "Every time I've had an interview with the school, we've brought that up. And he just doesn't want to go there [the GAT class]. So, caught between a rock and a hard place" (Sam).

**Losing "Face".** Sam was identified as high-ability and encouraged by adults to apply more effort. In choosing a low academic track, he protected himself from the fear of failure or losing face. He provided many reasons for not joining the GAT cohort. First, the GAT class was "boring", and he then went on to say,

I just don't know really if I want to do the GAT class, because [my sister] is in it, she says she doesn't like it, so I don't think I'll like it. I'm not really sure; she just says it's boring, and you're always stuck with the same people.

Another issue for Sam was that the mixed-ability timetabling enabled an endless variety of people in each subject; the GAT cohort remained a small, consistent pool of

students: “Yeah, you’ve always got the same people in the same class, and you don’t get to hang with other friends because you’ve always got the same people in the class” (Sam).

Despite Sam’s perspective, the evidence revealed that his sister “liked” the GAT class enough to continue for 3 years in this stream. The reason that she might have found it challenging was that in the words of her mother, and other parents, the workload was phenomenal. Changes in self-concept seem environmentally driven; therefore, working in a less competitive environment will help maintain a positive ASC. Social comparisons are with those of lower ability and effort. Self-concept development represents self-monitoring one’s learning and experiences against those in the immediate vicinity.

**Lowering Benchmarks to Maintain an ASC.** The avoidance of challenge could also explain the disruptive behaviour in class (Goss et al., 2018). It is possible that Sam was not willing to invest in work and assignments at this stage of his education. He gained the reputation of being the class clown so teachers appeared to have targeted him as the ringleader. Suspensions and absences meant that he did not do well in the half-yearlies. By the end of Term 4, he was on another “red card” (Cody). Despite the confidence he displayed in the final interview, his report recorded mainly Ds and Cs for conduct and effort.

**Not Being Able to Keep Up Because of Suspensions.** A student who is disadvantaged by multiple absences because of suspensions might have maladaptive motivational behaviour because of their frustrated basic psychological needs for competency (as revealed by the social comparisons within their reference group; Goss et al., 2018). The impression that he gave in the final interview was that the year had been very disruptive, and he had suddenly realised he could not avoid work any longer: “The first two terms you don’t get used to the classes, the change, and then you got to keep up with all the work you get, and its extra work, so it’s harder to concentrate” (Sam).

When the effort and perseverance involved seem endless, such as in the first year of secondary school, the effort–ability comparison is a powerful influence at a vulnerable time. According to one teacher at Denponse High there was more interest in the GAT class in Stage 5 when “there isn’t as far to go”.

In light of the robust replicability of the BFLPE; Marsh et al., 2008), a school with two academic tracks will predictably produce results with this effect. A BFLPE is related to the academic-track classroom context and was clearly discernible in the data:

I just think that I’m doing alright in mainstream classes and if I change then I might struggle a little bit and then I might go downhill so I just want to stay in mainstream for a little bit longer. (Sam)

This BFLPE was not present at the beginning of the year but emerged only by the end of the year, consistent with the findings of other studies (e.g., Becker & Neumann, 2016).

### **Aboriginal and Non-Aboriginal Students’ Perceptions on Motivation Compared and Contrasted**

At a fundamental level, accepting a placement into the GAT class entailed acculturation into classroom practices that emphasised competition, comparison, and ability self-assessment. When entering Year 7, GAT class students’ self-assessment of their initial level of competence (ability) impacted their confidence and effort as well as the ongoing social comparisons during the first year of high school. The information for these social comparisons of academic success was freely accessible. Only one Aboriginal student accepted this intellectually challenging environment with its overstriving classmates. Lisa entered the GAT class with the weakest pre-transition achievement level and not only maintained her placement but ranked highly in the class. When asked to

describe herself after one term in the GAT class she said, “organised, awesome and determined”. The findings established that there exist reliable and predictable differences in students’ default effort source beliefs and their motivation.

There was a relation between the effort source belief identified by the choice of class climate and the outcome. One stakeholder, Melanie, felt that for all Aboriginal students “it’s all about fear and they’re anxious”. Briony and Sam chose the mixed-ability classes to avoid effort and protect themselves from the intimidating classroom climate of the GAT class. They “doubt their abilities, and they shouldn’t” (Melanie). Some students are better able to function within a classroom climate that is less competitive and therefore involves less fear of failure and lower anxiety levels.

### **Non-Aboriginal Stakeholders’ Perspectives on Student Motivation**

The significant adults in the GAT students’ lives, particularly parents, were able to describe proudly their children’s achievements but also the incredible motivation and persistence they invested throughout Year 7. Kiarni’s parents had expressed worry about the sacrifices that she had made in other areas of interest to maintain her position at the top of the class across most subjects. The theme of “workload” in the GAT class was salient across the community for it to be a universal social comparison between students and across the two-tier education track system.

### **Non-Aboriginal Stakeholders’ Perspectives on Student Motivation**

From the perspective of an experienced leader, the principal explained,

What stands out as a real problem is the Year 6 to 7 transition. That their attendance is good, up until Year 6, and it doesn’t matter what primary they come from. And I’m talking overall, here, because you’ll have different kids who are, you know exceptions to that, but in general, they go good in Year 6, and it gets to Year 7, and it drops, and it

drops quite dramatically. It starts to pick up a little bit in Year 8, by Year 9, it's back to where it was.

**Perceiving Aboriginal Students Are Getting Left Behind.** The principal perceived the sense of distance and amount of effort required in closing the gap that many students must feel when comparing themselves with students in the first category of class (GAT). He sensed what the Aboriginal participants felt: "They're still catching up". Students observed the determination applied by their mates or siblings to accomplish their goals and acknowledged the gap widening.

The Aboriginal community worker Melita was employed by an agency to conduct a transition support project. She explained further,

If they haven't got those basic skills it's a disaster. And once again they know really, really quickly how to get suspended. And once you're [the students are] out that gate for an extended period it's hard to get them back.

## **Discussion of Key Findings and Themes**

**Peers as Frames of Reference for the Effort–Ability Dynamic.** A small cohort of 14 Year 7 Aboriginal and non-Aboriginal students were in the GAT class at Denponse High. Lisa was the only Aboriginal student. As a small, close group of students together, they supported each other, so positive gains were also found in the social domain. Participants worked together to develop "soft skills": communication, collaboration, and time management. The GAT class was very cohesive and consisted of individuals who had psychologically similar attitudes. They were all members of a small rural community, being similar in that they were from middle-class families. Only one participant's parents had divorced.

It is well established that social comparisons between peers have a powerful effect on a student's personal perceptions of competence (Marsh et al., 2014, 2015, 2016).

Correspondingly, my results suggest that local dominance effect occurred between classmates. Students knew the rankings of others in the class; one had identified another student as his “marker” for achievement, and they all had a perception of where they ranked in the class as early as their first term in secondary school. It appears from the interviews that performance and persistence were also positively or negatively reinforced when comparing their level of effort with others. Students in this GAT class had an online chat room devoted to supporting each other with homework. There was accessible social comparison information about how much time others were spending on work outside of class.

**Developmental Changes in Self-concept.** The young adolescent self-concept beliefs have not been exposed to a broad enough range of experiences and sources of information to make the ASC stable at this developmental transition (Bong, 2002). As discussed, in times of change, such as the transition to secondary school, adolescents yearn to have consistency and stability. The results revealed a gap between the participants’ cognitive beliefs (the reasoning) about their personal academic self at the beginning of transition and the tangible results (achievement) at the end of Year 7, which for those in the GAT class confirmed those beliefs.

The uncertainty about one’s ability makes social comparison cues more salient. The first year of high school may be important developmentally because young adolescents have not tried out their academic strengths and weaknesses in the new school setting (Lee & Bong, 2016). Secondary school was a fresh slate on which they must make their mark. From the Time 1 data, the participants shared the feelings of uncertainty of how they would cope with the higher standards of the academic classes. From the Time 2 data, students shared common goals and values of succeeding academically. From the Time 3 data, many were aware of the consequence of being unable to meet the high expectations

of the GAT class if their grades dropped, which meant being placed into a mixed-ability class. Entering this class “put[s] one’s entire self on the line” (McGregor & Elliot, 2005, p. 229). Dudovitz et al. (2019) also found that transition was a key point when students’ identification with school was in flux and “their social networks and identity were more malleable” (p. 133).

Both of these mechanisms were important in making social comparison cues within the GAT class predominant and set high stakes for participants. A key motivation in this case study was to belong to the class “where students wanted to learn” (Dave, Non-Aboriginal Parent). A key concern vocalised in the data was the threat of being dropped from the GAT class. Motives and current concerns are an important aspect of social comparison and help understand the salient and predominant cues.

**Social Comparisons Between the Two Academic Streams.** Social comparison between students and across the two-tier education track system could result in perceptions that the person had failed or was failing, or that others perceived them as failing (McGregor & Elliot, 2005). Social comparisons are competitive in their essence, with perceived winners and losers. Lester (2017) identified “failure” as the trigger: “The process associated with the child’s sense of failure manifests itself in a downhill spiral of withdrawal from the education process” (p. 143). McKnight et al. (2018) deconstructed shame as a barrier for Aboriginal students engaging with Western education and emphasised the importance of repositioning cultural understandings for them to engage positively in traditional philosophy.

The results revealed a growing realisation of narrowing of opportunities from the Aboriginal participants, with the exception of Lisa in the GAT class. This belief appeared, to a greater and lesser extent, with all students interviewed who were not in the GAT class. In comparing their present skills (not intelligence), learning environment, and support

systems with other students in the GAT class, their belief that any effort would make a difference had decreased.

**Effort as a Dynamic Equilibrium.** The avoidance of high-track contexts by many Aboriginal students is likely to create a downward spiral (Lester, 2016; Luke et al., 2013) that becomes a self-perpetuating process (Muenks & Miele, 2017). Marsh (1984) identified relationships between achievement, self-concept, and effort as a dynamic equilibrium or a state of balance. A change in one affects the whole equilibrium. One type of the equilibrium process could be described as a positive ASC reinforcing intrinsic motivation and perseverance with achievement (the positive effort–ability dynamic). The second type of the equilibrium process could be described as a self-evaluation of the amount of effort to invest to achieve a comparative ASC as one’s peers (inverse effort–ability dynamic).

### **Conclusion to Research Question 3: Two Parallel Processes**

The BFLPE involves social comparisons within reference groups. High group-level achievement is known to have negative effects on individuals’ ASCs (Marsh et al., 2019), and was identified in participants. A parallel frame of reference mechanism is one where students observe and learn about the effort invested by their peers to achieve their grades. Students then make a baseline judgement about where they are in comparison to that person and how much they must invest to arrive at par. A student who is disadvantaged by multiple absences because of suspensions might have maladaptive motivational behaviour because of their frustrated basic psychological needs for competency (Goss et al., 2018). The fear of failure, avoidance of challenge, and insecurity about one’s self-worth are all maladaptive behaviours that might result in choosing a low academic track because one has performed academically well in the past (McKnight et al., 2018). The negative effects of the BFLPE on the development on students' self-concepts were more pronounced for students with initially weaker achievement than for students with better achievement.

## Section Summary

The results of Research Question 3 showed there was a strong relationship between effort, ability, and achievement, operating in positive and negative directions. Comparing the two sets for results for the students in the GAT class and the students in the mixed-ability class, there appeared to be two parallel effort–ability processes at work: the positive effort–ability dynamic and the inverse effort–ability dynamic (Marsh, 1984) in addition to the BFLPE (Marsh et al., 2008). The GAT class was a context of high success orientation and high fear of failure. By comparison, the mixed-ability class developed an environment of low success expectation and a culture of academic futility (Boone & Demanet, 2020; Clarke, 2014; Spina, 2019; Van Houtte, 2016).

## Chapter Summary

This chapter comparatively analysed and described elements that contributed positively and negatively to the school life experiences of academically high-achieving students in rural two-tiered classroom climates. The rural Aboriginal mixed-ability students, with low ASCs, rejected entering a situation (the GAT class) where they did not feel they belonged. Some factors that are less known to inhibit high-ability Aboriginal students are social homophily, fear of failure, EBD, and fixed-mindset beliefs. Twice-exceptional students, especially Aboriginal high-ability students with EBDs (not weaknesses) have not been thoroughly examined in the literature.

Some complex reasons emerged as contributing to the mixed-ability setting. Marginalisation and EBD emerged as factors contributing to the underachievement of high-ability Aboriginal students. In addition, the mixed-ability environment may have fostered an inverse effort–ability dynamic (Muenks & Miele, 2017) that some have identified as academic futility beliefs (Boone & Demanet, 2020). Our mixed-ability

participants were gifted leaders. However, they overestimated their level of social competence (Marsh et al., 2001). The data revealed that social reinforcement from their peers for troublemaking behaviours led to a vicious circle of a negative self-concept, poor student–teacher relationships, and disconnection to learning (Bodkin-Andrews, O’Rourke, et al., 2012).

Students in GAT classes received more academic benefit than others through streaming in a two-tiered system (Carbonaro, 2005; Demanet et al., 2018; Van Houtte, 2017), and this had a buffering effect for the participants’ transition. The proximity of these two different educational settings, GAT and mixed-ability, was seen to shape the BFLPE and buoyancy of these students (Salchegger, 2016). Despite the complex interaction between the variables making it difficult to ascertain which factors had the most influence, the structure of tracking within the school contributed to the different learning experiences across tracks. These results, consistent with previous BFLPE research, indicate that certain educational structures are related to the internalisation of positive or deficit-thinking patterns and behaviour (Boone & Demanet, 2020). The tracking structure, which starts in Year 7, creates the BFLPE and defensive pessimism strategies, which could upset students’ ASC. Further research should focus on developing learning environments that promote success orientations that protect and develop ASC without relying on comparisons with others. The next chapter describes the synthesis and evaluation of the evidence from metropolitan case study schools.

## **Chapter 7**

### **Results Case Study B: Critical Analysis of the Impact of Transition in Urban Schools**

#### **Introduction**

This chapter reports and discusses the findings of the urban case study, with reference to the research questions posed (see Chapter 4). Six student participants came from two primary schools and transitioned to four secondary NSW DoE comprehensive schools located in an urban setting. In prioritising the voices of children, three Aboriginal high-ability students were the focus of the study, whereas three non-Aboriginal high-ability participants provided variations that enabled a richer interpretation of the focus participants. All six students were transitioning from Year 6 to Year 7 into GAT classes in comprehensive public schools with mixed-ability classes. A variety of stakeholders were interviewed as well as the six students, including two Aboriginal parents/carers, two non-Aboriginal parents/carers, two AEOs, seven teachers, four head teachers, and seven principals.

The need to understand the various experiences of primary and secondary schools is important to examine the social and academic outcomes for students transitioning into secondary school settings. The transition to secondary school in NSW signifies a major change as a result of the widespread practice of ability grouping. In the urban case study, students' experienced two different selective academic classroom climates: the selective GAT class and the local GAT class. A selective GAT class offers placement to students as a result of a formal test. If successful, out of area students are able to enrol in the school.

The placement in the selective GAT class is not permanent and is dependent on the ongoing achievement and performance of students. A local GAT class is an ability grouping made by a high school based on primary school grades and reports.

The first three sections of this chapter use three different lens to focus on students' trajectories. Research Question 1 examines the individual trajectories of each student across the transition from Year 6 to Year 7. Research Question 2 examines the differences in peers, teachers, and teaching practices across the two learning environments (selective GAT and local GAT). Research Question 3 investigates the changes in reasoning across the primary and secondary settings as a result of the transition. For Research Question 1 and Research Question 2 (see Chapter 4), the perspectives of multiple stakeholders were analysed. First, the perceptions are presented for Aboriginal students and their parents/carers. Second, the perceptions are presented for non-Aboriginal students and their parents/carers. Third, the perspectives of Aboriginal and non-Aboriginal students are compared and contrasted. Fourth, the perceptions of multiple stakeholders are presented in relation to Aboriginal students. Fifth, the perceptions of multiple stakeholders are presented in relation to non-Aboriginal students. Finally, the perspectives of multiple Aboriginal and non-Aboriginal stakeholders are compared and contrasted.

Two students did not transition successfully, finding their secondary school a poor fit for their needs. As a result, these students, Matt and Fay (Aboriginal students) changed schools in Year 7 from a GAT class to another school with mixed-ability classes. To address this second transition, two additional research questions were posed: Research Question 4, "What do multiple stakeholders perceive are the factors that contribute to a second secondary school transition?" and Research Question 5, "What do multiple stakeholders perceive are the outcomes in the second selective academic environment after changing schools in Year 7, for Aboriginal high-ability students?" Stakeholders who were

interviewed included students, parents/carers, AEOs, head teachers, teachers, and principals.

As explained in Chapter 5, the methodology employed was longitudinal, included this case study of NSW DoE secondary schools located in urban areas, was marked by rich description in interviews conducted with multiple stakeholders, and included triangulation of data. The study capitalised upon advances in theory (see Chapter 3) and appropriate data collection and analysis processes that included intercoder reliability and word-frequency tabulation (see Chapter 5). The findings of this chapter meaningfully connect literature, research questions, findings, and interpretations with each other.

### **Transitioning to Secondary School**

The characteristics of the educational context are foundational to understanding the success or failure of a school transition (van Rens et al., 2018, 2019). Johnston and Wildy (2016) asserted that public schools, particularly in low-SES catchment areas but also some in high-SES areas, use a selective streaming process to attract students to their school. Selective streaming is where students are separated into high-ability and mixed-ability classes. Research suggests that students from low-SES contexts often have average literacy skills that are behind those of wealthier students (Golinkoff et al., 2019; Reardon, 2013). As social context can privilege or disadvantage a student, maintaining achievement in a less-resourced environment can be a challenge for students from low-SES backgrounds (Goss et al., 2018).

Also, the effects of classroom composition may provide hurdles for some students. Recent developments in the study of the effects of group composition reveal that the organisation of classes in school settings can affect both individual and group outcomes (Dicke et al., 2018). Dicke et al. (2018) maintained that the BFLPE is one of “the most prominent school compositional effects” (p. 5). The BFLPE will often occur where there is

an environment that supports social comparisons such as selective streaming. Overall, there is substantial evidence that the environmental setting has a strong effect on the success of a transition (van Rens et al., 2018, 2019). This description of the school contexts and situations (environment) of the participants involved, demonstrates the high priority of this aspect of transfer for understanding students' experiences.

Similar to the rural case study, the metropolitan case presented here sought to provide a platform for deeper understanding of the phenomena in “transition in high-ability Aboriginal students” through a case study method. Known indicators of a successful transition are settling well into the new school life and adjusting to the new expectations (Evangelou et al., 2008).

### **Two Different Selective Academic Classroom Climates**

The need to understand the various experiences of primary and secondary schools is important to examine the social and academic outcomes for students transitioning into secondary school settings. In the urban case, study students' experiences of two different selective academic classroom climates—the selective GAT class and the local GAT class—is examined. The selective GAT class offers placement to students as a result of a formal test. If successful, out of area students are able to enrol in the school. The placement in the selective GAT class is not permanent and is dependent on the ongoing achievement and performance of students. A local GAT class is an ability grouping made by a high school based on primary school grades and reports. It is the school's “top” stream. Both the selective GAT class and the local GAT class usually operate across all curriculum areas and students remain together for Year 7.

The focus on three Aboriginal students (Fay, Mel, and Matt) was utilised to inform a sociocultural approach (Stokes & Feig, 2012). Of the Aboriginal students, Mel's experience indicated a successful transition into the local GAT class environment. Of

interest in this study, however, were the two other Aboriginal students, Fay and Matt, who had unique experiences of transition by changing schools. Fay and Matt initially transitioned into selective GAT classes. On second transition, they entered a GAT class at the local high school. The examination of this second transition enabled the illustration of how Aboriginal students' reasoning within the context of different types of GAT high school environments may be unsettling in establishing the new school life and elucidation of their perceptions of the benefits of a second transition.

To understand how these schools differ in aspects of classroom climate and academic status, the average NAPLAN results were used to compare the achievement levels across the participating schools (see Table 7.1). The average NAPLAN score in numeracy for this cohort in Year 5 was Band 5 and in literacy was Band 6. The results are reported using five national achievement scales, one for each of the assessed domains of literacy and one for numeracy.

**Table 7.1***Levels Across the Participating Schools*

No.	Student	Gender	Aboriginal	Primary AV NAPLAN Score 2014	Secondary AV NAPLAN Score 2016	Transition Between Academic Level of Class Composition: Up/Down Band
1	Fay	F	Yes	<b>Somerset</b> Fay's class = 24 students Band 5/6 (R = 16 students) Band 5/6 (W = 18 students) Band 5/6 (N = 16 students) School AV = Band 5	<b>Lewis: Transition 1</b> Band 7 (mixed-ability class) Band 8 (GAT class)	Up
					<b>Drahner: Transition 2</b> Band 5 (numeracy and reading) Band 4 (writing)	Down
2	Mel	F	Yes	<b>Somerset</b> Band 5 (numeracy) Band 5 (reading, writing)	<b>Drahner</b> Band 5 (numeracy, reading) Band 4 (writing)	Down
3	Matt	M	Yes	<b>Belby</b> Matt's class = 30 students Band 7/8 (R = 29 students) Band 8 (W = 36 students) Band 8 (N = 27 students) School AV = Band 6	<b>Lotown: Transition 1</b> Band 6 (reading, writing) Band 7 (numeracy)	Down
					<b>Fisher: Transition 2</b> Band 6 (numeracy, reading) Band 5 (writing)	Down
4	Kylie	F	No	<b>Somerset</b> Band 5 (numeracy) Band 5 (reading, writing)	<b>Lewis</b> Band 7 (mixed-ability classes) Band 8 (GAT class)	Up

No.	Student	Gender	Aboriginal	Primary AV NAPLAN Score 2014	Secondary AV NAPLAN Score 2016	Transition Between Academic Level of Class Composition: Up/Down Band
5	Jane	F	No	<b>Somerset</b> Band 5 (numeracy) Band 5 (reading, writing)	<b>Lewis</b> Band 7 (mixed-ability classes) Band 8 (GAT class)	Up
6	Tim	M	No	<b>Belby</b> Band 7/8 (GAT class)	<b>Tarium</b> Band 7 (GAT class)	Same

*Note:* Information about the secondary schools was taken from ACARA (n.d.-b). AV = average of the reading, writing, and numeracy score; R = average of the reading band score for the cohort; W = average of the writing band score for the cohort; N = average of the numeracy band score for the cohort.

Achievement scores range from 0 to 100 for literacy and numeracy, respectively. The NAPLAN scales enable changes in domain achievements by cohorts of students to be monitored over time. The Year 5 NAPLAN scale is divided into six bands used to report student progress, with four bands (Bands 5, 6, 7, and 8) identifying students above the national average (Band 8 being highest). Each band contains a range of scores.

### **Lewis High**

Lewis High was in a high-SES area, and half the student population had English as their second language. The school catered for 1,000 students with less than 1% Aboriginal population. There were many small minority groups at Lewis, with Mandarin and Cantonese language speakers being the largest of these groups. Although not a selective school, Lewis ranked academically in the top 200 schools of NSW. Lewis High had an average school achievement in Year 7 of Band 7 in 2016 (Band 8 being highest; see Table 7.1). Fay (Aboriginal student) and Jane and Kylie's (non-Aboriginal students) initial transition was into a selective GAT class at Lewis High.

### **Fisher High**

Fisher High was a large public secondary school situated near a substantial suburban Aboriginal population. Fisher High catered for 1,300 students. It was located in an urban area with less than 13% Aboriginal population. Over half the school's families were identified as having low SES. Fisher High had a dynamic leadership team committed to giving disadvantaged students the opportunities and choices for their future. The Year 7 group in Fisher High for 2016 achieved in Band 6 for numeracy and reading, and Band 5 for writing, performing below the national average (see Table 7.1). Matt (Aboriginal student) made a second transition into a local GAT class at Fisher High.

**Drahner High**

The Drahner High population was multicultural with less than 35% Aboriginal population. The school had approximately 300 students enrolled. Over half the school's families were identified as having low SES and from newly arrived immigrant families. The Year 7 group in Drahner High for 2016 were in Band 5 for numeracy and reading and Band 4 for writing, performing well below the national average for their age group (see Table 7.1). Fay and Mel (Aboriginal students) made a second transition into local GAT class at Drahner High.

**Lotown High**

Lotown High had the majority of its students coming from newly arrived immigrant families with less than 2% Aboriginal population. It had approximately 1,500 students enrolled. Each year the school had a large intake of immigrant students from Intensive English Centres (IECs). IECs provide intensive English tuition to newly arrived, high-school-aged students whose first language is not English. The average NAPLAN for this year cohort at Lotown was Band 5 (see Table 7.1). Matt's (Aboriginal student) initial transition was into a selective GAT class at Lotown High.

**Tarium High**

Tarium High had the majority of its students coming from newly arrived immigrant families with less than 10% Aboriginal population. It had approximately 2,000 students enrolled. A partially selective school such as Tarium had enrolments administered by the NSW DoE's High Performing Students Unit. These students were placed in a top stream using a stringent process of formal testing and school-based assessments. The average NAPLAN for this cohort in the selective class was Band 8 and above (see Table 7.1). The

average NAPLAN for the selective GAT class was Band 7 and above. Tim (non-Aboriginal student) transitioned into this class.

### **Feeder Schools: Belby and Somerset Primary**

Year 6 students were sourced from two primary schools (both coeducational), which had groups of high-ability Aboriginal students. Both Belby Primary and Somerset Primary were low SES schools in metropolitan suburbs. As both schools had similar reading and mathematics NAPLAN scores, the participants from both these primary schools had similar class-average achievement composition in their Year 6 class for academic achievement before the transition.

**Belby.** Belby Primary had most of its students coming from newly arrived immigrant families with less than 1% Aboriginal population. The school had approximately 1,000 students enrolled. Belby Primary had in place a two-tier academic tracking from Year 1 to Year 6. One class in each year group was a GAT class while the other classes were mixed-ability. The average NAPLAN numeracy band for this mixed-ability cohort in Year 5 was Band 6 and in literacy was Band 5. The average NAPLAN scores for the high-achieving class were above Band 7 (see Table 7.1). Matt (Aboriginal student) and Tim (non-Aboriginal student) transitioned from this primary school to secondary school.

**Somerset.** Somerset Primary had a minority (less than 20%) of its students coming from newly arrived immigrant families with less than 25% Aboriginal population. It had approximately 200 students enrolled. Over a quarter of the student population was from a low SES background. The average NAPLAN numeracy band for this cohort in Year 5 was Band 5 and in literacy was Band 6 (see Table 7.1). Fay (Aboriginal student), Mel (Aboriginal student), Jane (non-Aboriginal student), and Kylie (non-Aboriginal student) transitioned from this primary school to secondary school.

## Participants

Personal interviews (Hammersley, 2008) guided by semistructured interview techniques were undertaken with students, school executive, teachers, and parents/carers (see Chapter 5 for a description of the interview schedule and Appendix A for details). The characteristics of the student participants are shown in Table 7.2. Three Aboriginal students transitioned into three urban high schools: Lewis, Drahner, and Lotown. Four non-Aboriginal students transitioned into two high schools: Lewis and Tarium.

Fay and Matt (Aboriginal students) transitioned from two different primary schools to two different high schools into local GAT classes but then made a second transition to another two high schools in Year 7. Mel (Aboriginal student) transitioned only once (to Drahner High) into a local GAT class. One of these two students, Fay, initially transitioned to Lewis High into a selective GAT class but then joined Mel in Drahner High in a local GAT class in Term 4. Matt transitioned into a selective GAT class at Lotown High but changed to Fisher High in a later transition to a local GAT class. Therefore, data from two primary schools (Belby and Somerset) and four high schools (Drahner, Lewis, Lotown, and Fisher) were analysed. The other three non-Aboriginal high-ability participants (Kylie, Jane, and Tim) provided contrasting contexts that enabled a more nuanced understanding of the transition.

## Bounded System

**Aboriginal Students.** The three Aboriginal students who were the focus of the urban study—Fay, Matt, and Mel—were identified by the secondary school transition processes as “GAT” and selected to be in a “top” academic track. In Year 7, they had entered a GAT class. Fay was in Year 5 in 2014, and her class peers had a NAPLAN average of Band 5 across literacy and numeracy. The Year 5 cohort from Somerset

Primary would feed into a secondary school within the high SES area near to where she lived, illustrated in Table 7.2. After Year 6 in Somerset, Fay entered Year 7 of Lewis High in a selective GAT class, which had an average school achievement of Band 7 (see Table 7.1).

By contrast, Matt had received 6 years of high academic tracking (Table 7.1). The GAT class at Belby Primary had an average NAPLAN achievement in 2014 of Band 8 (see Table 7.1). Matt spent a week in a local high school in a GAT class before choosing to attend a GAT class at Fisher High (in Week 2 of Year 7). The average NAPLAN score from the feeder primary school into Lotown High was Band 5. Therefore, he moved into a lower level academic classroom where there was a two-band difference between his academic level at primary school and the average academic level of his secondary school, which was Band 6 for numeracy and reading and Band 5 for writing.

As shown in Table 7.2, Mel had chosen Drahner High because “it was a sports school, and I also know a lot of people there” (Mel). The small Year 7 intake (35 students) at Drahner was a cohort performing well below the national average for their age group (Bands 4 and 5). She had transitioned from a class-average composition of Band 5 (see Table 7.1). Compared with the other two Aboriginal students, Mel had a smooth transition.

In summary, the difference between the two urban contexts (primary and secondary) was that Fay was two bands below her peers (a context for potential downward comparisons that are theorised to enhance self-concept; see Chapter 3) in secondary classes across numeracy and literacy, while Matt was two bands above his peers (a context for potential upward comparisons that are theorised to adversely impact self-concept; see Chapter 3) in secondary school. As seen in Table 7.2, Mel had a smooth and uninterrupted transition from Somerset Primary to Drahner High in comparable bands and was selected for their GAT class. After initial transition to a local GAT class at Fisher High, Matt

quickly developed new friendships, was complacent towards his school work, and was satisfied with his abilities.

**Non-Aboriginal Sample.** Three non-Aboriginal students participated in this study. There were two female students who are identified as Kylie and Jane. They transitioned from Somerset Primary to Lewis High in a selective GAT class. There was one male non-Aboriginal student, who is identified as Tim (see Table 7.2). Kyle and Jane went to Lewis where there was a two-band NAPLAN difference of increased achievement (average achievement across reading, writing, and numeracy; potential upward comparison) between their primary and secondary environments. Tim chose to join the same partially selective school, Tarium High, where there was no NAPLAN difference between their primary school Belby and secondary environments. Tim was placed in a GAT class as Tarium was partially selective. Partially selective high schools have one class in each year level where enrolments are selected from parent applications and the results of the NSW Selective Schools Test.

**Table 7.2***Sample Characteristics*

No.	Student	Gender	Aboriginal	Primary	Secondary	Selective	ICSEA	Aboriginal Population	No. of Teachers	Effort = No Ability	Effort Brings Success	Strategies Benefit Self
1	Fay	F	Yes	Somerset	Lewis	Yes	> 10%	> 3%	> 70	Time 2		
					Drahner	No	> 50%	> 30%	> 30			Time 3
2	Mel	F	Yes	Somerset	Drahner	No	> 50%	> 30%	> 30		Time 2	Time 3
3	Matt	M	Yes	Belby	Lotown	No	> 60%	> 2%	> 110			
					Fisher	No	> 40%	> 20%	> 75	Time 2		Time 3
4	Kylie	F	No	Somerset	Lewis	Yes	> 10%	> 3%	> 70		Time 2/3	
5	Jane	F	No	Somerset	Lewis	Yes	> 10%	> 3%	> 70		Time 2/3	
6	Tim	M	No	Belby	Tarium	Partial	> 50%	> 10%	> 75	Time 2		Time 3

*Note:* Information about the secondary schools was taken from ACARA (n.d-b). ICSEA = Indicator of Socio-Economic Advantage (% shows students in the school whose family situation was in the bottom quarter in their community).

### **Results of Research Question 1. Social Connectedness**

Research Question 1 posed, “What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Head Teachers, and Principals) perceive are the consequences for the development of self for students transitioning into a streamed academic process for secondary school? To what extent are these similar and different for Aboriginal and non-Aboriginal high-ability students?”

For the Research Question 1, the perspectives of students, parents/carers, teachers, AEOs, head teachers, and principals were analysed. First, the perceptions are presented for Aboriginal students and their parents/carers. Second, the perceptions are presented for non-Aboriginal students and their parents/carers. Third, the perspectives of Aboriginal and non-Aboriginal students are compared and contrasted. Fourth, the perceptions of multiple stakeholders are presented in relation to Aboriginal students. Fifth, the perceptions of multiple stakeholders are presented in relation to non-Aboriginal students. Finally, the perspectives of multiple Aboriginal and non-Aboriginal stakeholders are compared and contrasted.

#### **Overview of the Issue Explored**

Choosing between study goals or friendship goals is a known difficulty for adolescents. For example, Jung et al. (2012) identified this forced choice as a dilemma for gifted students. Research has found that this performance inhibitor similarly endangers Aboriginal students (Merrotsy, 2016, p. 78). After describing the focus participants, this section focuses on two variations of the forced-choice dilemma. First, it looks at the reasoning behind some high-ability students’ choices (e.g., time limitations mean that intelligence and popularity are irreconcilable goals). Second, it differentiates social goals, in the forced-choice dilemma, for Aboriginal students involved.

Social goals are not merely peer friendships and popularity but generally for Aboriginal students may more likely be “connections” with family and community relationships for emotional support and a high level of mental strength. The literature (e.g., Kickett-Tucker, 2009; Kickett-Tucker & Shahid, 2019; Lohoar et al., 2014; McInerney, 2012; NSW AECG & NSW DET, 2004) shows that Aboriginal students are different because they can be strongly influenced by their experience of profound community bonds and a sense of belonging to this cultural group.

### **Aboriginal Students’ and Parents/Carers’ Perceptions of Profile and Self-Perceptions**

*Vignette 1: Fay’s (Aboriginal Female Student) Profile and Self-Perceptions Prior to Transition to a Selective GAT Class.* The week that I first met Fay she was performing in a play with a youth theatre group in the city. Ironically, the play was about transitioning to high school. The defining characteristic about Fay was her love of the performing arts: music, theatre, and song: “I would definitely choose music as an elective”. She confirmed this when describing her hopes for the future: “I want to go into the arts when I go to uni. . . because that’s what I want to do”. Fay appeared to have good self-knowledge: “I work pretty hard. I’m really focused on my work. I’m a perfectionist”. Her motivation for enrolling in the large school was extracurricular. The school had the resources to put on shows and performances, which Fay had attended with her mother. The selective academic class was not particularly on her agenda. She refused to sit the test. Fay explained,

We had to take tests but I didn’t because it was my birthday . . . so I didn’t want to do it. But it [selection for the GAT class] was just based on my grades. So . . . on the first day they put us into classes.

Fay or her mother did not actively seek Fay’s selection for the GAT class.

*Fay's (Aboriginal Female Student) Profile and Self-perceptions After Initial Transition to a Selective GAT Class.* The evidence from Time 2 indicated that Fay found it unsettling having routines set by numerous teachers with numerous styles of teaching and classroom management: "We have quite different teachers every time. So, we have to get used to it". Fay was frustrated: "When we go to maths like nobody really listens. Which is kind of really frustrating because like I want to learn. And since the teacher's shy, they don't care". Some of Fay's comments revealed a negative attitude towards the methods of teachers at Lewis High. For example, she said, "It was meant to be due 2 weeks ago but she collected it on Thursday" and "we just got given a workbook and she told us to do it. And that was really hard".

Fay compares her assessment of others' abilities with her belief about their effort source. However, her effort source beliefs may also have been predicting her assessment of ability. In contrast to Fay's statement that all "they" do is work, whereas she liked to play, Fay's final description of herself in the same interview (Time 2) revealed an inconsistency: "If something has to be done, I can't just leave it. And I'm pretty driven. I like doing work". Effort source beliefs are generally a better predictor of students' ability judgements, relations between self-judgements of ability, and one's motivation. Fay's Time 2 interview was replete with effort-related phrases:

I don't really get to play out much. Because I have so much work. Last week I had two assignments due . . . And you had to make an effort. . . . I was behind on stuff too, and that's when she assigned us the history thing. So I didn't have as much time. But then she only clicked. It was meant to be due 2 weeks ago but she collected it on Thursday.

We had to partner up for a science project and my partner wasn't very . . . Like she was really quiet and like I couldn't really do anything. So like I ended up like . . . She came over my house for like . . . So like we wrote stuff out but like we didn't do much. So

that night I just sat down and did all of it. And we got 12 out of 16 . . . But some work we get is really, really hard. Then for history, we just got given a work book and she told us to do it. And that was really hard. What helps me? I don't know, applying myself better. That's what my mom told me the other day. Because I had to do a French assignment and I was stressing out. Because like I didn't know what to do. So she [my aunt] helped me and that was a really big relief.

These statements reveal that the source of effort that Fay was expending to complete the activities was directly elicited by the difficulty of the task. Fay may have self-judged that her higher levels of effort were indicative of lower levels of academic ability. She may have viewed effort as inversely related to ability (Miele et al., 2019).

**Social Factors.** Fay seemed to overemphasise the fact that “I've made lots and lots of friends already”. There were other indicators of her insecurity regarding socialising successfully and bonding with friends at Lewis. She mentioned “friends” 14 times during the Time 2 interview, double the average reference to friends by the other participants. However, at times she was invisible to others:

*Fay:* I got lost a couple of times. That was kind of scary because like nobody was around. And so like I couldn't really ask anybody. But yes—

*Interviewer:* So how—? You just resolved yourself? Like—

*Fay:* Yes. Because all my friends were the same class. Well, not all my friends, but I've like, I've met new people. And they're like all my friends. So like sometimes I just follow them to class.

*Interviewer:* So you go to class just so you were somewhere?

*Fay:* Yes.

Fay tried to connect with others in the class, explaining when they helped each other:

Some of my friends, my new friends, sometimes they ask me and I ask them. So we give each other answers practically. Yes. And most of the DT [design and technology classes], we're sewing stuff. And say that . . . Because we have to fish [thread] the sewing machines. We have to work them out. I know how to do most of it but then some other people don't so I help them. And then they help me sew and stuff. It's kind of like that.

In a team science project, Fay did not draw a popular partner. Conscientious, Fay made an effort to collaborate on the project by inviting the girl over to her house:

But my partner wasn't very . . . Like she was really quiet and like I couldn't really do anything. So like I ended up like . . . She came over my house for like . . . So like we wrote stuff out but like we didn't do much.

Despite the "new" friends, Fay stated she was relieved that she still had her primary school friends:

*Fay:* My friend [Kylie] and I, like we're pretty equal. Like, we like the same things and she used to go to my primary school so I know her really well.

*Interviewer:* So you're quite happy in that class?

*Fay:* Yes.

***Fay's (Aboriginal Female Student) Profile and Self-perceptions at the End of the First Year After a Second Transition From a Selective GAT Class to a Local GAT Class.***

Time 3 evidence revealed that as the transition period came to a close, Fay's point of view was empathetic towards others who were presently in a similar situation to what she had experienced at Lewis:

[A primary school peer] said that it was really hard in the beginning [of Year 7] because she's Aboriginal. And they had [Aboriginal] teachers there; they had one teachers' aide, and the teachers' aide helped her for one term. And she found friends, and they were all

Aboriginal and stuff, so they were all comfortable with each other. But she still misses us.

The data conveyed Fay's understanding that Aboriginal community in a school context provided connectedness for Aboriginal youth (Kickett-Tucker & Shahid, 2019).

Fay felt she was not the same and not as "smart" as others:

There's a lot of smart people in my class. Because it's a selective class . . . they're not the same as me, some girls in my class, all they do is study, and work and stuff. But they rarely play sports. Whereas me, I like playing netball, I like going to the beach.

Fay perceived a competitive, pressurised environment, and this may have initiated fear of possible future failure. In Fay's story, possible failure would be the public humiliation of being dropped from the GAT class. She protected her self-esteem by lowering the perception of how much effort she had invested in school work. For example, Fay described her love of sports and her refusal to commit to the philosophy that "all I do is study". The perception of not having a high-ability can contribute to motivation at school.

One possible reason for Fay's social difficulties may be the lack of sense of community that she experienced previously in primary school. At privileged Lewis High, the (non-Indigenous) Aboriginal support coordinator arranged "permission" for Aboriginal students who were "having a hard time". She explained they were able to "sit in the library and work". The longing for sense of place and sense of belonging Fay expressed in Time 3 after settling in at Drahner High:

Well, I live like 30 seconds away. Whereas at Lewis I had to get a bus and stuff. I had to wake up really early, like 6:30 every morning, but now I wake up at 7:15. So it's pretty good. And when I went to Lewis I only had like two people that I actually knew in my

class. But then here, I've got relatives, basically all of Year 7 I know, because I've just known them for a really, really long time.

As a result of reflecting on her priorities at Lewis, a new understanding of what she felt was essential, her "connections", came from Time 3 (see Table 7.2). This view emerged in Time 3 because the focus at Drahner, where she was now enrolled, was relationships. Developing quality relationships was a consistent theme mentioned by all stakeholders, including Fay, as crucial for students' transitions. Moreover, later she expressed this sense of belonging towards the broader Aboriginal community: "I've got lots of friends here, lots. That I've known since kindergarten. And I've got relatives; I've got cousins. Yes. Just chilled".

The phrase "just chilled" underscores Fay's relief from psychological stress at Drahner. In this sense, a successful transition could be measured by the development of new friendships and improved self-esteem and confidence, settling well into a relaxed environment where everyone was "equal".

***Vignette 2: Matt's (Aboriginal Male Student) Profile and Self-perceptions Prior to Transition to a Selective GAT Class.*** In describing himself, Matt seemed to have a healthy ASC at the end of Term 1 in Fisher High: "Honestly, I think I'm on a high standard. I think I'm doing really, really well". Matt provided self-reported academic achievement in major subject areas. He was able to tell us he received 35 out of 36 in a mathematics test, 16 out of 20 in an art test, and 19 out of 20 in history.

In his own words, Matt was "responsible, confident, funny, polite". As a confident public speaker, school prefect, and winner of the esteemed Citizenship Award, Matt may have been one of the favourites at his primary school. The Belby principal described him as "our Matt":

Our Matt has four younger brothers, two twins in kinder and two younger . . . They see Matt achieving and that's a positive role model. And one of the ladies, after Matt received his award, said to one of the little brothers, you can be up there next year, then their eyes brightened up and they smiled. So, there's that motivation.

Matt was talented at art and had a special friendship with the art teacher. He had a close relationship with his cousin, who was the same age. Matt quickly developed a friendship network when the family moved to Fisher. He enjoyed spending free time after school with this group of teenagers. Matt had a very low sense of academic planning: "I just didn't think I'd get anything on time or anything. I thought I'd fail exams and all that". Matt was likeable, laid back and not conservative.

***Matt's (Aboriginal Male Student) Profile and Self-Perceptions After a Second Transition Mid-Term From a Selective GAT Class to a Local GAT Class.*** By transitioning from a high-achieving primary to a high-track class in an average secondary school, Matt unintentionally moved to a class with a lower academic level. His class in the high-achieving primary received average NAPLAN scores in Year 5 above Band 7. The Year 7 group in his secondary school was performing around Band 6 (Table 7.2). As a result of being in a primary school class that was working within the high school curriculum during Year 7, Matt had a very high pre-transition level of achievement.

Matt had a very healthy ASC: "I am actually in the top class; I'm really good at maths and that's really easy for me and then English is all right, the rest of it is all right. I try and get higher marks for everything and in the last maths exam I had I got 35 out of 36 so, that made me feel happy".

The advantage of having such high competence on arrival in Year 7 was that school work increased in enjoyment because it required less effort: "I like maths because it's really easy for me and everything else is, it's actually pretty good".

The combination of positive academic engagement, low fear of failure, and low application of academic persistence reduced conflict with peers and teachers. Matt was able to help the friends in his GAT class with work: “I’m doing really, really well. Hanging out with me and my mates just like makes everyone feel good”. As a “good” student, Matt had little conflict with teachers: “It’s great like you’ll like all the teachers”.

*Matt’s (Aboriginal Male Student) and His Mother’s Profile and Self-perceptions at the End of the First Year of Transition From a Selective GAT Class to a Local GAT Class.* Matt’s confidence in Year 7 stemmed from his perception of competence from one track to another: “They give me a great mark usually”. His confidence also stemmed from his comparisons with others in the GAT class:

Yes, I did [compare my results]. We did in classrooms and all that. In our tech classes and art classes, we actually go with another class, like we’re in groups with other classes now. And we share our results there . . . They’ll ask me, what did you get on your test? Oh, this number. And then we’ll share our results. And the exam we shared as well, we all showed each other our papers and everything . . . I’m usually top 10 in Year 7 for a few subjects.

Others who transitioned from the same high-achieving primary school and were in the same Year 6 GAT class stated about the content at high school: “I thought it was going to be much harder. But it was basically all the stuff that we’d learnt [last year]”.

In the lower achieving context that Matt was placed in, he reported that he did not have to contribute much effort to achieve well in his cohort: “We’ve got assessments and all that, but when I do them, I don’t revise or anything. I usually just go in”. By not appearing to work as hard to achieve, the general perception is that they are intelligent.

Matt expended an adequate level of effort, what was needful in class and home, and this led him to conclude that he had a high level of current ability. Matt summed up: “I’m

usually top 10 in Year 7 for a few subjects” in Term 4. When asked who supported him, he stated, “My own teacher in Year 6; she readied me for high school”. Confirming the contribution of the teacher, a non-Aboriginal parent in the cohort at Belby Primary testified to the skills of this primary school teacher:

I’m very fortunate with the teacher he has because, once again, they’re in enrichment so she has already been preparing them with Year 7 maths work. Um, she’s been doing, for literacy she’s been giving them a novel. So, they’ve been doing a text, a novel study, which is what they’ll be getting when they get to high school.

Matt had gained expertise and developed a positive ASC over a long period of time when he was in primary school. The person who continued to contribute to his success in high school was his primary teacher with whom he had no contact during Year 7. Matt was describing a level of competence that he brought with him to high school, not a level of effort input towards performance. The evidence presented thus far puts the effort–ability dynamic in a perspective quite different from Fay’s situation.

At the end of Year 7, Matt’s mother Marcia said that Matt had hoped to develop cultural knowledge:

I think that may be one of the disappointments because I don’t ask him, and I probably should ask more about it. But actually I did have a conversation with him last week about the Aboriginal heritage side of it. And I asked him what had he done with that sort of thing this year, and he said nothing.

The fact that Matt had not connected with his Aboriginal culture at Fisher and was disappointed about this contradicted the teacher’s perspective that high-ability Aboriginal students “fit in quite well” (Corrine, an Aboriginal teacher, Head of Welfare) and did not need cultural programs or connection to country and culture.

***Vignette 3: Mel's (Aboriginal Female Student) Profile and Self-Perceptions Prior to Transition to a Local GAT Class.*** Mel was a talented sportswoman who saw herself as “intelligent, helpful, caring” (Mel). Mel conveyed a sense of belonging when I interviewed her. Both her parents/carers were alumni of Drahner High. Members of her extended family (grandmother) lived close by, cousins shared the school bus, and adults in the community who bore no relation to her were “auntie this” and “uncle that”. She lived “right across the oval. So I grab my brothers after school, and just walk down” (Mel). Other people’s older brothers looked out for her. Mel explained, “He [the older brother] is a vice-captain”. Librarians and teachers kept an eye on her. Therefore, she was convinced that because she knew “a lot of people it will help me through my journey through high school” (Mel). Her comment was astute as the literature shows that the environmental context has a stronger effect on the success of a school transition than challenges of adolescence (Anderson et al., 2000). Her environment was the close-knit and intergenerational community that was centred on the local Land Council, Drahner High, and the local AECG.

There were also close links between primary and secondary school teachers as some taught at both Somerset and Drahner. In this context, Mel was happy: “I like it a lot. Because it’s not a big school, so it’s easy to get around. And like, there’s not many people here, so it’s not crowded”. In seeking to investigate how transitioning to a selective high school environment had impacted Mel, Mel provided essential data about her thoughts regarding these features. The themes that emerged were (a) feeling valued, (b) cohesive social and academic goals, and (c) competence and support in the selective class.

***Mel's (Aboriginal Female Student) Profile and Self-perceptions After Transition to a Local GAT Class.*** Being popular, sporty, and “knowing a lot of people”, Mel developed new friendships: “I’ve been with half of my friends through preschool, like

primary, and here. So it hasn't been that hard. But I've met a couple of new friends, and we've become really good friends". She also improved in social confidence:

I thought I was going to be quite shy, but since I know a lot of people, I'm not that shy anymore, because I used to be really shy, and didn't want to talk in front of people. But I've kind of grown out of that.

The friendship group in Year 7 was inclusive: "We all sit together". Everyone was kind. Mel reported, "I like being with my friends because they help me a lot". The school climate was also inclusive: "Everyone's nice and they include you in everything" (Mel).

Having relationships with others at the school made the transition "all right". Mel continued, "It wasn't too hard, because I knew most of the people here as well". She was special because she was known. Mel was also talented:

I do Oztag and netball, so I just trialled, because I've made it, I think, into the Australian Championships is like a National Oztag thing, and my state competition. So I trialled for that, that's outside of school. But I played in the TSP, talented sports program, netball.

Playing in school sport helped her develop friendships, confidence, and self-esteem.

In the thinking of Mel, there was a cohesion of social and academic goals in class. Academic work was important but not competitive: "I also actually like maths. Not a lot of people like it. Because my friends, they sit next to me, and I have to help them because they don't really know some of it". Teachers were connected to students:

I have a lot of relationships with my teachers. Like, for maths, my friend, she is family friends with one of our teachers, because he lives around Drahner . . . So we've got a good relationship with him. And probably our history teacher, he's really nice, and really funny as well.

Mel showed an increasing interest in school and school work, looking forward to Year 8: “I would like to see what my friends do as well, so I’m not by myself. My cousin, she’s in Year 8, and I’ve asked her what subjects she’s doing, and stuff like that”. When asked what advice she would give to Year 6, Mel’s response revealed her perspective on integrating both social and academic goals: “Study hard. Make friends. And try feeling really well”.

*Mel’s (Aboriginal Female Student) Profile and Self-perceptions at the End of the First Year of Transition to a Local GAT Class.* When Mel perceived continuity across the curriculum, she felt that “it’s not as hard as what people say it is. The subjects, it’s not that hard to go to once you start feeling comfortable, you know where you’re going”. One of the main features affecting a successful transition is whether children receive considerable help from their secondary school (van Rens et al., 2019). Mel identified the links with the university that provided extra help: “I also like that after school on Wednesdays I go to the homework centre, which is in the library. And that just helps me. They have a lot of uni. students there, so it helps me with my work”. With sport, there was also specialist help: “I think it’s the uni., but they got some people who do sport and that come in”.

Drahner had the same routines and organisation as the other high schools: “We have our yearlies next week, so we have to study for them”. In contrast to other interviewees, Mel used the second person. Significantly, she uses collective terms (we, our, and us) when discussing the selective class:

We’ve been studying for the last couple of weeks now. Our yearlies are next week.

They make us study in class, which is better. And we also study at home as well.

Everyone’s kind of on the same level because we are in the advanced class. We’re all even. We all kind of know each other from around so we’re all close, we’d never get into fights.

Through the voice of Mel, she had perceived a collective identity within this GAT class. The relationships at school form a positive experience of school, resulting in a high level of mental strength. By the end of the year, Mel expressed how the GAT class had helped her:

It helped me with my exams a lot, and other activities out of school, as well. Because I'm going to a uni. course, I think in December, for science. So I got selected, I think, 10 kids out of my school. So I'm going there and doing a course for 3 days.

By the end of the year, she had developed greater confidence in her academic abilities.

### **Non-Aboriginal Students' and Parents/Carers' Perceptions of Profile and Self-Perceptions**

*Vignette 4: Kylie's (Non-Aboriginal Female Student) Profile and Self-Perceptions Prior to Transition to a Selective GAT Class.* Kylie had a very strong self-perception of herself as a sportswoman: "I'm sporty. I like learning new things". Weekends were about participating in sport with friends and family; school was about competing in sports teams. Her hopes for high school also centred on sport: "The school said they did snow skiing and I ski a lot, so I was really excited to be able to do that, and a lot of sports. It's kind of the thing I like to do". She was not able to sit the selective test for Lewis High because they were away skiing.

Although Kylie had a strong sense of academic persistence, "I always want to get my work finished. I would hate to be halfway through and then just [not finish]" and was organised: "In my class we get diaries and write down upcoming events" (academic planning). She perceived her ASC as a mix of the fact "I am a bit competitive in class to try to beat my friends and get a better mark" and "I was more intelligent and more ready

for high school”. The oldest child in her family, Kylie did not worry about the workload, “although we’ll have a lot of homework, but I’m sure I’ll be fine”. Kylie’s main concern was social, as she would be leaving her primary school friends: “All of my really close friends are going to a different high school”.

*Kylie’s (Non-Aboriginal Female Student) Profile and Self-perceptions After Transition to a Selective GAT Class.* Despite having other girls in her primary school in her class (Jane and Fay), Kylie’s sporting activities built her a strong social network, stating, “I wasn’t really good friends with them. But I made a lot of new friends so I’m really happy”. She perceived herself as “nice”. Her academic engagement continued to be based on PE: “I really like PE”. There was a sense that “I feel like I’m better at some subjects like science and English and maths” and that she saw herself as “one of the top students”.

Her academic persistence in the first term of high school had not been really tested as “it’s been good because it’s been a little bit challenging but not hard”. Her approach had been “not to worry and just go along with it and try your best”. Kylie felt that she was doing “pretty well” in her school work at high school.

Confident in her abilities, Kylie used the claim of membership to the GAT class (“I’m in one of the selective classes”) to reinforce the confidence that she was “doing pretty well”. Getting “really good marks and the same on tests” and “I don’t think it’s been like really, really hard” had led Kylie to believe that she was “smart”.

Kylie also had confidence in her academic planning. Organisation was a large part of her self-concept and AWB: “I’ve been pretty organised; we got diaries with everything organised” and “I have four timetables”.

*Kylie’s (Non-Aboriginal Female Student) Profile and Self-perceptions at the End of the First Year of Transition to a Selective GAT Class.* Kylie’s perception of herself

changed from being at the “top” of the class at the beginning of the year and the feeling that she was “moving a bit forward this term”. At the end of the year, she was “at the top in PE” but for the other subjects she was at “the top end of the middle”.

There appeared to be an acceptance of the work involved in the class and, as assignments and topic tests appeared, Kylie viewed them as good for examination preparation, stating, “So we didn’t freak out on these ones [yearlies]. Just a lot of studying”. Her academic persistence was again displayed in the philosophical comment “We’ve had a lot more, and it’s been harder. But it wasn’t too bad, and nearly at the end of the year now, it’s all right”.

Kylie continued to have a strong sense of herself as a planner and organiser, completing several assignments and deadlines a week. Also, Kylie had the sense that she was becoming more intelligent in the class: “I feel like I know a lot more than I did in primary school”. Even though she was ranking in the middle, “I don’t really think about it, because I think our class, everyone’s pretty smart”. Her determination was centred on “study and do all the work, and try hard”.

Kylie’s greatest enjoyment in school was sport: “I like doing sports. I don’t really like maths”. School provided opportunities: “Recently I went into this talented netball trial for next year. And also, I will go to New Zealand with school for netball in 2018” and her aspiration: “I want to be a PE teacher”.

***Vignette 5: Jane’s (Non-Aboriginal Female Student) Profile and Self-Perceptions Prior to Transition to a Selective GAT Class.*** In her Year 6 cohort at Somerset Primary, Jane was the sole recipient of a University of NSW mathematics prize. She was a diligent student who believed in “just studying and just trying hard”. She found primary school “a bit boring”. She perceived that “everyone thinks I’m smart, maybe, yeah”. She saw that “I’m sometimes a loner because I like work sometimes alone”.

Despite enjoying sport and looking forward to participating “in a lot of sporting activities”, Jane’s perception of high school centred on academics. Her main anxiety about school was “sometimes I get scared if at high school I won’t be able to really finish my homework and my assignments because my sister’s in high school and she has a lot of work because she stays up to like fairly . . . like midnight”. Her sister is in an older GAT class and “gets good academic results”. Jane was looking forward to extension and homework clubs.

Jane also was proud of her membership in the GAT class, explaining, “I made it into the selective class. I did the selective school exam . . . the test and I got like a reserve for one school, so I got automatically in [to the GAT class]”. She reiterated she was “smart, a loner, curious, and loves learning”.

*Jane’s (Non-Aboriginal Female Student) Profile and Self-perceptions After Transition to a Selective GAT Class.* In Term 1, Jane explained, “Because I made it into the good class, the higher class, you have lots of assignments, I have three due and it’s a lot harder because in primary school you have only like one but now you have three due”.

She was very accepting of the load: “The work that you do, it’s a bit harder and yes, the work. It’s in my level. It’s normal”. Jane showed extraordinary persistence in finding strategies to deal with the work: “Sometimes we have to get here early on a test day; it’s a bit quieter”. She felt those who had older siblings in the school had an advantage with support academically: “Most people in my class they have sisters, I think that’s the main thing” and “my sister, she helps me a lot”. However, she also added the friends supported each other:

Because each morning my friends always help me, all come with me to the library to do work. They help with the bits I don’t really get because I’m not that good with English. In English we have to read a book. I’m not that good with reading, so it’s a bit hard.

Jane recounted that in primary school, “I was really good at maths and in high school I’m doing quite well”, revealing a drop in confidence regarding her mathematics self-concept. She also expressed other self-doubts about her ability: “I think I’m not that good because everyone’s really higher than me, I’m not that high in class. I’m like average”. Her self-doubt continued: “I’m not that good. Because I think my other friends are smarter than me and I’m not”. Nice, smart, shy Jane liked being in the GAT class but was aware that “you might go down next year if you’re not good at anything; you might go down a class. That is what might happen” (Jane).

*Jane’s (Non-Aboriginal Female Student) Profile and Self-Perceptions at the End of the First Year of Transition to a Selective GAT Class.* Jane summed up her year: “I was really nervous at first, but now I’m really excited. Now I’m really good [being] here”. She identified her academic persistence as a key to her overall success: “Because I’m not that good at English, it was really hard for me to keep up a bit”. Her reading self-concept was still low: “I have to keep up. Probably for English, because English is my second language so I don’t really understand it sometimes”.

By the end of the year, Jane no longer mentioned any extracurricular activities or sport. Her focus was “keeping up with the work, staying on task and listening to the teachers. Because if you get left behind and you don’t know what to do, then you just stay behind the whole time”, and the situation becomes “worse”.

There was a change in her academic planning over the transition. Jane was no longer “the loner”. Working with others had the advantage of helping each other with the volume of tasks: “There’s lots of assignments and you have to do it or you get marked down. I study with my friends because I don’t really like studying alone”. She learned she was more successful “working with friends”. Her ASC was based on her performance and ranks: “I came first in history. I have five in maths and for DT”.

***Vignette 6: Tim's (Non-Aboriginal Male Student) Mother's Profile and Self-Perceptions Prior to Transition to a Selective GAT Class.*** Together with Matt, Tim had been in the same enrichment class from Year 1 to Year 6. Tim was an only child and was clearly very mature, aspiring to be either an engineer or architect. He saw high school as the next step to “having more responsibility and being more grown up. And more things to do”. His social self-concept as a student in the classroom was “caring, positive, and friendly” and his self-concept regarding school was “hardworking and helpful and I learn quickly . . . only just missed out on getting in [to selective]”. He had both academic and social goals: “I like learning new things and I like making new friends”.

His mother Kate felt that “academically I think he's very well prepared. Socially, I think he is has nerves that are kicking in”. Tim felt he had “at times felt a bit bored with the work that they gave, maybe just a bit more learning [in primary], been a bit harder on us and [given] more challenges”. Kate's impression of his primary school enrichment class was the opposite:

He's being challenged and he's been working at his level rather than being held back.

And I think that that's been part of the success for him at school and his enjoyment for the fact that he hasn't been bored and he's being challenged. I feel that my child's fortunate that he's been in the enrichment class.

Kate felt the primary school could have provided “further enrichment activities” and “they could have offered maybe a little bit more in terms of GAT programs”.

Tim appeared to have excellent AWB. According to Kate, his grandparents, uncle, and she had “a value for education and the importance of it”. He was clearly competent: “Just going by his NAPLAN results he's achieving what some of the children would be achieving in Year 7” (Kate). In terms of academic engagement, “he's had great teachers every year that have motivated him to learn”. His Year 6 teacher and his mother had

supported him with his academic planning, and he believed, “I’ve got a bit more organised. I remember a lot more things like when work is due and when it needs to be done. I used my diary quite often”. He perceived himself as persistent and determined. “I just never give up and keep trying” (Tim). Despite being a high achiever, he missed out on a selective school placement that his mother explained as “I didn’t send him to any tutoring”. She also explained to Tim, “I said to him, you know, that in itself is an achievement when you haven’t gone to coaching for years and years to train for this test”.

Several times during the interview, Kate referred to a paradox she had noticed: “He is clever and but I think he doubts sometimes how clever he is”. She explained this self-doubt as a personality characteristic:

I think he can be a little bit of a perfectionist which at times can be a negative as well because when he sees that others might have . . . might have known something before him or perhaps seems to have come easier to them, he will be a little bit [tuts] negative towards himself and will put himself down.

Surrounded by high achievers for 6 years of primary school, she noticed that he compared himself with others: “He sees that’s what’s around him and that’s what’s modelled around him and I think he wants to succeed”. She mused, “It’s interesting that at times he would say, he doubts himself” and recounted one story:

There was one year where he didn’t believe that he was going to go into the enrichment year the following year. And, I was quite taken aback about that because I, sort of, went you know your results show that you are clever.

Kate resorted to “sometimes I have to remind that, yes, he is” and “put it into perspective for him”. Then she could “see the change in his body language that he sees and shows that, oh yeah, you know, that’s great I am [clever]”. Kate said Tim had “always

been on a high level for reading”: “Mathematics is . . . he seems to be a little bit more mathematically inclined”.

***Tim’s (Non-Aboriginal Male Student) Profile and Self-Perceptions After Transition to a Selective GAT Class.*** Tim found the first term of high school

A bit nerve racking, pretty nervous going to start, just a bit nervous about the change, like not many of my friends from old school came here, so I was starting all over and I was a bit nervous doing that. I know what classrooms to go to so, I don’t get nervous or suspicious. They just showed us around and gave us like a tour and showed us, and that was just really comforting at the beginning and still now.

He had support from his parents with his academic planning and persistence: “With homework if I don’t understand something I’d ask [my parents] and they’d probably most likely know what it is, explain it to me and then they give me an example then I will learn it”.

Tim expressed strong engagement and an increasing self-esteem and confidence in school life:

I think I just give myself challenges and work them out and find ways to help myself out. At times it can be challenging at times but you just ask a question and then the teacher just tells us, like shows us and then we’re good after that. I like how the teachers are really helpful and the work they give us they always come around and ask if we need help and they’d help us out all the time. It’s just how helpful and kind everyone is and everyone helps each other out so.

Tim felt that people above him in class were there because “probably just that extra work that they get like a tutor”, referring to the fact that he had noticed other students in his class attend coaching. He was still confident: “I think I’m doing pretty well, not the best but I’m doing well. Some kids help me out and I help out other kids”. Tim felt that he

was one of the people who helped out the others in the class so therefore he must be better than others. He credited his success to the fact that his primary teacher “gave us high school work”. His advice to a Year 6 student was to “just like push themselves over the limit and try to learn things that they haven’t learnt in Year 6”.

*Tim’s (Non-Aboriginal Male Student) Mother’s Profile and Self-Perceptions at the End of the First Year of Transition to a Selective GAT Class.* At the end of the year, Tim still “had thoughts on being an architect or engineer”. He described his year in the GAT class as being “a very nice experience. Like there’s been more work and it’s a nice opportunity to have different teachers. [High school] does feel like more responsibility”.

Tim described himself as organised, determined, and engaged during his year in the GAT class:

I’ve only been stressed out for exams but that’s the usual. Always done that. Once I study and go through the exam it’s a big relief because I’ve pretty much covered everything I need to.

I’ve learnt that I like to perfect my studies. I try really hard in classes to be a good student. I pretty much like everything. I learn new things in everything and I learn how to do new things. I like mathematics, problem-solving, and working out. They’re all pretty much the same; I like them all. I just dedicate myself to every subject.

His mother confirmed his academic engagement: “He’s taking ownership of his learning and trying to improve his own learning himself. So that’s been a very positive thing for me that I’ve seen in him” (Kate).

At the time of our Term 1 interview, there had been no formal testing, and Tim had the impression that there was little comparisons being made within his class. This had changed by Term 4, after the half-yearlies and yearlies: “Everyone wants to know what everyone got so the teachers mainly read out what everyone got and everyone knows”.

Tim's confidence came from the perception: "I'm close to the top. I compared my results. For maths I've gotten pretty much 90s all year so I compared them all and I've done really well".

Tarium High was a partially selective school. After the Year 7 entry test, the Year 8 entry into the restricted DoE selective programs, including the selective class at Tarium, was via application processes based on Year 8 grades. Tim had done so well in Year 7 that the possibility of Tim applying for the formal selective placement in Year 8 had opened up. His impression of the increased workload of this selective class caused Tim to hesitate in applying. Kate agreed:

I'd be putting him in a pressure cooker, and he doesn't need that. He's happy where he is, he's performing well. He's enjoying the fact that he can dedicate his time to his studies but he doesn't have the pressure of keeping up with everyone else.

### **Multiple Aboriginal Stakeholders' Perceptions**

The Aboriginal stakeholders involved in the Year 7 program were head teachers and teachers. There were no Aboriginal principals interviewed. The perspectives of Aboriginal stakeholders centred on the local GAT programs where schools were sorted by the schools using past reports. Developing AWB through the development of persistence, planning, engagement, goals, and valuing of school was a key theme (as shown in Table 7.3)

**Table 7.3**

*Themes of the Aboriginal Stakeholders' Perceptions on the Factors That Contribute to an Academic Wellbeing at Secondary School of a Local GAT Class*

<b>Main Themes</b>	<b>Examples From Coded Responses</b>
Academic persistence	I'm definitely glad he's part of the GT [gifted and talented] class. He's had some good reports from the school. He's also brought home some pieces of paper that say he's being recognised for his efforts in class. He's confident in his own abilities, he knows what he can do, and he does what he needs to do. I don't see him do a lot of homework.
Academic planning	Academically, and I'm not sure whether it's because of more kids or what, but his reports, like half-yearly report, I didn't think reflected how well he went when he was in primary school.
Academic engagement	Just the systems they use, like their red card systems and things like that. Yes, there have been a few issues. A limitation is the way that they deal with the behaviour issues.
Academic goals	My daughter is actually doing a master's in psychology.
Social goals	I asked him what [Aboriginal culture] had he had done this year, and he said nothing.
School valuing	They actually did send me a letter to have an interview in regards to the PLP [personal learning plan] but I wasn't able to make that one either.

Marcia, parent of Matt (Aboriginal student), revealed that her family modelled the value of education but trusted Matt to consciously apply himself to school (Academic goals, Table 7.3). She had seven children. In the Time 1 interview, Marcia described Matt's success after being in an academically competitive primary school class. In Time 3, she was more aware of Matt not being able to balance social and academic goals. From her comments, Marcia was aware of the paradox of Matt succeeding, although not as well as in primary school, but also realising he was not making much effort (Academic persistence, Table 7.3). Instead of talking about Matt's interactions with his teachers, or his enjoyment of school, Marcia was critical of the "red card behaviour system". School contextual effects manifest through the social and disciplinary climate in the school and classroom. Marcia's concern about the behaviour system reveals that student attitudes and engagement might be negative in Matt's GAT class, and indicative of a different climate to other GAT classes.

In contrast to this view, the Aboriginal head teacher Jan who worked in Matt's school perceived that the most important thing for Aboriginal students to enable them to grow and flourish at school was a "sense of belonging". Jan elaborated,

The time it takes if you're considering transition point from 6 to 7, the time it takes a teacher here to form a relationship with a student to be able to instil in that student, I believe in you and you can do this, is a significant period of time. Whereas if they've got that sense of self-belief from the home and they've got the support from the home they come out of here [school] with that level of resilience, but also that capacity to engage in academic rigour and either if they keep trying, if they look for support they will be able to overcome the obstacles.

When describing the importance of identity, Jan believed, "that when you make that cultural connectedness with a child, if that's what they're lacking then that's something extra that you can give a child for support, an Aboriginal child for support". She also perceived that involving Aboriginal community was "a big one" for sense of belonging:

It's something we're conscious of and it's something we're working on. But we are gaining community for Aboriginal students and non-Aboriginal students, in actively participating in the school. An example is we've just ran a workshop for parents this morning, a "learning-to-learn" session. We'll have as many as four parents turn up for information things.

### **Multiple Non-Aboriginal Stakeholders' Perceptions**

The non-Aboriginal stakeholders that were involved in the Year 7 program were principals, head teachers, and parents. There were no Aboriginal staff interviewed. There were limited Aboriginal staff in these schools, and they were not involved with Year 7 transition. The perspectives of non-Aboriginal stakeholders were about the local selective

settings where placements were sorted by the schools, using an entry test. The emerging themes from parents involved persistence, planning, engagement, valuing school, and balancing their social and academic lives (as shown in Table 7.4).

**Table 7.4**

*Themes of the Non-Aboriginal Parents' Perceptions on the Factors That Contribute to Academic Wellbeing at Secondary School of a Selective Setting*

Main Themes	Examples From Coded Responses
Academic persistence	He's been challenged, and I think he's enjoying the opportunity class and not being held back.
Academic planning	My son said "I have to do well because my teacher expects me to do well and he says I'm a capable student".
Academic engagement	Particularly his maths teacher, he praises him yet tells him the areas of need and he's studying at the moment for a maths exam.
Academic goals	He says that the children that are in the [DoE] selective that are just wholly focused on their academics. They don't really socialise. And my son's quite a social person. And these children are also going to tutoring all the time; they don't do things on the weekend. He plays sports competitively on the weekend and does things during the week.
Social goals	If he went into [the DoE selective class] he'd be keeping up with everyone in terms of, he wouldn't be performing, but feeling that he needs to be going to tutoring and feeling that he needs to be dedicating his whole weekend to studying rather than taking that time out to have a healthy balance. To be able to achieve successfully.
School Valuing	We value school work; they come home, they have to do their homework, they have to do all of these things and they've always known that they have to value their education.

Using these key concepts in Table 7.4, Kate, parent of Tim, revealed that she was very involved in her son's education, not simply modelling the value of education but supporting him at every step. Kate was very close to her son and attuned to his needs. Tim's desire to please his teachers through planning and preparing for assignments and examinations was rewarded by those teachers (Academic planning, Table 7.4). In the Time 1 interview, she described Tim's self-doubt after being in an academically competitive primary school class. In Time 3, she was acutely more aware of the need for Tim to balance social and academic goals (Social goals, Table 7.4). From her comments, Kate

appeared to equate tutoring, or coaching to improve students' results, as creating pressure for that student. By not applying for DoE selective class, Kate perceived herself choosing a less achievement-oriented environment, with less social comparisons, for her son (Academic goals, Table 7.4).

The Somerset principal had also seen the cycle of comparisons with higher performing peers occur previously with other students from his primary school:

You go to a gifted and talented stream, and all of a sudden you're thinking, oh I was smart, now I'm not smart. And that's not because you're in a gifted and talented stream, but what does it do to your actual attitude and what it's to do about you as a person believing that maybe I'm not as good as what I, what I really am. And that's, that's another challenge that, all kids, regardless of where they're going, when they have to make that transition that I believe is a really difficult step because, in a small school in a small primary school, it could be that at the top there, that you've got to recognise that, you may well not be but it doesn't mean that you're not still talented. You still are but you're just in a bigger pool of fab people. (MCP6)

Stakeholders were also directly asked about the needs of high-ability Aboriginal students. At Fisher, one teacher expressed the belief that high-ability students did not need a connection to country and culture. He went on to state: "The high-end Aboriginal students don't access cultural programs as much as the non-achieving Aboriginal students, and that's really quite evident when we run our PLPs [personal learning plans]". This teacher's perception reveals stereotypes develop about groups of high- and low- ability students, and may imply that high-ability students such as Matt may make decisions between committing to Aboriginal cultural programs or courses (academic achievement).

Matt may also have succumbed to subtle pressure to avoid connecting to culture to become "more driven for going to university" (Corrine). Corrine stated, "And I think they

just have a link [Aboriginality] that that is a tool that they can use to get there". The same perception that high-ability Aboriginal students were more westernised was expressed by a teacher: "It's the lower end ability that need that connection to country and culture. And they're the ones that access all those Aboriginal programs. And the high-ability achieving Aboriginal students, some do and some still need that sense of belonging".

Another stakeholder, a principal of a highly multicultural school, had a different view. She believed that all students were the same:

We don't think of Aboriginal and non-Aboriginal. They're just all our students.

I haven't noticed a difference there, no. I think we don't have a lot of trouble selecting our gifted and talented, and there's two classes; they perform on a higher level than the others.

In her view, Aboriginal students were part of the wonderful multicultural mix of her school.

### **Aboriginal and non-Aboriginal Multiple Stakeholder Perceptions Compared and Contrasted**

All stakeholders were aware of the conflicting social and academic "self" goals that competed for students' time in Year 7. Similarly, the same elements of AWB were identified in describing the progress of Year 7 students: persistence, planning, engagement, and school valuing. Primary school educators and parents were conscious of the effects of social comparisons of ability. High school educators used the constructs of "high-ability" and "low-ability" to describe influences and performance patterns. Most stakeholders discussed the concept of ability as a static, fixed entity.

Aboriginal and non-Aboriginal stakeholders differed in their awareness and responsiveness to cultural and academic differences. Aboriginal stakeholders were more

alert to the benefit and operation of noncognitive outcomes such as sense of belonging and cultural identity. Non-Aboriginal stakeholders were more sensitised to the prevalence of performance goals as a result of secondary school culture.

**Conclusion Research Question 1: Social Connectedness.** The potential to succeed in the new context was perceived to be dependent on the development of self-concept as well as the climate of the secondary school. The consequences on self first depended on how students balanced their social and academic goals and how students developed all drivers of academic success in the climate of the secondary school. Important drivers of AWB were school valuing, academic persistence, academic planning, and academic engagement. From the interviews with the children involved in transition, Aboriginal children tended to see the importance in community relationships and student relationships, together with curriculum and pedagogy, for socioemotional support to engage a high level of mental strength. One teacher summed up the whole transition experience:

The biggest challenge is really that the difference [between primary and high school] being the eldest in their school and then all of a sudden going back down to the bottom again, like starting kindergarten so to speak. So being the little people again and having to establish who they are. It's a whole different context.

The results also revealed that the primary educators were aware that the Aboriginal students appeared to be more vulnerable to entering secondary school. This teacher's views are appropriate for concluding the findings as they reflect the reality of what Aboriginal students experienced at this critical time:

Identity is probably the big key, knowing that there's importance, there's pride in their culture, and that's what I've seen over the last few years, is a real identity with many of the students. They're really proud to showcase their culture. Because they're feeling

proud and good about themselves and they're not just being . . . it's not just the behavioural programs that have been really looked at, it's those gifted and talented extension programs, so there's more of a sense of worth. Rather than trying to fix something, it's trying to extend on their capabilities.

These results resonate with the McCourt (2017) study, which revealed that those Year 6 students who had a higher sense of self-concept and confidence would also be likely to adapt better to the new context at secondary school.

### **Section Summary**

This section presented the voices of multiple stakeholders' perceptions of the motives, values, and attitudes concerning high-ability students' transition to secondary school. It differentiated the institutional factors, personal experiences, and school climate characteristics that students, educators, and community members perceived as impacting positively and negatively on the attitudes and commitment to school of Aboriginal and non-Aboriginal students.

## **Results of Research Question 2: Social and Ethnic Classroom Composition and Tracking**

Research Question 2 posed, "What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Head Teachers, Principals) perceive as the impact of transition on social and academic outcomes for students transitioning to different educational contexts (i.e., selective settings, mixed-ability) for secondary school? To what extent are these similar and different for Aboriginal and non-Aboriginal high-ability students?"

## **Overview of the Issue Explored**

First, students' and stakeholders' perspectives of each class climate—the local GAT class and the selective GAT class—are presented. Three aspects of each class climate are examined: social status, quality of teaching, and learning environment. Second, Aboriginal and non-Aboriginal students' and stakeholders' views are compared and contrasted. The data for the selective GAT class were reliant on one Aboriginal student. For an extended coverage of Fay's evaluation (Aboriginal student) of her two transitions, please see later sections (Research Question 4 and Research Question 5). Finally, a discussion of the key findings and themes stemming from the results are presented.

## **Students' and Stakeholders' Perceptions of the Academic Contexts**

### **Perceived Social Status: The Local GAT Class at Fisher and Drahner.**

Stakeholders perceived the GAT classes as having higher social and academic status than mixed-ability classes. Streaming is a mechanism for schools to attract high-quality students. Other schools such as Fisher and Drahner drew students to their school because of the existence of the class. During the interview, I mislabelled the local GAT class at Fisher. Immediately, Matt (Aboriginal student) corrected me: "It's the Q class", explaining everyone in that class "feels good". The Fisher principal recognised that "in Year 7, we tend to get people wanting to be a part of that class [GAT]. So the issue is more people wanting to go into the class than we have space for". At Drahner, Mel (Aboriginal student) identified that she was "in the high" class and that "some kids are really good at maths and science, they're good at that but, besides that we're all pretty good actually". When discussing an extracurricular program she said, "Well, my whole class could be in the gifted and talented program".

**Perceived Social Status: The Selective GAT Class at Lewis.** Some high schools such as Lewis were already sought-after destinations for students by their parents. These schools used an entry test to the selective GAT class to “take the cream” (Drahner principal). Fay (Aboriginal student) described her class: “There’s a lot of smart people in my class. Because it’s a selective class”. Responses from Jane and Kylie (non-Aboriginal students) revealed their belief that the class was exclusive. In examining the reasons for attending Lewis High, Jane was motivated by academic achievement. Kylie’s (non-Aboriginal student) parents/carers thought the school would give her a “good education”. Jane chose the school because “it has extension and homework clubs”. When asked “How did you find out about the GAT class?” Jane replied, “Because I did the selective school exam well, the test, and I got like a reserve for one school, so I got automatically in”. This comment reveals that Jane prioritised the academic status of success in the selective school exam. By cultivating an appearance of effortless, “automatically” getting in implied that she was more able than her peers.

**Selective Class at Tarium.** Tarium was also a sought-after destination for students by their parents. Tim’s mother Kate said that she chose Tarium as “the high school that we selected was within the top 100 state schools”. Being in the top stream during primary school had been Tim’s (non-Aboriginal student) experience for his entire schooling. He alone did not comment on this status to build his self-esteem. However, the GAT class became an exclusive social circle. Tim said that his friendship group became “just my [GAT] class and now we go to the oval and sit there and play sport”. Students in the selective GAT class believed that they were different. Kylie said, “I’m in one of the selective classes, so I think everyone’s doing pretty well”. Jane was surprised that GAT students did not have priority in selection for team sport: “You have to hand in the notice

really quick because it's not like just pupils who's gifted are in it, like whoever hands in their notice first".

**Perceived Quality of Teachers: The Local GAT Class at Fisher and Drahner.**

The philosophy of the principals of Drahner and Fisher, where the local GAT classes were situated, prioritised high-quality student–teacher interaction (see Table 7.5). There was an understanding across the staff that the academic engagement involved the teachers having caring, quality relationships with students. For example, at Fisher, Matt (Aboriginal student) described his art teacher as someone who took time out of his day for him. Students' own and perceived teacher reference norms are interrelated and linked to ASC (Lohbeck & Freund, 2020). Students' who perceive that teacher's reference individuals, by focusing on "student-teacher relationships" (Table 7.5), develop more positive ASC and weaker BFLPE (Dickhauser et al., 2017).

*Local GAT Class at Drahner.* Fay and Mel (Aboriginal students) were related to many of the staff and were proud of these connections. Teachers took them to sports and organised opportunities to participate in special projects and camps. At Drahner, the AEOs supported the quality of teaching and learning in the GAT class. Mel said, "I have quite a lot [of interaction with the AEOs], because they come in our classes and help us". Fay said, "We still get challenged", but it is less pressure than Lewis High as "it's a much smaller school". There were tutors provided by the school and the librarian who had an after-school homework club. Mel said teachers also helped after school in their own time: "There are some teachers who teach us go up there [the after-school homework club] and they can help us with the assignments that they give us". This engagement helped Aboriginal students feel that they belonged at the school. Mel (Aboriginal student) identified the homework centre as the best thing about high school in Year 7: "That [centre] just helps me. They have a lot of uni. students there, so it helps me with my work".

**Table 7.5**

*Themes of Principals' Perceptions About the Teaching Staff That Contribute to a Positive Learning Environment at Fisher and Drahner High Schools*

Themes	Examples From Coded Responses at Fisher and Drahner, Time 3
Teachers at Fisher High	We have 30% of children, we probably have about six workers that are Aboriginal, and then I think we have nine teachers. We often have a lot of staff members that go and play sports with kids during the holidays during night off week . . . One of the things we really focus on there is student–teacher relationships and how that’s striking. So obviously we’ve got an expectation they are trying to work with the students and establish that relationship but also more to the quality of the teaching as well.
Teachers at Drahner High	I tell everybody here Aboriginal education is everybody’s responsibility. Whether you’re the Aboriginal staff, whether you’re the non-Aboriginal staff. Whether you are the support team, it’s everybody’s responsibility including our parents/carers, the community, our AECG are people that lead community education discussions, everybody needs to have a part and work together as far as I’m concerned.

Finally, the local GAT classes were distinctive by the school culture to which they belonged. There was a whole-school directive to promote Aboriginal culture and generally cultural responsiveness in the curriculum. Considering the complex needs that are found in low socioeconomic environments, as Marcia pointed out, behaviour is an issue for subsections of the school community. Matt (Aboriginal student) indicated that at times some teachers did not have control of the local GAT class at Fisher: “The kids who are disruptive and really don’t care, they could start doing work and actually revising and all that”. However, evidence (e.g., Table 7.5) suggests that Fisher and Drahner were operating to try to meet the needs of all students, culturally, socially, and academically.

**Perceived Quality of Teachers: The Selective GAT Class at Lewis.** The Lewis High website marketed the GAT selective classes as employing teaching strategies that challenge high-ability students and allow them to develop their talent. When asked how the high school could have helped her better settle in, Fay (Aboriginal student) felt, “When they had a meet and greet for the teachers, like we didn’t really get to know the teachers

much. And like I like getting to know my teachers”. Overall, she found the different teaching styles at Lewis alienating:

They [the teachers] are different. So, one of my English teachers, he . . . I don’t know how to say it. He stands up all the time and he talks really loud. Sometimes he gets really scary. But then my maths teacher is really shy.

The transition to secondary school signifies a major change in relationships with teachers and in teaching practices. As an only child, Fay did not have the support of an older sibling in the senior GAT class, as Kylie and Jane did, to help her build new social networks.

Support from peers and older siblings had helped Kylie and Jane (non-Aboriginal students) mediate the impact of the competitive stream within Lewis High. They accepted the selective GAT workload and high-expectation orientation, going to the library early to study with friends before school. Inevitably, the threat of being dropped from the competitive GAT class created a high fear of failure. However, the key to their continued engagement at school was the student–teacher interactions. In the same classes, Kylie (non-Aboriginal student) noted, “The teachers really like teaching” but Jane (non-Aboriginal student) said, “No one really asks the teachers for help”. Jane said, “Mainly the teachers take time out to help us with our exams and give us all our notes which we have to study”. The result of failing to meet the performance expectations was “you might not be in a good class next year” (Jane).

***Selective Class at Tarium.*** Although students loved learning, in the GAT classes, there was a mix of mastery and performance goals mentioned in interviews. Tim said, “The workload at the start of the year isn’t that heavy, so the teachers try to slowly put the weight on you so you adjust to high school and the work”. Tim explained, “This term [Term 4], three assignments came at once. So they mostly come at once, and then are due

within the fortnight”. Kate, Tim’s mother, felt that the students in the selective GAT class “were all focused on their academics, they were children who were teacher pleasers, worried about doing something wrong”. Tim noticed that high school was “a lot stricter and teachers have been expecting everything due on time. I haven’t had any incident where I’ve handed in anything late”.

**Perceived Learning Environment: The Local GAT Class at Fisher and Drahner.** At Fisher, Matt (Aboriginal student) felt supported by everyone: “If anybody has questions you’ll help each other”. Matt was straightforward about the fact that people get taken out of the GAT class: “He [my cousin] was in the same class as me for everything but he got moved out”. Matt was motivated by extrinsic rewards: “I’ve been looking forward to that [a trip] and that’s been making me do my work better”. He explained, “It just keeps me motivated so I do well”. He was adamant that he was doing well “across all subjects” despite not doing a lot of homework.

At Drahner, the level of intensity of the work in the local GAT classes was also manageable in the opinion of students. At the beginning of the year, Mel (Aboriginal student at Drahner) thought that “the work isn’t as hard as you might think it is”. By the end of the year, her opinion was that “It’s a lot harder, but when you start doing it more you get used to it”. She added that knowing people at school was a support and help: “It’s been all right. It wasn’t too hard, because I knew most of the people here as well”. When it came to exam time, Mel felt well prepared “because we’ve been studying for the last couple of weeks now” and only “a little bit” worried. As was explained in Chapter 3, students’ own and perceived teacher reference norms are interrelated and linked to ASC (Lohbeck & Freund, 2020).

Regarding teacher judgements, I interpret the findings in Table 7.6 as a clear reference that perceived teachers' reference norm orientations (indicated by the focus on

relationships with individual students) is a significant contextual factor influencing motivational development. Being judged under an individual reference norm more likely results in a more incremental view of intelligence, as the individual reference norm is strongly associated with effort-related feedback (Dickhauser et al., 2017). There are six main ways in which the participating secondary schools developed academic persistence and academic planning within the local GAT classes: (a) conducting a transition intervention program (Advancement Via Individual Determination [AVID]; see later sections and Chapter 9), (b) building teachers' respect for Aboriginal culture, (c) including parents/carers in supporting their children, (d) building Aboriginal students' trust and providing consistent relationships at school, (e) students being Aboriginal role models and having Aboriginal role models, and (f) ensuring that there is a team responsible for Aboriginal education in the school. For example, Table 7.6 reveals that teachers at Drahner High were proactive in building trust, dialogue, and relationships with Aboriginal families. Fisher High also sought to build home–school–community partnerships with Aboriginal people (as shown in Table 7.6). Aboriginal culture can be seen to be the foundation of teaching, learning and, community.

**Table 7.6**

*Themes of Multiple Teachers' Perceptions on the Factors That Contribute to Learning Environments in Local GAT Classes at Fisher and Drahner*

Main Themes	Examples From Coded Responses
Intervention program	<p><b>Fisher:</b> Our school's running in AVID at the moment, and one of our primary schools initially was to have picked up on AVID strategies and that has flown through, making it a lot easier, because the techniques are quite the same, the languages are the same. So that's been a lot better. (Aboriginal Head Teacher)</p> <p>We've just created a team structure now to be very tight, which is a lot more similar to the primary schools where they have a team of teachers which is cutting down on having so many teachers. (Aboriginal Head Teacher)</p> <p><b>Drahner:</b> I know that a couple of [Year 7] students who went home very stressed and all that with not just the school life, with home life.</p>

Main Themes	Examples From Coded Responses
	<p>And how much pressure that homework, all their assessments and exams that come up through the year that's put on these young kids, it's pretty demanding. (Aboriginal Teacher)</p>
Teachers	<p><b>Fisher:</b> I get a lot of complaints about kids coming out of class for cultural programs, a lot of resistance. And I don't think that they see the benefits teaching stuff, don't see the benefits of those programs because Johnny might be a really naughty little boy in class, but in the cultural program he leads the didge group. He's such a leader and culturally knows everything. So I think they just don't see those things because they're just blind-sided. (Aboriginal Head Teacher)</p> <p><b>Drahner:</b> It's just a rippling effect and how different their workload is when they get to school and they know that this teacher's there, not just to be on top of them, but just to help them get through school. (Aboriginal Teacher)</p>
Pastoral care	<p><b>Fisher:</b> Consistent workers. It's just been having consistent Aboriginal workers to have a face for parents to contact. (Aboriginal Head Teacher)</p> <p><b>Drahner:</b> Going back to cultural, if you can trust . . . If you can get some trust out of these kids, helping them in education will go a long way. (Aboriginal Teacher)</p> <p><b>Drahner:</b> We had a camp and the children from another school kind of got into this who's better at gymnastics than the other one, that kind of thing. It boiled down to quite a racist exchange. And one of the children said oh Miss the kid called me Black, one of the Aboriginal kids. I was furious, you know, because we are so down the track with that, so we all sat down, we talked about it, we know that that's wrong. I approached the other school and said, you know, my kids were offended because their response was oh yeah, I'll note it. I was so furious about it, you know, that I had been dismissed, that I'd addressed that. I talked to the kids about that because they were there, you know, and I said this . . . what was wrong about that situation? (Non-Aboriginal Teacher)</p>
Role models	<p><b>Fisher:</b> Initially we used to have a lot of mentoring going on between our [secondary school] Aboriginal students and primary school Aboriginal students. Our students would go over and they would be a mentor. (Aboriginal Head Teacher)</p> <p><b>Drahner:</b> Now a lot of parents have got jobs and they see their mum and dads go early in the morning, going to work, I've got to go to school, and sort of getting them in that sort of routine where I've got to do this when I get a bit older too. (Aboriginal Teacher)</p> <p><b>Drahner:</b> I think that chiefly I have evolved as a teacher in so many ways through our Aboriginal kids because it used to be something I wouldn't [discuss, that is, racism], I'd skirt around it in other schools. And I'd think like let's, I'd keep it very sort of on the side. (Non-Aboriginal Teacher)</p>
Aboriginal education	<p><b>Fisher:</b> [For our Aboriginal education team] we've had lots of non-Indigenous people putting their hand up and saying, we want to be involved in the process, which has been a real eye-opener for a lot of teachers in the school. And this year, in particular, we got our highest parent rate coming in. It's tripled. (Aboriginal Head Teacher)</p> <p><b>Drahner:</b> These days the parents and the grandparents know how</p>

Main Themes	Examples From Coded Responses
	<p>important education is and the parents or grandparents, when they come up and meet out of school, where we know that Aboriginal kids love to meet with their own mob out in the community, they're more relaxed and then they're more open to talk about issues. (Aboriginal Teacher)</p> <p><b>Drahner:</b> I believe that one of our strengths is Aboriginal perspective in education. It's very much on our agenda constantly, so we teach very much from that perspective. I've taught in other schools and I've not taught anywhere that actually does that, and it's so embedded in our culture that it's a natural process for us. (Non-Aboriginal Teacher)</p>
Community	<p><b>Fisher:</b> We have some very smart students here at this school that just, they don't even look at university because they're just, it's never been talked about in the house. It's not an expectation. And they've got blue-collar workers that just think, well, I'm going to go and get a trade. Some Aboriginal parents have that fear of high school. They don't come into the high school much. I think the fear, or the not valuing education, I think that also tends to fall on some of the Year 7 students. They don't seem to value education because they've never had, they didn't have education in their lives. (Aboriginal Head Teacher)</p> <p><b>Drahner:</b> Just our Aboriginal students I think it's more because culturally we're all just so close to this one teacher. You go home, you go to their lifestyle, they know their lifestyle at home, and change is not really good. (Aboriginal Teacher)</p> <p><b>Drahner:</b> You know they're just so delightful in how they, their community is everything and it's like we talk about things very openly. In my experience, um, the teacher and parent working together is . . . it's a formidable combination. (Non-Aboriginal Teacher)</p>

Both Drahner and Fisher high schools used a combination of approaches to build the resilience of students to make school more relevant and meaningful. The principal at Drahner believed that “when Aboriginal education becomes everyone’s responsibility” and students start to value school, there will be a sense of connectedness to school and engagement in learning.

**Perceived Learning Environment: The Selective GAT Class at Lewis.** The Lewis High website marketed the streamed classes as offering opportunities for high-ability students to interact with coequals in an academically inspiring setting. My participants Fay (Aboriginal student), Kylie, and Jane (non-Aboriginal students) in the course of their Time 2 and Time 3 interviews indicated a focus on assessment and high grades at Lewis High.

The students were persistent and willing to make significant time sacrifices to meet the high expectations set. Fay (Aboriginal student) said, “It will be really hard at the start but you just got to like, just go for it because it’s going to get easier”. Each morning Jane’s friends would go to the library to work. They all had older sisters to help them with the assignments. Jane explained, “The work is a bit more harder and you have to kind of keep up with the work and the assignments that are really due, you have to study hard”. At Time 3 (Table 7.2), her advice to such students was “Keep[ing] up with the work, stay[ing] on task and listen[ing] to the teachers”.

The students who thrived in this environment tended to have a keen dedication to study. Fay (Aboriginal student) said, “The work is a bit harder and you have to kind of keep up with the work and the assignments that are due, you have to study hard”. In Term 1, she listed some of her work:

Like last week I had two assignments due. One was for like practical PE, and the other one was for theory PE . . . and we had to do a French assignment. And we had to form like, how like go on a holiday. And we had to plan a 10-day trip to France. And I had to make a poster the other week.

Jane explained that six people in the class were known not to be “able to keep up with the work. I study with my friends . . . it was really hard for me to keep up” but was motivated by the fear of moving to a mixed-ability setting. Kylie (non-Aboriginal student) reported, “After tests, everyone says, what did you get?” There is “way more homework and more exams and assignments”. These findings are supported by a body of research that suggests GAT environments might promote more competitive academic climates (Ho, 2020).

The results revealed that there was, however, a gradual shift from Term 1 to Term 3. Fay (Aboriginal student) said that “some people [at Lewis] told me that like in Year 7

they like push you really, really hard. But then they back off in Year 8". Jane (non-Aboriginal student) said, "At the start of the year I liked it, but it gets harder" and "if you get left behind and you don't know what to do, then you just stay behind the whole time". Her language highlights social comparisons are made with the group in regard to progress. A competitive environment is known to exacerbate the BFLPE (Marsh et al., 1995).

The data showed that students were aware of the demands of work. Fay (Aboriginal student) was convinced that other classes did not have as much work, and that the work was demanding "because I was put into the selective class". There were high expectations of output: "My friends always come with me, like all come with me to the library to do work, yes, each morning they'll come" (Jane, non-Aboriginal student). Students were aware of how their peers were doing and their relative achievement standards. For example, students observed each other to monitor their own progress to maintain their position within the class. On maintaining their status, all participants of the GAT classes mentioned "working hard".

The focus on effort was foremost in the minds of the participants in the GAT class. However, it was not always due to the difficulty of tasks but the amount. For example, Fay (Aboriginal student) described the routine for homework:

We have a lot of maths homework but that's pretty easy . . . We get [science] worksheets every week and that's like for homework. And it's like revision for our test, like our half-yearlies. We got given a revision sheet and we just work on that. And that was pretty easy.

When asked to clarify how she found the work in high school, Kylie (non-Aboriginal student) said, "It's been a little bit challenging but not hard". These excerpts reveal that comparisons were made as students acclimatised to the expectations in secondary school. As the classroom climate in primary school was less competitive, some

students had become accustomed to the new performance culture at Lewis in the selective GAT class.

The students pushed themselves to meet the high expectations set. Fay (Aboriginal student) explained the high demands in the selective GAT class: “Sometimes it gets hard. Like for history, we had to do like 30 pages in a week”. Interviewee Kylie said, “On some of the assignments I’ve gotten some really good marks and the same on tests”. As a result of the prominence of marks and rankings, the climate of the selective GAT class was more competitive than primary classes (Figure 7.1). The focus on performance was foremost in the minds of those participants in the GAT class. When asked what helped her in high school, Fay (Aboriginal student) said, “just working”. Kylie (non-Aboriginal student) said, “It’s been a little bit challenging but not hard”. The underlying motivation was for many students a belief: “You might go down next year if you are not good at anything like, say if you are not good at maths you might go down a class. That is what might happen” (Jane). Jane perceived that “in high school, we have to listen to teachers and really talk with the teacher while writing”. Jane mentioned the learning environment including group work, independent note taking, and listening to the teacher talk. Jane was aware that some people in her class (about six) were worried that they may not be in the class next year. Her view was there were “not many people in the class who couldn’t keep up with the work. And they don’t really work together, and they’re not really good at work”.

***Selective Class at Tarium.*** Tim (non-Aboriginal student) perceived that “everything they teach us leads to the exam and it’s really good when they revised it at the end and your brain sort of refreshes and you know what to do”. He realised that the GAT class had “polite” teachers, but he had heard stories that teachers in other streams “are very strict and unkind”. Students’ own and perceived teacher reference norms are interrelated and linked to ASC (Lohbeck & Freund, 2020).

**Multiple Teachers' Perceptions on the Factors That Contribute to Learning Environments in Selective GAT Classes at Lotown, Tarium, and Lewis.** There were five main ways the participating secondary schools developed academic persistence and academic planning within the selective GAT classes: (a) differentiation of the selective classes and providing tutoring, (b) providing time and building teachers' professional learning, (c) including community in supporting their children, (d) building Aboriginal students' trust and providing consistent relationships at school, and (e) students being Aboriginal role models and having Aboriginal role models. Each of these schools, Lotown, Tarium, and Lewis, indicated that they could improve on building connections with the Aboriginal community. For example, Table 7.7 reveals that teachers at Lotown High were proactive in building trust, dialogue, and relationships with Aboriginal families. Tarium also sought similar support systems with Aboriginal people to build home-school-community partnerships (as shown in Table 7.7).

**Table 7.7**

*Themes of Multiple Teachers' Perceptions on the Factors That Contribute to Learning Environments in Selective GAT Classes at Lotown, Tarium, and Lewis*

Main Themes	Examples From Coded Responses, Time 3
Differentiation	<p><b>Lotown:</b> Academically speaking, for those classes, we look at all the academic stuff. They're going to stay together throughout the junior schooling. [The idea] is to retain, I suppose, those [academic] students and let them know that we can cater for you. (Non-Aboriginal Teacher)</p> <p><b>Tarium:</b> That those kids [in the local selective GAT] were going to do the same work as selective [DoE selection]. Now we don't report the same way because obviously it's unfair to put them in, because they've earned the right to be on their own discretely. But they all do the same work. (Non-Aboriginal Head Teacher)</p> <p><b>Lewis:</b> But it's all the same work [between the mixed-ability and GAT classes], it's just a differentiation of learning [regarding student goals]. Whatever it is that they feel they need. So let's say that most of them are to improve academically in a subject, per se, to improve on extending their writing skills. So then they've been offered tutoring or access to the homework centre has been suggested to them. (Non-Aboriginal Teacher)</p>
Teachers	<p><b>Lotown:</b> [For teachers] time is . . . is our biggest . . . our biggest problem in any school, to be quite honest and being able to create that time. (Non-Aboriginal Deputy Principal)</p>

Main Themes	Examples From Coded Responses, Time 3
	<p><b>Tarium:</b> We're a high-value-add school. So this school has totally transformed in the last 4 years in relation to teaching and learning, in the way that we support students, in the way that we identify students, in the way that we track students, in the way that we look at professional learning plans, in the way that we look at differentiation of teaching practices at the coal face. (Non-Aboriginal Deputy Principal)</p> <p><b>Lewis:</b> With the teachers, probably the teaching community. If they're not cognisant of behaving, if they're too regimented, if you don't connect, you lose them. Some teachers have more patience than others, and that's just life. (Non-Aboriginal Teacher)</p>
Pastoral care	<p><b>Lotown:</b> So to me teaching our . . . Indigenous population in comparison to non-Indigenous and the health disparity and what-have-you . . . it's a tough question. (Non-Aboriginal Teacher)</p> <p><b>Tarium:</b> So from a selective point of view, in the last couple of years we haven't had too many Aboriginal kids in our selective stream. We've had a few, not many. So I suppose the challenges that they have been confronted with are very similar to the challenges of a selective. So it's more about getting here, getting an understanding of the organisation, working with 10 teachers instead of one teacher. Having a level of high expectation where they've just come from a primary school now, and what does it look like in a high school. That sort of fear of the unknown. (Non-Aboriginal Head Teacher)</p> <p><b>Lewis:</b> I'm the Aboriginal support coordinator. I get a lot of kids. Something if a girl needs to come out of class or is having a hard time, I come and sit here. We've got permission that they'll sit and do their work in the library or have a chat with me and go back in. (Non-Aboriginal Teacher)</p>
Role models	<p><b>Lotown:</b> I think certainly positive role models are a really good thing, having positive role models and I mean sports people or high academics or teachers that identify proudly.</p> <p><b>Tarium:</b> I mean we've got one that's currently just doing his HSC, and he was one of the brightest Aboriginal kids that we've ever seen. He's at the moment one of our prefects. So he's always been in a formal leadership position. He held a formal leadership position the whole way through, for 6 years. (Non-Aboriginal Head Teacher)</p> <p><b>Lewis:</b> Generally speaking, the families are very supportive, and they want their child to do well.</p>
GAT class	<p><b>Lotown:</b> Essentially the best 30 kids in the year group. So they may not necessarily be gifted and talented.</p> <p><b>Tarium:</b> When we start to look at our classes because we want to give them the best opportunity to learn in a situation where there's more like-minded kids. Whether they gravitate towards literacy or numeracy, whether they're strong in both, we normally do, as much as we would not promote it, there would be a "one" and a "two" class within our selective [GAT classes]. But even though they're partly mixed-ability, we sort of still have an idea that one [GAT class] is still a little bit more gifted than the other [GAT class], based on what we've got. (Non-Aboriginal Head Teacher)</p> <p><b>Lewis:</b> The girls here tend to be quite supportive of each other, and that's generally the mainstream. (Non-Aboriginal Teacher)</p>

Main Themes	Examples From Coded Responses, Time 3
Community	<p><b>Lotown:</b> As being Aboriginal, which is great, and they're starting to really get lots of things happening. So, there's talk of getting a garden built, which is really, really cool. [In terms of engaging Aboriginal community] it's probably that we can probably improve on, to be quite honest. (Non-Aboriginal Deputy Principal)</p> <p><b>Tarium:</b> Our Aboriginal liaison officer for the whole time she's been here in 18 years and she's very, very passionate about engaging the community, engaging Elders, and making sure that even with multicultural and talent quests and making sure the profile is as big as it possibly can be. (Non-Aboriginal Head Teacher)</p> <p><b>Lewis:</b> That they have a number of challenges, just because the whole place is foreign. I think it might be more intimidating or more daunting for Aboriginal students. Not having network, not having friends or family in a place might be more off-putting for the Aboriginal students. (Non-Aboriginal Teacher)</p>

Whereas the teachers in the secondary schools with low Aboriginal student populations clearly have well-meaning intent to “give them (Aboriginal students) the best opportunity”(Tarium; GAT class) there is clearly a sense in which Aboriginal students are an out-group “Not having network, not having friends or family in a place” (Lewis; Community). The findings of Table 7.7 reveal indications that teachers' used reference norm orientations (indicated by the social comparison of students). Research has found social comparison was associated with a steeper decline in students' ASC. The Aboriginal support coordinator, who was non-Aboriginal had put in place a system to help Aboriginal students; “they'll sit and do their work (with me) or have a chat with me and go back in” indicating that Aboriginal students commonly had “a hard time”. Being judged under a social reference norm more likely results in a more fixed mindset view of intelligence and lower self-concepts (Lohbeck & Freund, 2020). A more frequently use of a social reference norm has been found to be more strongly related to achievement comparisons and wanting students ‘to do well’.

## **Aboriginal and Non-Aboriginal Students' and Stakeholders' Perspectives Compared and Contrasted**

Aboriginal students mentioned similar challenges to non-Aboriginal students such as meeting expectations, being the youngest again, and increased workload. The main difference between the selective GAT class at Lewis High and the local GAT class at Drahner High was the amount of pressure. Fay (Aboriginal student) explained the difference as “when I was at Lewis I was in the top class. And we were expected to do really well, and we were expected to be, you know. But here [Drahner], it’s a little bit more chilled out”. When asked whether she thought the local GAT class was as challenging as the selective GAT class, Fay said, “I don’t”.

**Lewis High.** In the selective environment of Lewis, another challenge for all students was working out different teachers’ expectations: “In primary school we knew what the teacher expected but now you have different teachers, they have different methods of teaching you. So you have to get used to it” (Fay, Aboriginal student). Every school had some difficult teachers. They all felt a little intimidated by being the youngest in the new environment: “We’ve gone from like, the older kids in the school to the youngest” (Kylie, non-Aboriginal student). The pressure about working to deadlines and increased workload was discussed with greater intensity at the end of the year of transition, after the Term 4 exams: “And she [the teacher] was away so I had to like scram [to do it] because I didn’t know about the assignment”.

**Drahner High.** The local GAT class was not threatening to the ASC of the Aboriginal participants. In contrast to the non-Aboriginal students, the Aboriginal students, such as Matt and Mel, in the local GAT classes rarely spoke about being dropped from their streamed class. Once Fay had made a second transition to Drahner High, she no longer felt this threat. There were indications that Drahner High was a less pressured and

competitive environment. Both Fisher and Drahner were located in low-SES environments and recognised the complex and historical nature of the multilayered issues that were in the Aboriginal community.

**Transitioning From a Selective GAT Class in Primary.** Matt (an Aboriginal student) and Tim (a non-Aboriginal student) both transitioned from the same selective primary class at Belby Primary to a selective GAT class. Matt enrolled at Lotown High, and Tim enrolled at Tarium High. They had both been in the same class for 6 years. At the end of primary school, evidence revealed they experienced the BFLPE (see Chapter 3). Both experienced self-doubt from being in a high-performing class among high achievers. They transitioned initially to similar (in terms of level of achievement) GAT classes (higher achievement environments than at primary school) in different high schools. However, Tim benefited from the assimilation effect of a higher achieving class composition, and because of his pre-transition achievement was able to make downward comparisons to peers. Matt, at his first high school, in his first transition, did not make downward comparisons; rather, he made upward comparisons. He felt helpless as the teachers at “the old school . . . they didn’t help at all”. He explained: “I fit in [here]” and “nobody treats me like I’m different” (Matt). In his second transition, he was confident as a high achiever in a lower ability GAT group: “We had NAPLAN this year. And it wasn’t really that hard. I actually did pretty good, in the eights and nines, basically”.

**Fisher High.** At Fisher High, Matt was able to make downward comparisons. For example, Matt felt that students who invested more organisation and effort into the increased workload at secondary school experienced more academic success. Thus, by thinking of ability as a set of skills, instead of a capacity for learning, students were motivated by a positive causal relation from effort to ability. In their reasoning, if ability were a set of skills, they could be developed and improved by effort and practice. If ability

were a capacity, it had physical constraints that limited how much improvement could be made by practice and effort. Examining the level of ability of selective classrooms can help advance understanding the impact of social–cognitive responses on the social and academic outcomes of Aboriginal students.

### **Discussion of Key Findings**

#### **Performance-Oriented Classroom Climate at Lewis High and Tarium High.**

An important academic outcome of the transition was the formation of the belief in intelligence as a static, fixed entity. For example, as the achievement level compared to her primary school was raised, Fay made upward comparisons to other students in the class, which was damaging. She explained that she started doubting her ability as she felt the pressure to do well and “somehow I just thought that I couldn’t [do well]”. Fay, unlike the other participants, never described herself as intelligent.

By contrast, for Matt, the achievement level compared to his primary school was initially comparable at Lotown, but in the local GAT class at Fisher, much less challenging. The words and actions of Matt (Aboriginal student) indicated that he believed his ability was innate and unchangeable: “When I do them [tests], I don’t revise or anything”, and his mother commented that despite this, he always got a “great mark”. His mother had not noticed he had not done much homework in Year 7, while Matt said his father had told him, “You’re so good [at school]”. Matt consistently stated he was “pretty good” despite not pushing himself with extra revision or homework. He believed he had a fixed entity of intelligence that was of a “high standard”, stating, “I didn’t like it [history], but I did get good results. I don’t know how, but I just did”.

The responses from Lewis High and Tarium High were also indicative of a performance-oriented classroom climate in the GAT class. Fay (Aboriginal student) described Lewis: “In our class it was very competitive. It’s just complicated. But yes, the

teachers put lots of pressure on us to do well”. Achievement goal theory (Elliot, 2020; Elliot & McGregor, 2001) proposes that performance-oriented students have a high achievement orientation, tend to value competence, and expect success. Students who have this orientation often hold the belief that success is the result of their superior ability (Senko & Harackiewicz, 2002). In a model proposed by Elliot and McGregor (2001), this conceptualisation can be broken down to include approach and avoidance components. A performance-approach orientation involves validating and proving one’s high-ability. In her interviews after transition, Fay (Aboriginal student) was protective of how she presented herself, validating herself by stating when asked how she was going at school: “I’m pretty good”. Conversely, in Time 3, her repetition of the words “just chilled” indicated a change to a performance-avoidance approach. In the second transition at Time 3, Fay cultivated an appearance of effortless achievement and striving (see “Results of Research Question 4”).

**Reaction to Performance-Oriented Environment.** For Fay (Aboriginal student), the social outcome of transition was alienation. The increasing focus on grades and performance at Lewis High may be the reason Fay felt she was not in the right place. Fay felt she did not belong. In Fay’s reasoning, the fact that others appeared to be motivated by demanding school work, that they were “driven”, was an indication they had higher intellectual ability. With their high-ability, they self-initiated their constant studying in the library at the expense of leisure activities.

In answer to Research Question 2, a significant impact of transitioning to a selective GAT environment is potentially developing a negative perception of one’s abilities because of comparisons with others in the class. Fay (Aboriginal student) expressed a negative perception by her self-assessment of her grades: “Not very good because I knew that other people would be way better than me, because we were in a

selective class”. When describing her situation at school, she described herself through comparison with others. For example, she stated, “I’m not like struggling too bad but yes . . . there’s a lot of smart people in my class”.

When comparisons between students’ effort and ability impact upon on how they perceive the world, there is a between-participant effect. A between-participant effect examines differences between individuals. Lewis High had a two-track academic system to separate an elite group of students into a selective GAT class and mixed-ability classes. Tracking, or streaming, means separating students by academic ability into groups for all classes or certain classes. Classification by academic ability fosters competition and comparisons. The girls at Lewis reacted differently to the competitive classroom climate. Kylie (non-Aboriginal student) reacted confidently. Fay (Aboriginal student) reacted with insecurity. Most schools that have a two-track academic system would expect to have students with anxiety levels and self-doubt associated with the BFLPE (Marsh et al., 2008).

**Contrast Effect Operating in High-Performing Students.** One known effect in social comparison theory is the contrast effect. The contrast effect occurs when, in the mind’s perception of self, an individual views themselves as different to the reference group. As a negative relationship between a student’s mental representation of their self and the reference group occurs, they experience self-doubt and a diminished self-concept. Consistent with the findings of other studies (Becker & Neumann, 2016), the BFLPE was not present at the beginning of the year but emerged only towards the latter part of the year. Throughout Year 7, there was a culmination of assessments and examinations. By the beginning of Term 4, the rankings from NAPLAN, mid-year examinations, and yearly examinations would have been completed and known. In each interview, as has been described, students could relate their positions and rankings for each of these

examinations. For example, in the Term 4 interview, Matt (Aboriginal student) explained, “They’ll ask me, what did you get on your test? Oh, this number. And then we’ll share our results”.

An assessment of effort expenditure can have a negative effect on the thinking of high-ability students. Muenks and Miele (2017) identified the developmental change in adolescence, where students feel that they are not as smart as others if they need to work harder than others for the same result. For example, Fay expressed expectation to continually work and perform to prove she was GAT, in the selective GAT class, which amounted to “pressure”. She described feeling stress-free at Drahner “and I don’t have as much pressure as Lewis”. By utilising more effort, they feel judged about their intellectual ability. At Drahner, there were no judgements about intellectual ability. Fay said, “They’ve got [extracurricular] gifted and talented on Thursdays, so it’s just a little bit of extra work if you want to do it”.

**Assimilation Effect Operating in High-Performing Students.** Another known effect in BFLPE theory is the assimilation effect (Marsh, Ludtke, et al., 2015). The assimilation effect occurs where, in the mind’s perception of self, an individual views themselves positively as similar to the reference group. In the case of Matt (Aboriginal student), as shown in Table 7.2, he engaged in the selective class at Fisher and connected with his peers and therefore had a positive relationship between academic self, his intellectual ability, and the GAT class. The similarity between himself and individuals in the class helped Matt to assimilate and benefit from this positive assimilation effect. The similarity of classroom settings in terms of similar academic achievement in primary school to that of the new class transitioned to in secondary school can also help an individual, such as Matt, assimilate into a new setting. The movement between selective academic environments has not been emphasised as a moderator of BPLFE, but using the

quadripolar model, the similarity in academic levels between settings contributed to Matt experiencing a positive assimilation effect of the BPLFE. Crucially, receiving an “ability label” (from membership in the GAT class) and self-confidence in learning, compound as they impact on other beliefs and behaviours. BFLPE’s negative effects are related to ability-beliefs, not actual academic performance.

**Positive Effort–Ability Dynamic.** Academic preparedness is known as a strong predictor of academic success in the transition to secondary school (McCourt, 2017). Matt was very academically prepared for secondary school: “I basically know pretty much everything they expressed in our primary school” (Matt). Matt transferred into secondary school after receiving 6 years of high academic intensity in a selective stream (GAT class) within his primary school. Matt benefited from the assimilation effect of a higher achieving class composition, and because of his pre-transition achievement and the lower average ability in the new class, he was able to make downward comparisons to peers.

Matt’s perceived effort source can be understood more clearly in terms of the quadripolar model (Covington, 1992), moving from a classroom environment with high success expectations (Belby; Overstriving) to a classroom with lower success expectations (Fisher; Self-protecting) in his second transition. He moved into classrooms where there was a two-band difference between primary and secondary. In addition, the “years of progress” measure of the Fisher GAT classes (ACARA, n.d-b; CESE, n.d.; source identifiable on application, see Kaiser, 2009) indicated that the lack of challenge in this classroom setting would slow his academic growth. Years of progress is a measurement that adjusts for the nonlinear rate at which students typically gain NAPLAN scale scores as they move through school (Goss et al., 2018). Student progress for a given cohort is compared by estimating the difference in equivalent year level of the typical student over a given timeframe. Although he was in a classroom environment with high success

expectations, as it was the GAT class, the class-average academic growth was slow. Matt's consistent confidence with everything but English being "easy" indicated the lack of academic challenge that he experienced throughout the transition period until the end of Year 7.

### **Conclusion Research Question 2: Two Opposing Social Comparison Effects**

The impact of transition on social and academic outcomes for high-ability Aboriginal and non-Aboriginal students was a psychological response, a coping mechanism based on the conditions in the selective GAT class of competitive attitudes and behaviours. In response to Research Question 2, the data seemed consistent with previous studies that demonstrated that in streamed GAT classes, academic comparisons and competition dominated, and the BFLPE was cultivated (Becker & Neumann, 2016). An example of the contrast effect was found in one participant (Fay, Aboriginal student), and an example of the assimilation effect was found in another (Matt, Aboriginal student), impacting their motivation during transition. The key emerging themes relating to the research question posed included the importance of both the effort and achievement comparisons to the reference group, the development of performance-oriented climates in high school, and the movement between academic environments as a moderator of a positive or negative BPLFE.

Each of the participants exhibited the BFLPE in different ways. No reference norm yields the 'complete' picture of an achievement. A student may not recognise her learning progress because she only makes comparisons with other peers. Fay's (Aboriginal student) beliefs about herself were strongly influenced by social comparison. Students like Fay who are more engaged academically experience a stronger BFLPE (Cheng & Lam, 2007). A contrast effect, such as Fay experienced, is also stronger in students who are not well integrated into a friendship group (Szumski & Karwowski, 2015). However, Matt

(Aboriginal student) was well integrated into friendship circles at Fisher. The assimilation effects that he experienced may be associated with his close connections with the high achievers in his class. The finding of my research supports the virtuous and vicious cycles of contrast and assimilation effects in BFLPE theory where social comparisons and self-concept are linked by upward and downward spirals of effect (Hermann et al., 2016). My research also extends the findings of BFLPE to Aboriginal Australian students experiencing transition to urban high schools.

### **Section Summary**

This section found that Year 7 GAT classes served as frames of reference shaping the ability–effort reasoning of the students in transition. High-achieving students' thoughts became more oriented to their assessment and performance, comparing each other's rankings and results. Moving between academic environments impacted motivation as classes were grouped by ability and often teachers delivered curriculum according to that grouping. Therefore changes in learning environments may possibly be a facilitator of the BFLPE. Students transitioning from less-competitive environments to competitive environments experience an impact on their self-concept that has a complex process based upon assimilation and contrast effects where social comparisons and self-concept are linked by success and failure self-perceptions. This differential creates a dilemma, particularly for Aboriginal students.

### **Results of Research Question 3: Individual Variables**

Research Question 3 posed, “What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Head Teachers, and Principals) perceive are there relationships between effort, achievement, and

sense of self for high-ability students transitioning into streamed classes in the first year of secondary school?”

### **Overview of Issue Explored**

In this section, I analyse transcript data from different school environments. Results, obtained from my analysis of keywords in the interview transcripts, reveal how much a student discusses effort, ability, or their performance at a particular point in time and in a particular context. This narrative analysis may indicate the differences in thinking and an indication of the levels of competitiveness between the unique school contexts. Systematic methods of narrative analysis, such as keyword analysis, are required to understand interview data, as well as coding and other categorising strategies (Marshall & Rossman, 2016; Rubin & Rubin, 2012).

### **Keyword Analysis: Reasoning About Effort Expenditure**

Pre- and post-contexts, as well as a person's ASC, can potentially predict the academic motivation or demotivation for a student. The present cross-sectional study analysed four different transcontextual transitions across primary to secondary schools and two contextual transitions from a secondary school to a new secondary school. The school climate construct is complex and multidimensional and beyond the scope of this study. However, of particular relevance to this study is the performance orientation or the competitiveness of the GAT environments that students enter in Year 7. The quadripolar model will be used to explain movement between performance orientations between school settings and the accompanying strength of the BFLPE (see Chapter 3). The subfactors that impact academic achievement are used to define school climate: academic emphasis (ability), academic optimism (effort), and achievement (Maxwell et al., 2017). The assessment of school climate (i.e., a primary classroom or a GAT classroom) is limited to

the type of student talk that a specific setting generates at that time. The three types of keywords analysed are ability focused, effort focused, or performance focused.

Using keyword analysis, these differences in dialogue were found in transcripts, revealing varying amounts of competition between school climates. A competitive learning environment promotes a performance-oriented classroom culture, a characteristic of GAT programs (Marsh et al., 1995). In the secondary GAT classes, the students were convinced about how much effort they needed to invest in order to perform (Figure 7.1). When asked what advice they would give to Year 6 students, the recurrent answer was “work hard”.

Overall, the major theme that emerged from the keyword analysis of the interview data was that thinking about performance increased in secondary school. Although some students maintained similar reasoning about self-efficacy beliefs, effort expenditure, and performance across the transition, for others a decrease in thinking about effort expenditure may be an indicator of demotivation.

### **Increase in Thinking About Performance in Secondary**

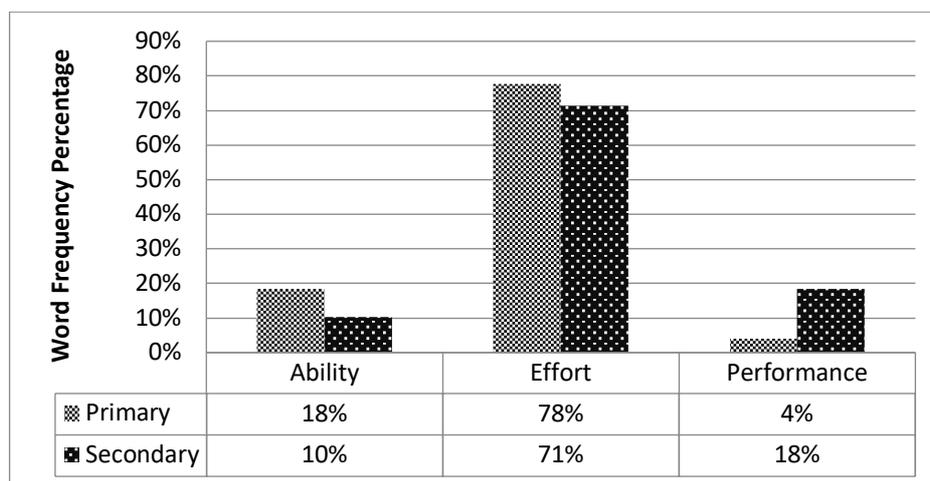
A large body of research indicates the declining trends in student motivation occurring in the secondary school context (Eccles & Roeser, 2011; Wijsman et al., 2015). “This increase in the likelihood of adolescents being exposed to more performance-oriented/relative ability focused classrooms likely contributes to the declines that exist during adolescence in school motivation, school engagement, and achievement” (Eccles & Roeser, 2011, p. 228).

This pattern is consistent with increased thinking about performance in Year 7, as revealed in Figure 7.1. There was an increased frequency of words relating to success and achievement in the secondary context across all students, from 4% in primary school to 18% in secondary school (Figure 7.1). Overall, participants used fewer words associated with ability (smart, gifted) in the new setting despite being in GAT classes. The shift to a

focus on performance may be related to the decrease in thinking about effort in the transition from primary to secondary (Figure 7.1). Despite a large variation in the sampling of classroom climates and types of high schools the word-frequency results (in Figure 7.1) reflect more than a 10% average decrease in reasoning about effort as students transition into secondary school. The increase in thinking about ability and performance suggests that the mindset of the culture of secondary school may promote increased thinking about competition and ‘fixed mindsets’ (Dweck, 2017).

**Figure 7.1**

*Development of Reasoning About Effort Between Primary and Secondary Contexts*



*Note.* This figure demonstrates the frequency of keywords from the interview transcripts, converted to percentages.

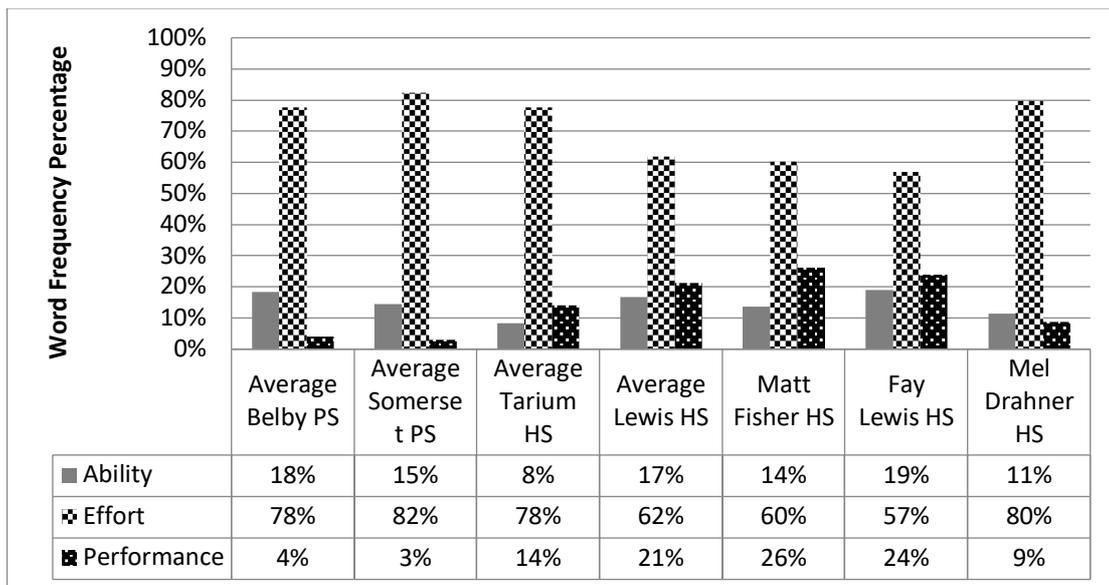
### **Fay (Aboriginal Participant): Individual Variables Across Pre- and Post-Contexts**

The movement between low-effort and high-effort academic environments influences self-perceptions, and this differential may be indicated by the frequency of the word “effort”. Keyword analysis of the variable “effort” across the pre-and post-contexts are identified in Figure 7.2 by school. The analysis for primary was averaged between participants but in secondary was based on individuals (as they went to different high

schools). In Figure 7.2, Fay’s reasoning about effort decreased from 82% to 57%, more than 10% relative to most other participants. A decrease in thinking about effort may indicate a decrease in motivation. As discussed in “Results of Research Question 2”, analysis of Fay’s interview transcripts at Lewis High indicated possibly low motivation and fear of failure as a result of moving between pre- and post-contexts in transition. In response to the question, “Did it worry you going into the mid-year exams?” Kylie replied, “A bit because if you don’t get a good mark, you might not be in a good class next year”. The movement between academic environments is possibly a moderator of BFLPE, and in this case, creates a negative contrast effect with Fay’s high-achieving peers at Lewis.

**Figure 7.2**

*Development of Reasoning About Effort*



*Note.* Average = more than one participant in the interview analysis with the results averaged. PS = primary school. HS = high school.

The movement from low-performance to high-performance academic environments influences self-perceptions. Performance in GAT settings has been found to be oriented towards either the achievement of success or the avoidance of failure (Lohbeck & Freund, 2020). In Figure 7.2 there is an average decrease in reasoning about effort from 78% to

71% for Belby Primary students, who spent six years in a high-track primary class, and transferred to secondary schools where average ability was higher. Interestingly, the average decrease in reasoning about effort for the Somerset Primary students, who were from mixed-ability primary classes was 82% to 66% in the semi-structured interviews.

Being judged under a social reference norm may result in a more fixed view of intelligence and lower self-concept. In Figure 7.2, Fay's reasoning about performance increases from 3% to 24%, and she is thinking about performance 3% more than the average of the three Lewis High girls (Time 2, as shown in Table 7.2), which was 21%. An increase in thinking about performance may indicate an increase in competition. The transcontextual reasoning resulting from this movement between pre- and post-contexts, from a less competitive context such as Somerset to a competitive such as Lewis, may be poor ASC. Fay said, "Maybe I am not as smart as them".

NAPLAN achievement scores indicate that Somerset Primary had a low-average student performance. Using the Grattan Institute equivalent year level measure (Goss et al., 2018), the NAPLAN achievement scores for Somerset Primary were below the national average by 30 points, approximately representing 9 months of learning. The frequency of "effort" related words (82%) in the classroom climate of Somerset Primary, illustrated by Figure 2, by comparison, reveals the lack of frequency of words thinking about ability (15%). The quadripolar model (Chapter 3) clarifies the impact of competitive contexts for self-concept. Moving from this optimistic context to the context of high expectations and high class-average achievement at Lewis High may be a catalyst for a psychological response and a coping mechanism. The catalyst would be the individual perceiving people in the selective classroom who have significance or similarity to them, and that subsequently facilitates social comparisons of ability. Therefore, a selective class will have

many close and relevant high achievers that may initiate the process of generating the BFLPE.

The movement from a less competitive class to a selective class might have reinforced the BFLPE. After transition to Lewis, Fay muses “I don’t like maths. I’m bad at it so I don’t really like it”. Using the quadripolar model, Fay is moved into the Overstriver climate, a competitive GAT class where she must strive to compete. As discussed in research question 1, Fay’s language (‘really hard’, “stressed out”, “12 out of 16”) and reasoning (“not the same” as the “smart” ones) revealed a high fear of failure and low success orientation. Having left the school by Time 3 (Table 7.2), she was self-handicapped by returning to a less privileged and lower performing school. There is evidence using Figure 7.2 that the local GAT class at Drahner was less driven by rankings and performance. Using the quadripolar model, Fay moved from the Overstriver climate (a competitive GAT class) to a Self-protector climate (a local GAT class with lower class average achievement) where she feels more confident making downward comparisons to lower-achieving peers. However, she no longer had a fear of being dropped from the GAT class. By being admitted into a GAT class at Drahner High with a lower class-average achievement, she could protect her ASC.

### **Mel (Aboriginal Participant): Individual Variables Across Pre- and Post-Contexts**

By contrast, Mel (Aboriginal student) maintained similar reasoning across the pre- and post-contexts. A low-performance-oriented environment was identified at Drahner, with half the average achievement language of the other high schools (9%) in the keyword analysis (Figure 7.2). As shown in Figure 7.2, of the three high schools, Drahner had the least frequency of language concerning ability (11%). As regards the language of performance, Drahner also had the least frequency (9%). This environment, with less competition, may have strengthened the reasoning about effort, which was the highest across

the high schools at 80% (Figure 7.2). Using the quadripolar model, Mel is moved into the Optimist climate which is characterised by a high success orientation and a low fear of failure. The willingness to invest effort may also be an indicator of achievement motivation, revealing that those at Drahner were optimistic about their learning. Being judged under a individual reference norm more likely results in a more incremental view of intelligence, as the individual reference norm is strongly associated with effort-related feedback (Dickhauser et al., [2017](#)). Those who maintained similar reasoning across primary to secondary, perhaps as a response to their learning climates, experienced the least disruption in transition.

### **Matt (Aboriginal Participant): Individual Variables Across Pre- and Post-Contexts**

When comparing Matt's language, and hence thinking, across the primary to secondary school transition (Figure 7.2), he was found to be more focused on performance (Belby 4%; Fisher 26%) but less focused on effort (Belby 78%; Fisher 60%). These relationships align with interview transcripts describing his moderate effort but strong academic achievement in Year 7. Describing himself as "confident", Matt was quickly accepted into the GAT class at his local high school in 2015. Using the quadripolar model, Matt is moved into the Overstriver climate, a competitive GAT class where he must strive to compete. After an abrupt move in the first weeks of Year 7, he was equally quickly given a passport into another GAT class at another, but more disadvantaged, public school.

The school environment influences self-perceptions. The school climate at Belby Primary also provided a reference point for Matt against which he could compare his new class in Year 7. Consistent with BFLPE (Marsh et al., 2008), as shown in Table 7.8, it appears the academic environment of the GAT class gave students, including Matt, a sense of accomplishment. Using social referenced norms, Matt had a sense of accomplishment because he was in a group with low mean achievement and compared his achievement

with that of his peers (Table 7.8). Matt moved to a Self-protector climate (a local GAT class with lower class average achievement) where he feels more confident making downward comparisons to lower-achieving peers. His conscientiousness in primary school meant he had a level of competence. Using individual reference norms based on absolute comparisons of attainment, Matt did not have to expend as much energy as his peers, even leaving his assignments to the deadline (Table 7.8). Reference norms may be concurring.

**Table 7.8**

*Reasoning About Effort–Ability From Matt’s Interview*

<b>Reasoning</b>	<b>Responses From Time 2</b>	<b>Responses From Time 3</b>
About effort	I think I’m doing really well with it. Because I try and get higher marks for everything and in the last maths exam I got 35 out 36 so, that made me feel happy.	I’m usually top 10 in Year 7 for a few subjects. We’re the highest class, they [some students] just don’t want to do it [the GAT class] because we get more work.
About achievement	Well I’m really good at maths and that’s really easy for me and English is all right, the rest of it is all right.	I will do it [the work], but I just don’t get it [understand]. But then in tests, I take a random guess with that area usually, and somehow, I do get it [understand].
About expenditure	I just didn’t think I’d get anything in on time.	If you don’t have good results, just revise and you should basically get good results.

The movement between academic environments was feasibly affecting his self-view, through social comparison of effort and ability across time (primary to secondary): “Not revising at home, I don’t do that, so I don’t know why they should. Unless they want really good results. But they should just start listening in class, basically” (Matt).

Matt’s reference group was his GAT class at primary school where his peers cared about learning, listened to the teacher, and made an effort in class. As a result, Matt was academically well prepared. He benefited from access to above-standard learning opportunities in the primary GAT class (Hattie, 2002; Lauermann et al., 2020), which likely promoted his growth (Glock et al., 2015), and subsequently his ASC. Therefore,

Matt did not perceive a relationship between his ability and effort: “I don’t revise or anything. I usually just go in, and they give me a great mark usually”. Although he was motivated to learn and had a healthy ASC, he gave the impression of cruising through his work: “The rest of it is all right”. The evidence suggests that Matt was not investing optimum effort. In his self-perception, his minimum effort was resulting in an acceptable performance. As shown in Table 7.8, Matt was confident about his ability, achievement, and results.

Students who have confidence in their competence in a specific subject area are more likely to invest effort, even minimum effort, in the sense they expect to successfully accomplish the work. Therefore, those who “are usually in the top 10” like Matt (Table 7.8), who expect to succeed, are likely to persist longer than those with less confidence. The increased effort could be the mechanism through which the positive outcomes of ASC operate. Taken together, and consistent with the theoretical construct of achievement motivation (Marsh et al., 2016; Martin, 2010), these findings suggest a role for cognitive (self-concept) and behavioural (effort) elements in promoting motivation and engagement.

These findings seem to also partly support expectancy–value theory (Guo et al., 2015; Marsh et al., 2016) in that ASC (i.e., expectancy of valued success due to ability) would have a positive effect on later effort. Then intuitively, increased effort would have the potential to produce an increase in subsequent achievement. In Time 3 (Table 7.8), Matt also described students in his GAT class “who are disruptive and really don’t care”. These are examples in the data of students who believed in ability (i.e., expectancy of success due to ability) but may not have put in extra effort because investment of effort may mean they were not bright enough.

Matt appeared to calculate a delicate balance between maintaining his expectancy of valued success and careful investment of effort: “Not revising at home, I don’t do that,

so I don't know why they should. Unless they want really good results". Matt honestly thought he was "on a high standard", meaning that he was confident of his ability. His effort in Time 3 was related to personal goals—for example, if someone wants "really good results". As the focus of the academic environment in Year 7 changes from learning to performance, this change in focus can be detrimental. Students invest effort either in a calculated manner or as an adverse effect of BFLPE (Hulleman et al., 2010).

### **Conclusion Research Question 3: Academic Environment**

In assessing whether there were any relationships between effort and sense of self for high-ability students transitioning into GAT classes, multiple stakeholders' views revealed students thought less about their ability or intelligence in Year 7, and more about working hard. Pre- and post-contexts, as well as the person's ASC, can potentially predict the academic motivation or demotivation for the student. The present study analysed four different transcontextual transitions across primary to secondary schools and two contextual transitions across an initial secondary school to a new secondary school. In terms of the relations between effort and achievement, those participants whose thinking about performance increased also experienced a decrease in thinking about effort. Consistent with research, this may be an indication of demotivation occurring in the early years of high school (Figure 7.2) (Eccles & Roeser, 2011; Hulleman et al., 2010).

### **Section Summary**

This section explored and found three key interactions between effort, achievement, and sense of self for high-ability students. First, the influence on self-perceptions as a result of the moving between low-effort and high-effort academic environments was identified. Second, an influence on academic self-perceptions was found to be transitioning between low-performance to high-performance academic environments.

Those who maintained similar reasoning across primary to secondary academic environments, perhaps as a response to those particular learning climates, experienced the least disruption in transition. Third, an interaction between self-perception of ability and the resulting effort expenditure was identified. High-ability students may not put in extra effort because the investment of effort may mean they are not bright enough, a negative effect of the BFLPE. However, some high-ability Aboriginal students may not put in extra effort because they prioritise balancing their social and academic goals, and do not want to achieve one domain at the expense of another. The next section analyses the reasons why disruption in transition occurs for some Aboriginal students who have enrolled in selective academic environments.

#### **Results of Research Question 4: A Second Transition to a Selective Academic Environment**

Research Question 4 posed, “What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Head Teachers and Principals) perceive are the factors that contribute to a second secondary school transition?”

#### **Overview of Issue Explored**

This section explores why some Aboriginal students changed schools after enrolling in GAT classes. In my study, GAT classes were being implemented in Year 7 in all of the sampled comprehensive high schools. Choosing a school within a more privileged class composition (a GAT class) could be indicative of higher future academic performance for students living in disadvantaged areas. This was an important discovery as these classes created social elites of high achievers within each year cohort (Johnston & Wildy, 2016). A large body of research tells us that streaming has negative effects

(Demagnet & Van Houtte, 2019). If high performers seek to work together, a large body of research reveals that ability streams serve as reference groups for social comparison (Hofman et al., 1999, Liu et al. 2005; Marsh & Hau, 2003; Opdenakker & van Damme, 2001).

To whom students are exposed on an everyday basis, the frame of reference, is important as it forms the basis of competition. As was explained in Chapter 3, students' own and perceived teacher reference norms are interrelated and linked to ASC (Lohbeck & Freund, 2020). The use of reference norms varies across school tracks as some teachers foster this competitive atmosphere when they formally or informally rank students publicly in the classroom. In the context of creating the BFLPE in school settings, social homophily can be a negative factor. Homophily is the tendency for people to seek out or bond in friendship with those who are similar to themselves. The closer that a student identifies with their positive frame of reference (the target) the higher their self-evaluation perception (Boissicat et al., 2019). Therefore, identifying differences with an upward social comparison, such as race or gender, can produce a contrast effect on self-evaluation. Differences become more salient than similarities (Sailors & Heyman, 2019).

Therefore, not only does the upward social comparison create self-doubt, the BFLPE was stronger when students identified differences with the frame of reference (the target) (Boissicat et al., 2019). BFLPE's negative effects are related to ability-beliefs, not actual academic performance. Poor self-concept based on race stereotypes may make it difficult for some students to develop friendships with similar others because self-evaluation is highly salient (Ho, 2020). Forced exposure to comparisons at the class level may reinforce fixed-mindset beliefs and the desire to avoid failure in achievement situations. A fixed conception of intelligence has been shown to result in contrast effects among students (Lockwood & Kunda, 1997). Finally, the inherent nature of a GAT class

represents the “fixed-mindset belief” in the education system (Hodge, 2019) that some people’s ability cannot be developed as readily as others. Through negative perceptions of low status, individuals, including Aboriginal students, can stereotype themselves as outgroups (Latrofa et al., 2012). Thus, the real difficulty of changing tracks after Year 7 may be to internalise the deficit-thinking orientations of many Aboriginal students.

### **Desire to Protect Self-Concept: Fay (Aboriginal Student) at Lewis High**

In the formation of social networks, groups are most often made through similarity, or homophily, in age (Cotterell, 2013), and schools use age to group students together resulting in a strong, homophilous context. People sharing similar characteristics and qualities are more likely to interact with each other. However, when people feel threatened or fear losing face, they are less comfortable forming networks of friendship. Students from disadvantaged backgrounds may fail to reach above-average levels of achievement equal to their more privileged schoolmates, with negative results for ASC. By commuting to a school with a more privileged sociodemographic composition one may feel more stressed and experience lower levels of well-being than one’s peers.

In a school community, homophily simultaneously builds a sense of belonging and safety network (Yuan & Gay, 2006). People who share the same characteristics are unified. People with different characteristics are excluded. Initially, Fay felt she shared the same characteristics as those in the GAT class. However, as the year went on, she felt her values and goals were different. In Time 3 (Table 7.5), she felt her peers were “way better than me . . . and it was competitive”. Gradually, Fay realised that her peers were preoccupied with academic achievement. Instead of deeming them relevant for social comparison by ability (e.g., membership in the GAT class), she deemed them dissimilar to her by their effort expenditure and less relevant for social comparison. By distancing herself from them, she protected her self-view (Huguet et al., 2009). Hence, the change in the way she

connected with others at Lewis over time made a difference. This difference made it more difficult for Fay to make friendships with her peers at Lewis. Szumski and Karwowski (2015) found the BFLPE was stronger in individuals who were not well integrated with their peers. As Fay's values and goals changed, she did not integrate as well into the social groups at Lewis. She explained, "Well, at 'Lewis' it was hard, . . . And in the end, I just ended up sitting with three different groups. So one day I'd just go to that group. So it was kind of hard". Her conception of ability and fixed-mindset beliefs created the fear of losing face. Fay said, "I get kind of scared that I'm going to fail or something". Fay changing to an environment where she was more comfortable and bonding with people from the same group had a positive impact on performance (Titzmann & Silbereisen, 2009).

The experience of Fay highlights the theme of fear of failure and the BFLPE. She was a high-ability Aboriginal student who came from a low-achieving primary school into a high fear of failure, high success orientation class at a high-achieving secondary school. Fay arrived at Lewis with a healthy ASC: "I was chosen in the selective stream because of my marks". In terms of homophily theory (McPherson et al., 2001), her main tie to the ingroup at Lewis was her intelligence and selection in the GAT class. Sociodemographic school composition relates to contextual quality as well as disadvantaged students' cognitive and non-cognitive outcomes. Students such as Fay may find it more challenging to find a sense of belonging at more prestigious schools and the potential relative advantage in academic achievement may not translate into higher school satisfaction and better psychological wellbeing.

### **Homophily in School Context**

School ethnic composition has been shown to greatly influence social homophily in complex ways (Titzmann & Silbereisen, 2009). The principal at Fisher described her school as "probably . . . one of the most multicultural schools". She admitted that "They

[Aboriginal students] do [take longer to settle in]. It's very multicultural here". She explained, "I think it might be more intimidating or more daunting for Aboriginal students. Not having a network, not having friends or family in a place might be more off-putting for the Aboriginal students". These comments reveal the importance of relationships that provide safety, the feeling of belonging, and cultural recognition.

Some students prefer the same ethnic friendships, particularly if they are new arrivals or in the minority among the ethnic groups. Remaining near their friends and under the protection of an extensive social network's safety and cultural recognition seemingly overshadows the effects of stigmatisation or discrimination in a new context. The lack of a majority ethnic group resulted in cliques forming across the school community (Titzmann & Silbereisen, 2009). Added to the sense of competency and strong ASC, both non-Aboriginal participants, Kylie and Jane, had connected in some way to the school. Jane was Japanese and had connected across the school and in her grade: "I can make friends from my culture".

Kylie was an elite sportsperson and had found a sense of belonging through sporting teams across the school and in her grade: "Mostly sport, some were in Year 8 or something, I went to primary school with them. Some of them are my age, so I see them on the weekends". Fay had not connected, moving from friendship group to friendship group. Her primary school teacher had predicted that "re-establishing firm friendship groups" would be one of the main challenges of transition. The Lewis principal identified that Year 7 girls must "try and deal with not having the support networks that they had when they were in primary school that they have made, especially after 6 years". She later added, "If they're not going to give a bit or show a bit of connection, I think you can lose some of the girls to that, because they won't get it, they won't connect". In her opinion, Fay and a second Aboriginal student had left the school midway through the year because "it was

closer to home and they were friends”. Thus, the possibility of maintaining close relationships with their friends, the simplicity of physical closeness, and the concern of being reduced to outsiders prevailed over isolation, discrimination, and impaired ASC.

### **Value Homophily**

High-ability track classes that are effective in enhancing student achievement not always not always simultaneously successful in cultivating student well-being. There was some evidence to suggest that some Aboriginal students may change schools because the values of a large high-performing comprehensive school may not form a part of their developing identity. For participants without highly educated parents, social comparison mechanisms may come into play with a majority of peers from higher-SES families and/or higher average achievement. The embedded school values of prioritising academics may have been another way in which Fay did not feel she connected. Benner and Graham (2009) argued that children in the minority within the ethnic pool at secondary school are more vulnerable in transition. Race can impact the transition to secondary (Anderson et al., 2000; van Rens et al., 2018, 2019). When asked what might be a limitation of the school for Year 7 students in transition, the principal replied,

The size of the cohort and the size of the school. Sometimes the contact with the girl can get a bit lost if everybody's busy because you get this bit and this bit, and you've got all the things for all the years getting done. So I think sometimes if we could check in with them a bit earlier in the term, and just ensure that they're connecting and that things are going okay. (MRP7)

The principal perceived, “It's harder sticking to a system that is so regimented”.

In contrast to the students who had displayed a high self-concept, Fay was exceptional in her struggle: “Sometimes it gets hard . . . you had to make an effort . . . I didn't have as much time” (Fay). This may be the result of her perceived gap between

present skills and abilities and the expected high levels of intellectual effort required to close it. As discussed, there is a causal relation belief that operates such that students, like Fay, believe high levels of effort will not lead to high achievement.

With this negative thought in mind, fear of failure, avoidance of challenge, and insecurity about one's self-worth are apparent. Maladaptive thoughts and behaviours could result, leading to a decision to choose a low academic track despite a history of high performance. In reality, Fay's results were, in her own words, "not really" that bad. In Drahner High, her psychological need for competency was not being met (Ryan & Deci, 2000). Class rankings are general knowledge.

*Interviewer:* So everyone in your class knows where they sit?

*Jane:* Yes.

*Interviewer:* And apart from those two subjects, where are you sitting across the class?

*Jane:* We have a ranking for each subject, so we know the overall.

*Interviewer:* Right, so which were your rankings, between one and five, or five and 10?

*Jane:* I have five in maths and for DT [design and technology].

Marks that are compared among peers inevitably lead to social comparisons. Comparing her rank to others—for example, like Jane her friend from primary school—Fay started to internalise negative reasoning about her abilities.

**Balancing Investment of Effort for Amount of Achievement.** Fay and Matt (Aboriginal students) changed schools because they did not want to engage in the type of high-ability settings offered by secondary schools. Fay explained, "I just felt really pressured, and the work was hard. I wanted to stay connected [with the community] and be with people that could help". According to Fay, the workload was demanding, and the content was "hard" (Fay). Year 7 students experience their first exams and assignments

often with deadlines in the same timeframes. The BFLPE flourishes in competitive classroom climates and may limit some Aboriginal students' academic success in the transition to high school (McCourt, 2017).

At the beginning of secondary schooling, Fay had been “put” in a GAT class. In the Time 2 interview, Fay used emphasis and tone to emphasise her choice of the word “put” to make clear that it was not her decision to be placed in the top academic track. Throughout Year 7, she had been encouraged to remain in the GAT class. She estimated the investment required was ongoing for the next 6 years to perform. The endeavour was intimidating. The AEO at Somerset identified that Aboriginal students need to “have more confidence in themselves. They’ve got to get rid of this shame factor. I’ve still got it myself, really. They’ve got to get rid of that [and] know they are capable and they can do it” (MCT2). Unfortunately, the process of avoiding shame is likely to exacerbate the tendency to avoid failure (Elliot & McGregor, 2001) and diminish opportunities for challenge and growth (Dweck, 2006).

**Forced-Choice Dilemma.** The people were “not the same as me” (Fay). A typical high-performing adolescent, she had a forced-choice dilemma. A choice had to be made between two competing options: (a) to rise to the academic expectations and (b) to play her sport and be with her friends: “I really don’t get to play out much”. For her, the single-sex school was a pressure pot of competition that was forcing her to invest in school work to the detriment of her self-concept. Considering the robust replicability of the BFLPE (Marsh et al., 2008), a school like Lewis High, with two academic tracks, will predictably result in this effect in the GAT class. The results confirmed that changes in self-concept, an evaluation of one’s own academic performance, seemed to be environmentally driven. For Fay, her reasons for leaving Lewis were based on social goals. She would be in a school with family connections and be able to play her sport. As shown in Table 7.9, this

reasoning was used to excuse her attempts to meet the high academic comparisons with others in the top class.

**Table 7.9**

*Reasoning About Effort–Ability From Fay’s Interview*

Reasoning	Responses From Time 2 Lewis High	Responses From Time 3 Drahner High
About effort	There’s a lot of work . . . And so we got hit with a lot of work.	I don’t like to get worked up about it. Yes, I get kind of scared that I’m going to fail or something. But I just stay relaxed.
About achievement	I think I’m doing pretty good. Like I’m not behind on anything. Yes, sometimes it gets hard. We got 12 out of 16 or something, which is still great.	[My marks at Lewis High were] not very good, because that’s when I actually did get a little bit, because I knew that other people would be way better than me,
About expenditure	But some work we get is really, really hard. I think I’m up to date.	I write down the stuff that I actually need to study, that I don’t really know about.

Fay perceived that there was an unending pressure (to invest effort) at Lewis High.

Fay left Lewis High in Term 3 of Year 7: “I like to challenge myself, but it was just so much pressure”.

### **Matt’s (Aboriginal Student) GAT Classes**

**Status Homophily.** “Matt was in our high-achieving class and has done very, very well” (MFP6). The primary principal went on to say, “Academically, he’s doing very well. ‘Matt’ would apply [to a selective class]. Uh, his family would encourage him to apply. Mum’s very powerful in the family. Dad’s very supportive, but Mum is the central person in the family” (MFP6).

When Matt was awarded the “highly sought-after” (MFP6) Citizenship Award, the principal noted, “Mum, of course, came up and the tears are flowing, and the father goes to the stage . . . and I said, guys, recognition”.

Belby Primary was a large primary school, yet the leadership team had ensured that the school had a strong sense of community: “Relationships make or break” (MFP6). Students felt valued and appreciated: “There’s a close bond with the home teacher” (MFP6). The principal repeated for emphasis that “our teachers are so in tune with the children that they can pick up very quickly whether there’s a potential issue developing” (MFP6).

The ethnic composition of a school has been shown to influence social homophily (Smith et al., 2016). Adolescent students prefer same-ethnic friendships (McPherson et al., 2001). The social fabric of Lotown High was the most multicultural in Australia. The three largest ethnic groups spoke Vietnamese, Assyrian, and Arabic. Matt’s mother Marcia was aware that her seven children did not blend in this environment:

*Marcia:* I notice there are other Aboriginal children at the school, not many, but I know they are. But I think, yes, it [Elders] possibly would’ve because it acknowledges their background. You know, I don’t know if you’ve been around the school but there’s a lot of, um, err, I don’t mean to sound . . . [sighs]. I don’t know how to say it without sounding, you know, bit of a big head but—

*Interviewer:* People from other cultures.

*Marcia:* Yeah, that’s the way . . . yeah that’s it.

In another instant, she reiterated, “They’re in the minority that’s for sure, my kids”. The Belby principal had noted that Aboriginal parents/carers were conscious of their children “not feeling that they’re different”. He perceived Marcia: “She wants to see him just flourishing like everyone else, not . . . say, well, you’re an Aboriginal student. Therefore, you’re different” (MFP6). At the end of Year 7, when reflecting on the past, Matt said, “Yes, because here is safer. You can walk on the streets without worrying . . . Basically [I feel I belong] all the time”.

**Reasons for Choosing Lotown High.** “I want to go to Lotown High”, stated Matt during the Phase 1 interviews. I also noted the contentment of Matt’s mother Marcia when she described how quickly he had been accepted into Lotown’s first GAT Year 7 class. It was a surprise when organising the second interviews to find he had moved to another school. It appears from the data that his mother was not comfortable with the ethnic composition of the school and did not like the way his school singled out Aboriginal students. In 2015, Marcia had given two main reasons for Matt attending Lotown High. The reputation of Lotown was superior to the school, which was their catchment area high school. Marcia said, “Probably the reputation, you know. I don’t know, I just didn’t want him to go there [laughs]. From what I’ve heard it’s a very rough school, yeah”. In addition, she explained, “We applied for that [GAT class], and he was accepted for that, so he was very happy”.

**Implicit Racism.** There was a critical incident, which Marcia described, that appeared to influence her decision to move to another school and location:

It had happened out of school with another child but was actually in the primary school. It got put onto the high school’s Facebook page, and they even named my son. So that didn’t help. And then I had an interview with the principal, I asked to see the principal. And I showed it to her, as soon as it came up on Facebook, it was removed off the site. And she was quite supportive and wanted to assure me that there was no issue with him and the school. (Marcia)

The principal at Lotown said, “When they come into high school, for teenagers, quite often they want to blend in, they want to be part of the group, and they want to be not standing out as different”. However, the scale and composition of the school’s population influenced the learning climate of Lotown:

We've got Vietnamese which is our biggest population group, we've got Syrian, and Arabic speaking. Whereas we have that stereotype and we say it's a stereotype, but it does exist, where lots of the Asian parents/carers are very academically driven. On parent-teacher night we'll see they will line up for maths, and English more so and they really want them to succeed. (Principal at Lotown)

As part of a strategy of inclusivity, the school was planning to single out Aboriginal students. "What we're doing in next year for the Aboriginal students [is make them] a much higher priority" (Principal at Lotown).

In contrast, Matt stated in his interview that at Fisher High "nobody treats me like I'm different or anything. And everyone, we fit in like we're basically family". In the view of the Lotown principal, his school had one main limitation:

It's a big school. There's 1,430 kids. So it is large, and it can be quite daunting, you know, for a little kid coming from, you know, Year 6 to Year 7, and seeing so many. We try our best, obviously, to make them feel as comfortable as we can, but it is a big thing. I mean just imagine us going to a workplace with [257 age cohort colleagues]. Time is . . . is our biggest . . . our biggest problem in any school, to be quite honest and being able to create that time. (MFSP72)

Not only was this school a large school, but it was also heavily weighted to the older years. Sixty percent of the school was in Years 10 to Year 11 as a result of intakes of migrant arrivals. In the opinion of one of the teachers, the number of senior students could be intimidating for the younger years. Matt reiterated in his final interview, "I have moved up here from 'Lotown', but that was ages ago. I get along with everyone here, and I fit in".

**A Second Transition: Matt at Fisher High.** A safe, small school size is a valued attribute for a school community. At Fisher, the small size fostered a sense of belonging and teachers had more time to give to individual students. Students were known. Students'

own and perceived teacher reference norms are interrelated and linked to self-concept (Lohbeck & Freund, 2020). Matt explained, “We moved up here because ‘Lotown’ was really, really busy”. During the summer months, Marcia and her family spent many weeks with her sister and family. The children made friends with the neighbourhood children and, in Matt’s words, enjoyed the freedom of feeling “safe” and not being “crowded”. Marcia explained that her sister’s “son also started Year 7 at that school this year. So I guess socially, he knew some of the kids already, so it wasn’t a complete change of scenery”. Being in a school that was “like family” was important to Matt.

**Ensured Placement in Another Selective Environment.** Considering that GAT classes have higher social and academic status, taking a child out of this environment might be perceived as a difficult decision. The choice to change schools after transitioning to a selective academic environment was made easier because of the availability of GAT classes across most NSW high schools. Both Matt and Fay were accepted into another selective academic environment in the second high school of choice. The provision of another “elite opportunity”, the GAT class, possibly could have eased concerns when changing schools. As discussed, there is a perceived elitism attached to the label of this academic track (Dumont et al., 2019).

Marcia had followed her son’s positive progress in the GAT program at Belby Primary. Marcia’s experience over this 7-year period had been very positive. When asked “Do you think that the school prepared him effectively for high school?” Marcia replied, “Yes, definitely. Definitely”.

My daughter is actually doing a master’s in psychology at the moment. Then you’ve got him, and I’ve got another one going to high school next year. And he’s been accepted into the gifted and talented there as well. My one that’s a year behind him was in the enrichment class. So I don’t know, maybe they inherited something from me.

From the evidence, it appeared that the GAT programs had given her family an identity that was personally important to Marcia. The perceived status of the GAT class explained the contradiction in her statement: “The class, I don’t think it’s an issue. He seems to be doing quite well, and he’s quite settled in the class. School, as I said, there’s not really a lot of choice”. She believed the benefits: “I’m definitely glad he’s part of the GAT class”.

**Fisher High Community.** Matt felt that he was treated like anyone else in primary. When he transitioned to secondary, he was not comfortable with the ethnic composition of the school and did not like the way his school singled out Aboriginal students. He moved to Fisher High. However, connecting to an Aboriginal community in a local school may facilitate the development and expression of Indigeneity for Aboriginal youth. The findings reveal that at Fisher, participants perceived that teacher’s referenced students as individuals, developing more positive ASC and weaker BFLPE (Dickhauser et al., 2017). However, Matt in the highest school track, such as the GAT class, had a positive assimilation effect from the status of the class.

At the school level, a wide range of programs and sports set high expectations in an integrated and culturally respectful way. In Table 7.10, there is evidence of fairness and respect in the emphasis on pastoral care, and the engagement of Aboriginal role models and mentors, as well as trying to include Aboriginal parents/carers. Incredibly, the vision of the leadership extended beyond the school gates to equipping preservice teachers with the skills to confidently impact achievement outcomes for disadvantaged students. Community alliances and integral external partnerships with other institutions appeared to be making bridges outside of the school. This reveals that acculturation stress in the form of cultural racism can be present in some urban schools. Implicit or perceived racism, where students are singled out because they are Aboriginal or made to feel different, can be an example of

unfair treatment. One of the host of associated factors that explains the relationship between Indigeneity and low SES is real, or perceived, discrimination. This association between discrimination and self-concept has been supported by research on adolescents (Bodkin-Andrews et al., 2017; Meegan & Kashima, 2010).

**Table 7.10**

*Themes of the Principal's Perceptions on the Factors That Contribute to a Collective Identity at Secondary School, Fisher High*

Main Themes	Examples From Coded Responses, Time 3
Intervention program	The Fisher principal summed up the whole transition experience: We have an AVID GAT class . . . there's a team of teachers that can work together to pull into line behaviours, to pull into line consistency, having that one classroom, minimal teachers, minimal movement, behaviour management strategies, all sorted. That team is using AVID strategies. Although it's not an AVID class, it's using AVID strategies.
Community	SLSOs [School Learning Support Officers] are like teacher aides. So we have Aboriginal teacher aides, then we have Aboriginal tutors and then we have Aboriginal senior tutors . . . We have our students . . . went down to Barangaroo and they had, they looked at our local sites with people from the community . . . At decision-making at points, that's where we look at AECG to help with that.
Pastoral care	We've got focused groups in the school on the Aboriginal team. And on Tuesday we met each teacher, there was eight, nine teachers in there took away the list of Aboriginal students in the school and identified three kids that they are able to contact with and now we're just going to a phone call home just to quick touch base and see how things were going and give them an opportunity to . . . Yes, give a heads up on any issues so now things are fine.
Role models	We do a lot of work with universities. We do an Aboriginal iBelieve program with Year 7 and 8. So probably opening more doors than they can get to probably. We went down for a camp, a boy's camp, with senior students and Aboriginal students just for a mentoring thing and they had those community people working at the camp. The AIME [Australian Indigenous Mentoring Experience] program is the high one, and we do that with just the Aboriginal students.
Family/parents/carers	The engagement of parents/carers is probably the hardest one [challenge] that we face. So we're still trying to find ways to tap into parents/carers and to make them feel part of, I suppose, what the learning that's taking place in the school and being out to support that and continue that . . . We do have PLPs [Personal Learning Plan] every year where we try to get parents/carers and then that slowly we notice has increased over the years.
Teachers	We have 30% of children, we probably have about six workers that are Aboriginal, and then I think we have nine teachers. We often have a lot

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of staff members that go and play sports with kids during the holidays during night off week . . . One of the things we really focus on there is student–teacher relationships and how that’s striking. So obviously we’ve got an expectation they are trying to work with the students and establish that relationship but also more to the quality of the teaching as well.

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The collective identity revealed by the participants from Fisher High (Table 7.10) reveal the important function of schools to develop both attainment and well-being. The sociodemographic composition of schools can be essential for the psychological wellbeing, and potentially academic outcomes and future aspirations, of certain groups of adolescents. Particularly for youth forming their identity in the developmental stage of adolescence, the way racial diversity is operationalised in schools matters, particularly for minorities. The results of this study are consistent with the rejection-identification model (Branscombe et al., 1999) because Fay, Matt, and Mel sought a connection to their culture (by enrolling in schools with a high Aboriginal student population) to maintain a positive self-perception by avoiding school contexts associated with the negative emotions and/or discrimination. For these reasons, social homophily, in the form of creating selective classes in Aboriginal community schools, may be a support that can be given to Aboriginal students to make it possible for them to have equal access to educational opportunity. In this manner, Aboriginal students might have more equitable treatment.

### **Mel at Drahner**

Building positive ties from within a collective group identity improves academic performance (Yuan & Gay, 2006) and encourages collective, participatory learning (Barab et al., 2004; Lave & Wenger, 1991). Developing such an identity requires the creation of connections within the network of the school community regardless of traits and values that distinguish individuals. Past research has found that social homophily is an important key source for working together on tasks and projects such as what occurs in a classroom.

Strong bonds and connections within a group are vital because these connections create unity and familiarity (Krackhardt & Kilduff, 1999). When individuals feel at ease, they are more productive and in an optimal state of functioning (Phan et al., 2019).

**Strong Bonding Ties Within Group.** Mel (Aboriginal student) went to Drahner as a result of the reasoning: “I’m going there, as well, because I know a lot of people and it just will help me through my journey through high school”. Mel went to Drahner as a result of connections with the Aboriginal community. Mel was proud that she knew everyone in her Year 7 class: “Most of my class is from Somerset [primary]”. She also expressed the importance of relationships to people at Drahner High: “One of my friends’ older brothers came here and we know a lot of people that are here already”. Mel’s comment highlights the importance of peer connections during adolescence. Providing a sense of belonging can be expected to shape students’ satisfaction with school, with further implications for their well-being.

My findings reveal that the racial composition of schools may create some difference in the homophily networks of the adolescents, teachers, and learning community (Kickett-Tucker & Shahid, 2019). When describing the 3D design class in the GAT extracurricular after-school program, Mel noted that the teacher was Black: “She’s African”. Mel did not describe any other teacher than this science teacher, revealing that race and gender may be salient characteristics for Mel in a role model. Mel deliberately stayed at a less privileged school in order to preserve a feeling of safety and belonging.

**Bridging Social Capital That Results From Ties With People Outside the Group.** The homophily of the network ties bridging across the school to the Drahner community was examined (as shown in Table 7.11). Social homophily is an important key source for working together on tasks and projects as it develops relationships that provide safety, the feeling of belonging, and cultural recognition. The intervention program

implemented at the school was based on students committing together. By using friendship homophily to achieve educational goals, the students formed a collective identity based on ASC. The school employed local Aboriginal community members to work with the students, as race is the strongest basis for homophily (McPherson et al., 2001). When asked, “Would you recommend other Aboriginal students attend selective gifted and talented classes?” Fay replied, “If they want to stay connected, and if they want to be with people that would help them, then yes [they should stay in the community]”.

**Table 7.11**

*Themes of the Principal’s Perceptions on the Factors That Contribute to a Positive Learning Environment at Secondary School, Drahner*

Main themes	Examples From Coded Responses, Time 3
Intervention program	AVID provides a system of placing high-achieving students to commit as a group to the program, together.
Community	I think all the Aboriginal staff employed in this school is from the community. So, I think that’s a good thing. We all know, and we’re all involved and we know the kids in the community as well so we attend and they see us outside.
Pastoral care	I think just instilling in the kids that if they need anything whether it’s big or little that we’re always happy to help, they have to let us know. Yes, we’re open, they’re our priority, our Koori kids are our priority.
Role models	Year 7 have an Aboriginal year adviser, [Anonymous], so I think she muscles and wrestles around them about it. But it’s good but in a big Auntie type of way. We’re not seen as the teachers, though we’re teachers we’re the big Auntie type authority here. What else? We encourage them to attend the homework centres, the gifted and talented they’re always invited to their part of any of the big art events.
Family/parental support (PLPs)	And the parents/carers too, they’re not shy to ring or just to double-check. Some parents/carers are really, they turn up, “this is the date”. But we have for Urban Koori we have met mothers and aunties out in the community in a neutral spot where they feel safe.

Pastoral care of Aboriginal students was networked with strong bonding ties within the school and across the community. Table 7.11 reveals Drahner as a school that develops relationships that provide safety, the feeling of belonging, and cultural recognition. This characteristic of the school is important in establishing the classroom climate as providing

a more balanced focus on social and academic goals. Preservice teachers acted as classroom assistants and literacy mentors and provided tuition in after-school homework. The school was recognised with a World Teachers' Day Award from the Australian College of Educators as well as a Staff Excellence Award on Community Engagement. The school focus was training all staff in the strategies of AVID. Three full days were allocated to this training to lay a firm foundation for future implementation. Two Aboriginal teachers were leading the development of the program through the school.

Role models from the University–Drahner Education Partnership and University–Support Centre (a building on site) introduced students to new future aspirations. Not only was it a powerful and active collaboration between the school and university, but many learning partners had also been introduced via the School of Education. The result for students has been an exponential increase in the opportunities afforded to all students, irrespective of students' level of financial advantage. This unique partnership is an example of how universities and schools can be highly effective and innovative with their approach to training future teachers, as well as being able to simultaneously provide services to schools. Forty percent of students reported that working with the university made them want to attend tertiary education, while 93% of teachers felt that the partnership was mutually beneficial.

In low-SES communities, research has revealed that the school climate has been empowered by the involvement of parents/carers in the educational process (Muijs et al., 2004). In the meetings reported by a teacher,

This year we held an AVID parent meeting, and it was the biggest event ever that I've ever seen at this school, and I'm an ex-student at this school, ever we've had turn up to Year 7 AVID parent meeting ever. The library was packed, and we had to bring in extra

chairs. So, slowly the parents/carers are coming around, but I must say this year's 7s there's a lot of high-end number of kids that are very academic.

It is almost certain that a school–community approach was identified as an essential element of success for Drahner High. In 2016, there were seven Indigenous staff. The connection with country and community was difficult for some to articulate. One teacher felt “just being there and being Indigenous myself and coming from a cultural background, just that support is a great thing for our kids”. There was a sense in this community that the students belonged to everyone, and he went on to explain,

I'm from this area and I just know all the families and their parents/carers and their grandparents/carers. I even went to school with a lot of their parents/carers too and we all come from the same area, this is our old high school. So it makes it a lot easier.

This sense of belonging created an amazing sense of trust, respect, and collaboration among many of the staff. A common view among interviewees was that relationships were the key to resolutions in a school environment. The principal said “You need that personality, like a mum. But with higher expectations academically”. Particularly in a small community, “everyone in this community, everyone knows everyone”. Aboriginal education is everyone's business.

#### **Conclusion Research Question 4: Changing School Contexts**

Changing contexts often allows an individual to clearly observe the differences between people, making the BFLPE more expected (Preckel et al., 2010). Comparing our unique and authentic self is important to make sense of ourselves and our place in society (Thomas & Azmitia, 2014), and is equally important in times of personal development such as adolescence. In schools where the majority of students come from ethnic backgrounds and are privileged with corresponding cultural capital, students from other

racial backgrounds are known to feel vulnerable and experience the BFLPE (Bunar, 2010; Khoo & Birrell, 2002; Malik, 2015; Marks et al., 2006; McInerney, 2008; Vialle, 2013). Students may find a rationale that can serve as an explanation for their minority in that academic space. Both Lewis High and Lotown High were large schools with diverse ethnic populations and recently arrived groups. Ooka and Wellman (2006) found that more recently arrived groups had more homophilous networks. For many people of ethnic background, their identity is closely tied to that cultural group. A shared understanding of similar ways of thinking and behaving will create a sense of fellowship and familiarity with that ingroup, stemming from the collective identity. Similarity breeds connection.

Some disadvantaged students change schools after transitioning to a privileged academic environment because of the relational power of homophily (Granvik Saminathen et al., 2019). Patterns of homophily tend to get stronger as more types of ties exist within the relationship (McPherson et al., 2001). Status homophily (race, sex, age, intelligence) may be one type of tie, while value homophily (work ethic, conceptions of intelligence, family) may be another type of tie (Yuan & Gay, 2006). Some Aboriginal students change schools to leave an outgroup where the groups are characterised by status homophily and seek to belong to an ingroup in another school community where the groups are characterised by value homophily. Drahner and Fisher were the schools that attracted Fay and Matt. The characteristics of these “value homophily” schools were feeling valued and belonging by the connections to community and the access to pastoral care and Aboriginal role models (Table 7.10; Table 7.6). The support of the teachers, particularly through the AVID program, perhaps gave a sense of growth in the academic arena.

Of interest, in this study, was that Drahner and Fisher had moved away from focusing on suspensions and had self-identified as learning communities. Ethnic homophily can benefit the development of groups such as Aboriginal schools as they have

greater access to social resources, support, and information (Pettigrew et al., 2011). At Drahner High and Fisher High, Aboriginal staff were identified as strong supports for students. Evidence indicates they are crucial (Price et al., 2019). Research shows that having a strong positive ethnic identity protects against the BFLPE (Craven & Marsh, 2008) and discrimination (Chavous et al., 2008; Wong et al., 2003). Aboriginal students may be exposed to acculturation stress, such as daily microaggressions or covert racism in a classroom, on social media, or the playground (Carlson & Frazer, 2018; Mellor, 2003). Discrimination as an added layer of disadvantage, is one of a host of associated factors that explains the relationship between Indigeneity and low SES and as such, deepens the connection between similar others.

### **Section Summary**

Race was found to influence the transition to secondary. This section revealed that particular school contexts may produce social homophily, causing students to not feel at ease in their initial school context. The situational difference of students when entering a Year 7 GAT class is impacted by the initial level of competence as well as the social comparisons and exaggerated by other minority groups in the class. In terms of their experience of transition, a difference emerged in the development of self between Aboriginal high-ability students according to how they reasoned about the interaction between their effort and their ability. Finally, consistent with previous research, my findings reveal that highly capable Aboriginal students question their capabilities, perhaps as a result of internalised deficit thinking (McKnight et al., 2018; Tarbetsky et al., 2016) and social comparisons with other privileged groups (Walker & Smith, 2002).

### **Results of Research Question 5: Collective Identity in Schools**

Research Question 5 posed, “What do multiple stakeholders (students, teachers, Aboriginal Education Officers, Aboriginal Education Consultative Group members, Head Teachers, and Principals) perceive are the outcomes in the second selective academic environment after changing schools in Year 7, for Aboriginal high-ability students?”

#### **Overview of Issue Explored**

The last section found that Drahner and Fisher were schools where there were attempts to build diversity and inclusiveness. Building positive ties from within a collective group identity and across the community improves academic performance. Only Aboriginal students, Fay and Matt from our sample, made second transitions in Year 7. All non-Aboriginal students in this cohort remained in their first choice of high school, highlighting a point of difference between Aboriginal and non-Aboriginal students. This section examines how the collectivism and group spirit, which differentiated the Aboriginal students, might protect students’ self-concept and academic optimism (P. A. Smith & Hoy, 2007), taking the shape of acculturation and social justice. The first section focuses on the positive learning environments of Drahner and Fisher and their cognitive and noncognitive approaches. The second section focuses on the whole-school academic program carried out by these schools and how it reinforces a collective identity. I then turn to some of the consequences of these practices: on how collectivism extends beyond the school, linking into the broader community and informing racial solidarity. Finally, this section provides a summary of how school environments have developed positive effort expenditure in students’ reasoning through the development of a collective academic identity (Kickett-Tucker & Shahid, 2019; McKnight et al., 2018; Ouweneel et al., 2011).

### **Consequences of Fay's (Aboriginal Student) Second Transition at Drahner High**

Fay made a second transition to another selective environment. Was this second transition a better experience for her? If so, why? When Fay enrolled in Drahner High, her new secondary school environment provided a “more relaxed” (Fay) environment. People with similar values and characteristics create a sense of group identity (Tajfel & Turner, 1979). The decrease in requirements for academic application led Fay to perceive the learning environment as relaxed. The smaller school delivered opportunities for Fay to succeed without putting her ASC or self-worth at risk: “I’ve got lots of friends here, lots. That I’ve known since kindergarten. And I’ve got relatives, I’ve got cousins. Just chilled” (Fay). The lack of competitiveness of the Drahner High context—“Everyone’s kind of on the same level. It’s weird. Like, everybody” (Fay)—provided the support Fay needed to enhance her motivation, engagement, and learning in the crucial transition years for Fay (Kickett-Tucker & Shahid, 2019). As predicted by her primary school teacher, Fay flourished in this environment. Coffey (2013) argued that positive interrelationships can improve the challenge of transition.

### **Influence of Cognitive and Noncognitive Strategies in Transition**

In primary school, students’ reasoning was that they had a relationship with their teacher where they were known, understood, and “generally wanting to please” in learning. In this nurturing context, their efforts were rewarded emotionally (Eccles et al., 1993). The Year 6 teacher at Somerset said,

Being here and knowing my kids and they’re just beautiful, you should go and meet them, they’re fantastic. You know they’re just so delightful in how they, their community is everything and it’s like we talk about things very openly. We are so together.

An experienced educator of Aboriginal children, the principal of Somerset said that in transition one of the greatest changes for these students was “having to establish who they are”. Before they reach this stage of internalisation, motivations need to transition from hot executive functioning (emotion) to neutral executive functioning (processes) (Poon, 2018). The thinking starts to become automatic, with students knowing how to proceed, what to expect and are confident that they have the skills to produce the product needed (Phan et al., 2019).

### **Consequences of Matt’s Second Transition to Fisher High**

As shown in Table 7.5, in Matt’s second transition to Fisher, he experienced a school climate that had strong interpersonal relationships and valued cultural inclusiveness. In addition, Fisher was putting in place a program to emphasise academic growth (Table 7.5). At the classroom level, he had good relationships with his peers and with teachers. He was confident about his academic abilities and had a special connection with the art teacher.

Academic optimism (P. A. Smith & Hoy, 2007) and strong teacher–student relationships are influential in supporting academic growth (Tschannen-Moran et al., 2006). Academic optimism is defined as having the requisite resources, experiences, and relationships for academic success (Tramonte & Willms, 2010). In the school setting, an optimistic environment is where there are high expectations but low fear of failure. The implementation of AVID at Fisher High may in part have contributed to Matt’s sense of academic self-confidence and his claim that Fisher was like “family”. Consistent with M. A. Parker et al. (2013), Pugh and Tschannen-Moran (2016) identified that the program had success with ethnic groups because “AVID’s family-like environment and student–teacher relationships improved academic motivation and achievement” (p. 153).

The philosophy of AVID mediates the multiteacher experience by limiting the number of teachers in Year 7 and importantly providing tutors. The principal at Fisher said that decreasing the number of teachers that had contact with students increased the quality of relationships and consistency. As was identified in Table 7.10, a focus on relationships with individual students as part of the Fisher school ethos was a significant contextual factor influencing motivational development (perhaps indicating teachers' use of individual reference norms).

In addition, by giving the AEOs the responsibility of implementing AVID and integrating it with Aboriginal programs, Aboriginal culture was valued at school: "Making them feel that their culture is valued and it's something really significant" (Corrine, Aboriginal Teacher, Head of Welfare). Significantly, there was a change in engagement as well as academic achievement: "We have seen a phenomenal improvement. The negative referrals have dropped, suspensions have dropped" (Principal). Both qualitative and quantitative evidence testified to the program's effectiveness:

The statistics are very, very positive, it had such a huge impact . . . Because in Year 9, all those kids had grades above the state average. It was wonderful. So, it was so effective that we just thought every kid deserves this program. (Principal)

### **Consequences of AVID Program for Fay and Matt (Aboriginal Students)**

The growth of higher order cognitive systems is powered by the desire to improve self-awareness, learn new skills, build identity, and develop potential (Guthrie, 2018). The alignment hypothesis proposes that the development of metacognition with clear instruction is crucial. Hence, as lower order and higher order cognitive processes are emerging, so are the benefits of ASC and intrinsic motivation. The provision of small tutorial groups provided this balance in the AVID transition program (<https://www.avid.org/>).

**Positive Attitudes and Practices to Affirm Students.** Drahner High and Fisher High had committed to AVID, the cognitive strategies and processes program, and had trained key teacher-leaders in its methodology. Teachers at Fisher believed that AVID supported the transition to high school as local feeder primary schools also implemented the program. As a result of this consistency, “AVID strategies have flown through [the school] making it a lot easier as the techniques are the same, the languages are the same” (Corrine, Head Teacher). More specifically, the program develops the ability to break down problems, identify patterns, and sequentially apply logic through rules and steps to solve those problems (Bugno, 2018; Kadir et al., 2018).

The AVID program aims to develop academic optimism in gifted, disadvantaged students by equipping them with cultural and academic capital. AVID seems to have some positive effects, as reflected in the evaluation of the Drahner AEO Jemma: “Our school is running in AVID at the moment. I think it’s had an absolutely huge impact”. The program was involving parents, which contributed to its impact:

Whilst those in school try their hardest to have all those programs and support materials offered, I think that drive has to come from the parents. For kids to be successful everybody’s got to be involved. This year we held an AVID parent meeting and it was the biggest event ever that I’ve ever seen at this school, and I’m an ex-student at this school, ever we’ve had turn up to Year 7 AVID parent meeting ever. The library was packed and we had to bring in extra chairs. It’s been very beneficial because not only do the parents and the students get to see but I think too it’s a two-way street where the parents . . . we have that time to sit with parents and talk about their kids and what they like and how can we better support and it’s not in a formal meeting it’s informal they just come and go as they need. (Jemma, AEO)

Jemma's colleague Susan, the Aboriginal teacher in charge of the program at Drahner, agreed:

So, for example, the [AVID] critical reading process teaches the kids how to read and unpack text. So when they go to their classes they can use that strategy to help them read and essentially write. Ideally what it is, is a program to enhance or get more kids going to university or further study. So not just university, but TAFE . . . It's also an organisational tool which we use, called a binder. So the kids carry a folder around, all their stuff for every subject. What's been good about the binder, what are you doing? Oh, it's organised, it's got all my work in it. So they know that it's good and they know what they've got. They go to class, the teachers are happy because they go to class and they're organised, they've got their books, not digging it out covered in mouldy cheese or something that's been sitting in their bag for a week.

AVID provides organisational, writing, and critical reading strategies to close achievement and opportunity gaps for diverse and disadvantaged students (A. Black et al., 2008). It provides students with support, organisation, structure, and consistency: "We'll meet up with students prior to assessments so that they're aware and have started" (Jemma).

***Long-Term Consequences of a Second Transition.*** Over the 2-year period 2015 to 2017, according to ACARA (n.d-b) statistics, both Fisher and Drahner, moderately disadvantaged schools, increased more than 25% in learning progress for the Year 7 to Year 9 cohort, as compared to similar schools. This evidence reveals the importance of developing ASC through metacognitive processes and skills (Kadir et al., 2018). Although ASC is one of the most important and influential factors in the learning process, it is often an area that is paid the least attention by teachers.

Supporting documentation is available on the schools' websites in their 2016 annual reports (sources identifiable on request, see Kaiser, 2009). The CESE (n.d., source identifiable on request, see Kaiser, 2009) published findings from Fisher High that reported significant improvements in positive homework behaviours, effective learning time, relevance and rigour of curriculum, expectations of success, a positive learning climate, advocacy within and outside of school, positive behaviour at school, and students feeling interested or motivated. Drahner High had similar characteristics according to the results of the Tell Them From Me school survey in 2016 (source identifiable on request, see Kaiser, 2009).

Research (e.g., Poon, 2018) has identified changes in conceptual development, (see Chapter 3), which means that there may be different sources of intrinsic motivation as children's brains develop: from pleasure in learning to self-satisfaction in an academic discipline. The challenge for adolescents is transitioning from relying on feelings of pleasure about the learning process to relying on self-regulation to apply skills in order to accomplish competence (Poon, 2018). As a result of high ASC, there is a reciprocal effect on subsequent engagement (Marsh et al., 2016). There are similar bidirectional interactions between memory and the development of academic achievement (Fuhs et al., 2014; Poon, 2018). It is possible that the effect of embedding skills into habits is to produce a tangible and reliable expression (self-regulation) of an intangible and cognitive belief (ASC) (Kadir et al., 2018).

### **Conclusion Research Question 5: Optimistic School Climates**

The consequences of a student's choice in making a second transition to a new school environment was that the Aboriginal participants showed increased academic motivation through the development of a collective academic identity at these schools (McKnight et al., 2018). By choosing smaller learning communities, these students had

found schools that provided a sense of belonging. Also, the learning climate of both these schools was optimistic, with low fear of failure and high success orientation. These two “optimistic” school climates, Fisher and Drahner, were implementing the same program targeting self-concept, academic discipline (Greene et al., 2018), and collective academic identity (Debrosse et al., 2018). Standardised testing reveals that Drahner’s and Fisher’s achievements during 2015 to 2017 (Year 7 to Year 9 cohorts) increased dramatically under this program. Plausibly, a consequence for my Aboriginal participants may have been the development of self-concept in the second transition GAT context to a less competitive and more cooperative learning environment. Given self-concept’s mutual relation with achievement, enhanced self-concept should also yield growth in academic achievement. Results from NAPLAN over a 2-year period evince academic growth and achievement took place in these schools.

### **Section Summary**

The consequences of a second transition was that Aboriginal participants experienced progress and a sense of belonging at high school. Adaptive transition programs and school culture also strengthened both academic strategies and noncognitive skills, including ASC for Aboriginal students. The evidence presented provides support for the finding that there was increased compatibility between the belief about one’s academic potential (sense of self) and the group-related self in the focus participants at Fisher and Drahner. The replication of similar results in both case studies provides a compelling study of how self-concept and psychological needs (i.e., the need for competence, relatedness, and autonomy) have impacted high-ability Aboriginal students transitioning to secondary schooling. Therefore, the findings have relevance beyond the cases under investigation. ASC, psychological needs, social self-concept, and ethnic homophily are important and influential factors in the learning process, factors that also could be related to the

consequence of increased engagement and achievement in students (Usborne & Taylor, 2010). Finally, the resulting increase in collective self-concept (McKnight et al., 2018) may be attributable to a closer alignment between collective and personal selves, as well as a decrease in social comparison and competition.

### **Chapter Conclusion**

This present investigation found that the structural and cultural aspects of the school environment exert an influence on friendship networks and self-concept. Consistent with a number of studies, the schools in this study functioned as socialising environments transmitting norms about practices and discourses that structured the classroom climate of the urban GAT classes. Some students were better able to function within the academic culture of secondary school because it was similar to the expectations and values of their own native culture. For Aboriginal students in the urban case study, the culture that they came from bore little resemblance to the expectations and values that they were transitioning into—a selective GAT class. Having fewer co-ethnic peers, or none, possibly led to less attachment to the different aspects of secondary school life. “Not fitting in” was an outcome of having a low percentage of co-ethnic peers. But one Aboriginal student transitioned successfully because she connected with an Aboriginal friend.

After making a second transition to schools with higher ethnic congruence—that is, an increased percentage of Aboriginal peers—it appeared that there was greater bonding to peers and teachers. It appeared from the data that a closer match between the student and the school gave the adolescent the impression of a greater sense of belonging in the school context than in the secondary school where they first transitioned. In the schools where their culture was valued and celebrated, Aboriginal students formed meaningful connections to the school, peers, and teachers.

Differences in pre-transition achievement and post-transition achievement was an influential contextual factor for participants' interactions with their peers. The adapted quadripolar model (Covington, 1992; see Chapter 3) was a useful tool for predicting these contextual changes. The compositional effect exerted positive and negative comparisons of both effort and ability, suggesting that success and positive comparisons with peers mutually reinforced each other. At the same time, failure and negative comparisons with peers were also linked reciprocally. The culture in each school, in particular the amount of competitiveness, impacted students' ASC and behaviour.

Academic, cultural, and social support was provided in schools with high Aboriginal student enrolment through the implementation of the AVID program. This whole-school approach supported practitioners in establishing an academic school culture and prosocial peer friendships, and developing the role of ASC in the learning process. The self-confidence gained from the direct instruction of academic discipline and skills may strengthen and protect the ASC (Greene et al., 2018).

Future research should investigate whether a decrease in social comparison and competition is influential in creating an optimistic learning environment. The case study has filled a gap in the literature on transition to secondary school by prioritising the voice of Aboriginal children transitioning to secondary urban schools. The next chapter presents a summary and discussion of the findings.

## **Chapter 8**

### **Discussion and Conclusion**

#### **Introduction**

This chapter brings together several key themes from previous chapters to draw insights from the experiences, challenges, and voices of high-ability Aboriginal and non-Aboriginal students and their significant adults as they transitioned from primary school into secondary school. The chapter identifies areas of congruence and dissonance of the findings from interviews with school principals, Aboriginal and non-Aboriginal parents, members of the NSW AECG, AEOs, and the high-ability Year 7 students who had recently completed the transition to the first year of secondary school. Several conclusions regarding the disjuncture between ideology and practice in the education system emerged, which are discussed in this chapter.

This research employed a case study methodology to explore school transition experiences for Aboriginal and non-Aboriginal high-ability students, which was designed to account for the issues raised in the “Literature Review” (Chapter 2). In this investigation, the prevalence of streamed settings in the case study schools revealed that social comparisons and ASC became relevant in predicting academic success and satisfaction in school. Peer comparisons of achievement take on additional importance in the developmental phase of early adolescence (Harter, 2006; Symonds et al., 2019). The attractive theory that intelligence can be improved through effort, advocated through educators, is contrasted in secondary school transition with cumulative experiences of

assessments and examinations, revealing logically that academic ability has its limitations (McNeil, 2000).

First, an overview of heterogeneous Year 7 “GAT classes” and “mixed-ability classes” across NSW is presented. This description provides a fundamental basis for understanding secondary education transition processes in the context of streaming, demography, and SES of rural and urban school communities. Then, the discussion of the results is structured around the five overarching research questions (see Chapter 4). Each research question is presented followed by a discussion of the results pertaining to it. Finally, the strengths and limitations of the present investigation and the significance of the findings for theory, research, and practice are summarised.

### **Heterogeneous Year 7 “GAT” and “Mixed-ability” Classes Across NSW**

By carefully examining the data, it was found that different selective academic classes, often labelled GAT classes, have different entry requirements, various levels of high success orientations, and a wide range of achievement standards. For example, across two nonselective government high schools, Denponse High (rural case study school) and Lewis High (urban case study school), the achievement standard of Denponse High GAT class was one band below the mixed-ability classes at Lewis High. According to the average NAPLAN score across reading, writing, and numeracy, the rural Year 7 high-ability cohort were possibly two years of achievement behind their commensurate urban peers at Lewis. Year 7 classes in different schools and different classroom contexts have widely disparate achievement levels (Goss et al., 2018).

The results suggest the existence of race excellence gap, with participants nominated as high performers in different settings having large gaps in standardised scores based on NAPLAN data (ACARA, 2019). Schools with low Aboriginal student population had larger class-average attainment levels than in settings with high Aboriginal student populations.

Australian and international research reveals similar trends on achievement when students are segregated by race and SES (e.g. Bonnor, 2019; Francis et al., 2020; Hernandez-Torrano, 2017; Jordan, 2010).

It was discovered that the definitions for the tracked classes—GAT classes and mixed-ability classes—in the case study schools were highly contextual to the location and SES of the schools. In contrast, Drahner High and Fisher High, which were both located in low socioeconomic urban areas, had GAT classes with similar achievement standards to Denponse High. At the beginning of Year 7, the GAT classes at Denponse, Drahner, and Fisher were all working at an achievement standard one band below their commensurate mixed-ability peers across Australia. From my interviews, I found many of the students in these classes, such as Kiara (non-Aboriginal, rural student), Matt (Aboriginal, urban student), and Mel (Aboriginal, urban student), considered themselves top-performing students, often because of their placement and achievement in the GAT class at their school.

Instructional quality cannot be thought of as independent from school composition characteristics. The findings revealed that different schools and different classroom contexts placed different emphases on competition and ability differences. The student and parent interviews, as well as observations of critical incidents and behaviour, illustrated the ways selectivity impacted individuals. The data also revealed how institutional and cultural frames influenced the invisible state of mind. The context of streaming, the demography and SES of the school communities, and the cultural frame of the students combined in processes that elicited the dual motives of avoiding failure and approaching success.

One evidence-based strategy that schools could adopt to raise the social and academic outcomes of their disadvantaged students is mixed attainment grouping. Mixed attainment teaching has greater potential to improve outcomes for all pupils (Taylor et al.,

2016). Unfortunately, the potential of this inclusive style of class composition is weakened as a result of the segregation, or sorting, of students into schools, sectors, and locations. In the NSW system, those with educational advantage, and hence high-attainment, are not evenly spread across schools, sectors, and locations (Bonner, 2019) to create actualised cooperative or mixed-attainment groupings. The dynamics and positive outcomes arising from this type of class composition may not be feasible.

There can be no clear definition of mixed-ability class in the case of the NSW education system because of the stratification across demographics and types of schools. In recording the trajectories of the six Aboriginal students, it was found that these students were affected by institutional and cultural contexts. Context, situation, and individual differences combined in the transition process to secondary school. Some students had an advantage in simply being able to better adapt to a given set of environmental conditions. On average across OECD countries, students express greater fear of failure and less positive feelings when there is greater competition among their peers (OECD, 2020).

### **Discussion Research Question 1: Consequences of Transition on Development of Self**

#### **Overview: Research Question 1**

Research Question 1 posed, “Are there differences in the consequences for the development of self for high-ability Aboriginal students?” There were differences in the consequences for self for high-ability participants in this investigation, and “self-beliefs about abilities matter most when people face difficulties, such as in the transition to a new educational institution” (Campbell et al., 2020, p. 27).

### **Aboriginal Participants and Stakeholders in the Rural Demographic**

There were differences in the consequences for Aboriginal students' identities as learners during transition as a result of streaming in the rural case study. To the extent that GAT classrooms fostered between-student competition rather than personal bests and growth, motivation was undermined (Burns et al., 2019). As placement in classes was not permanent, participants feared failing.

**Selective GAT Class.** The GAT class provided status and academic growth. For example, Lisa (Aboriginal student) benefited from the reflected glory of being in the "higher class". Aboriginal and non-Aboriginal students and their parents place value and status on inclusion within a high-track class (Johnston & Wildy, 2016). For Lisa, an Aboriginal student, interacting with people of diverse backgrounds in culture, intelligence, and skills opened up the potential of new possibilities for oneself. Particularly in a rural school, these schools often face complex challenges in meeting students' needs. Therefore, for Lisa belonging to a GAT class had benefits for individual achievement. She was advantaged by the positive stimulation of the class environment: higher order thinking, concise coverage of content, and the reciprocal influence of highly engaged and motivated classmates (Marks, 2010; Siegle et al., 2016).

For participants in the GAT class, spending time with other clever students, their drive and awareness, is inherently a positive influence (Burriss et al., 2006; Burriss & Welner, 2005). In the longer term, for Lisa, the consequence of belonging to a top-set class led to the development of a positive ASC with improvements in achievement, a high-quality curriculum, maintaining performance among other high achievers, and aspiring for future goals. Lisa transformed from being the lowest academic performer of our sample in primary school to ranking seventh in the GAT class in some subjects. The composition of the class can account for the positive assimilation effects of being in an achieving group

(Opdenakker & van Damme, 2001). The study of compositional effects reveals that some group-level achievement is the result of factors peripheral to the achievement itself, such as school resources or the quality of teachers (Stabler et al, 2017). This finding seems to be consistent with the assimilation effect in BPLFE theory (Hermann et al., 2016; also see Chapter 3), where social comparisons and self-concept are linked by upward spirals of effect. Hence, Lisa benefited from an assimilation effect, reflected glory from her status in the “higher class” (Lisa).

Some participants chose to form studious identities. The study found that where social circles and friendship networks valued academic achievement, there was an increased sense of purpose and possibility towards achieving academically. As Lisa (Aboriginal student) was a member of the select high-ability group, her confidence benefited from the higher status of the overstriving GAT class (a reflected glory effect; Parker et al., 2019). She was less adversely affected by the negative BFLPE from contrasting herself with high-ability peers. BFLPE’s negative effects are related to ability-beliefs, not actual academic performance.

**Mixed-Ability Class.** Student participants’ ASCs were less threatened by being in the mixed-ability classes than in the selective settings. Within the mixed classes in the rural case study, there was a higher percentage of Aboriginal friends and family, and Aboriginal students felt accepted by their classroom peers. Aboriginal students chose not to stand out from their friends with their academic achievement in this class, either because of self-doubt or peer pressure.

Another significant consequence for Aboriginal high-ability students in transition was the risk of being excluded socially. In this crucial time of forming “self”, they did not want a studious identity. The stigma of intellect or “being a nerd” creates social dilemmas for Aboriginal students of high-ability (Barber & Wasson, 2014; Coleman & Cross, 2005;

T. L. Cross et al., 2014). A finding of this study is that this attitude is more prevalent among rural Aboriginal students. Some of the students insisted on not being in the GAT class as they wanted to be with their friends. High-ability Aboriginal students like Sam and Briony may underachieve to be accepted socially (Renzulli et al., 1999). They did not want to be seen as different from the group. These results support those of previous research in that (a) high-ability, “invisible” Aboriginal students are doubly at risk of disengagement (Merrotsy, 2013, and (b) due to the necessity, centrality, and importance of community networks, high-ability Aboriginal, or minority, students often forfeit excelling academically to be accepted by their peers (Bunar, 2010; Merrotsy, 2013).

My research identified patterns of differences in the self-concept consequences of streaming for high-ability Aboriginal students, according to whether they were living in rural or metropolitan regions. Restricted to mainstream classes, the average peer achievement of the class, and any poor student–teacher relationships will slow the academic outcomes of students (Vogl & Preckel, 2014). Discrimination from teachers, or singling out students as Matt (Aboriginal student) experienced, is also known to negatively affect Aboriginal students’ achievement (Chavous et al., 2008; Hynds et al., 2017; Wong et al., 2003). These are well-established disadvantages that have consequences for students’ ASC.

Once Sam and Briony (Aboriginal rural students in mainstream classes) were in self-destructive cycles like suspensions, they acquired gaps of learning from extended periods away from school and felt less connected to the school community. Melita (Aboriginal community worker) attested to this cycle often ending with students dropping out of school at the end of Year 7. It is known that underprivileged students, and students whose parents have comparatively low levels of qualifications, will have fewer support networks to function in transitioning to the norms of the structured academic culture of

secondary school (Benner & Graham, 2009). Aboriginal students are less likely to enrol in high-track classes (Bonnor, 2018; CESE, 2018a). Based on my research, as well as ACARA data (Bonnor, 2019; ACARA, 2019) pointing to the existence of an excellence gap, the urban high-track GAT classes offered a poor fit for some Aboriginal students' psychological needs because of the dual characteristics of (a) continual fear of failure because of the ever-present threat of being dropped from the class and (b) a competitive learning environment. Fay (urban Aboriginal student), Sam (rural Aboriginal student), and Briony (rural Aboriginal student), believed that social and academic goals were not compatible with the increased workload of a high-track class. Another finding of this study was that limited resources and family stress are prevalent in rural families, not only impacting mental health but confining choices (ABS, 2016b; Guenther & Osborne, 2020; Halsey, 2018). Most high-ability Aboriginal students in rural areas in my study could only choose between a high-performing academic stream or mainstream in their local secondary school.

Freedom of choice is known to be linked to flourishing and positive wellbeing in terms of the paradigm of positive psychology (Seligman, 2018). Less autonomy is predictive of less positive attitudes (Ryan & Deci, 2001). This study found no upward movement between the groups and therefore little choice or autonomy. This finding corroborates (extensive) research that ability groupings are often fixed (Francis et al., 2017; Larina & Markina, 2019). Ability grouping also has a symbolic meaning. With high stakes being tied up with the formation of learner identity in a gifted or mainstream class, it seems unremarkable that there is a polarisation of attitudes. The attitudes are linked to the status of each group and the potential for academic success or failure within it. The evidence from this study showed that the curriculum differences counted more in the reproduction of social inequalities than individual ability factors. This finding was also

reported by Hodge (2018) and Yonezawa and Jones (2006). Therefore, not being able to move into a different stream or to access a higher quality learning environment is another structural mechanism that allocates Aboriginal students to a negative mindset. Many high-ability students can be held back from progress by either low fear of failure or deficit-thinking orientations that they have internalised as a result of being placed in ability grouping structures from early years (Woessmann, 2009).

### **Aboriginal Participants and Stakeholders in Urban Demographic**

**Selective GAT Class.** Urban students had greater flexibility in finding a school culture or high-track that complemented their values and attitudes (see Chapter 8). To have more choice, urban students had the capacity to change schools with little financial impact. Fay and Matt (Aboriginal students), who had more choice, or autonomy, were able to find an educational context that suited their optimal functioning in cognitive and noncognitive terms (Phan et al., 2019).

A further consequence of high-ability grouping is the creation of an environment of competition and comparison. Results and rankings become important in a performance-oriented setting. Fay (Aboriginal) compared herself to others in the selective GAT class, which strengthened the BFLPE. The way Fay perceived herself in the GAT class influenced the way she acted and the ways she engaged in learning in two ways: (a) The achievement level in the new class was significantly higher compared to her primary school, and (b) based on her comparisons with other higher achieving peers, Fay became more sensitive to her failure experiences relative to others. The significance of race is salient in selective academic environments (Garcia, 2020; Ho, 2020). As the only Aboriginal student in the selective class with an Asian majority, this would be a significant factor undermining Fay's sense of belonging at Lewis High. Ho (2020), in her qualitative study of selective academic environments in NSW, stated that "the significance taken on

by ‘race’ in defining oneself and others is often specific to selective school environments” (p. 145). These findings are consistent with BFLPE research, whereby BFLPE theorists (Parker et al., 2019) have emphasised more negative ASC will develop in highly context-specific environments where students are grouped homogeneously according to achievement level. As Aboriginal students are known to have lower ASC (Tarbetsky et al., 2016), they are more vulnerable at either end of the achievement hierarchy to the effects of BFLPE. Aboriginal students’ competence beliefs can be more distorted by the students around them because of this vulnerability. Racial stereotypes may increase the visibility of academic achievement. Ho (2020) stated,

Students [in selective academic environments] cannot escape being viewed and defined in terms of their (perceived) racial background, which can profoundly shape how they view themselves and others. Selective schools are examples of social environments where race is reified and behaviours and attitudes are viewed purely through a racial lens, which may not reflect the complexity of factors shaping any given situation. (p. 143)

Stereotypes about superior or inferior intelligence may appear linked to particular races in selective academic environments (Ho, 2020), reinforcing fixed-mindset beliefs about the conception of ability and therefore the strength of the upward comparison effect. In the case of Fay, her ASC was diminished considerably while moving to a high-achieving school.

Fear of failure was a critical experience that affected participants whether they were motivated or adopted achievement goals (Song et al., 2020). The extent to which students felt that they were in control of their ability to succeed academically, the less they felt threatened by the GAT class. Hence, fear of failure motivated some students. For example, Fay (Aboriginal student) was given group assessment tasks that involved

persisting with ineffective classroom peers, and she obsessed over effort and workload involved in the GAT class.

**Local GAT Class.** The data revealed that the benefits of Drahner High and Fisher High were their inclusive school values and support of Aboriginal culture and community. Fay, Mel, and Matt all described feeling more comfortable on second transition in a school that was connected to Aboriginal community. In the local high school, Mel enjoyed an environment where she was a big fish in a safe pond. The cooperative learning environment of that class led to fewer between-student comparisons. Hence, this research extends the findings of BFLPE to Aboriginal students in that positive assimilationist effects can positively address the BFLPE for Aboriginal individuals who assimilate the status of the GAT class and friendship networks.

Others had no fear of failure and were not as motivated. Matt (Aboriginal student) became frustrated when the work was not challenging. This reaction resulted in less effort as less work was required. They believed they were intelligent big fish in a safe, small pond. Matt compared his beliefs about others' source of effort and ability to form his self-concept. He came to his school much better prepared academically, but in-class comparisons led him to conclude he had superior intelligence, stating "I am usually in the top 10 in Year 7 for a few subjects", as he applied less effort than others. BFLPE's negative effects are related to ability-beliefs, not actual academic performance, but unfortunately, lowered ability-beliefs could negatively affect subsequent academic performance.

A concern that Marcia (Matt's mother of Aboriginal student) raised was about her child being "in the minority" at Lotown High. The principal at Lotown self-described his school "as we have that stereotype . . . where lots of the Asian parents/carers are very

academically driven”. By moving Matt from Lotown High to Fisher High in Year 7, Marcia hoped he would develop Aboriginal identity as well as flourish at school. From the perspective of such parents, connecting with Aboriginal community is more about self-preservation than social homophily (Jackson et al., 2014). Social homophily, in the form of creating selective classes in Aboriginal community schools, may be a support that can be given to Aboriginal students to make it possible for them to have equal access to educational opportunity. In this manner, Aboriginal students might have more equitable treatment.

Although the equity problem is widely recognised by researchers and educators (Gonski, 2018; see also Bonnor, 2018; CESE, 2018b, 2020; Goss et al., 2018; Halsey, 2018; Marks, 2017; North et al., 2018), my study shows that attempts to address the issue are hampered by the structural environments in which schools operate. In a qualitative study of high achievers in NSW selective schools, Ho (2020) argued that students’ awareness of race in selective academic settings, “Whether in racialised friendship group formation, self-segregation, everyday racism, or institutionalised racism within selective schools, race shapes students’ experiences of school in fundamental ways” (Ho, 2020, p. 146).

In adolescence, the influence of peers begins to take precedence as students seek out others who are similar to themselves. Fay regained her confidence by returning to her community and surrounding herself with friends like Mel who shared her culture and values. Across racial groups, there is evidence that students have friends who are from the same ethnicity (Howes & Wu, 1990).

### **Non-Aboriginal Participants and Stakeholders in Rural Demographic**

**Selective GAT Class.** Parents in this study compared a private school education positively with the quality of teaching and learning received by their child in the

government GAT class. As a result, to attract brighter students to their school, administrators used GAT classes as a marketing tool. Not only are selective settings used to stop the drift to the private sector, “the reflected glory” of being in the “higher” class expressed by participants revealed that within the home and school context, they were an established status symbol. Membership is an emblem of higher intelligence. There is an increasing awareness in recent growth mindset literature about the role of context on learning beliefs: “We have the power to influence growth or fixed mindsets through our instructional design, whether or not we intend to do so” (Campbell et al., 2020, p. 41).

### **Non-Aboriginal Participants and Stakeholders in Urban Demographic**

**Selective GAT Class.** Similarly, in the urban setting, participants had an underlying anxiousness about “fitting in” during the transition to secondary. The high-ability students in the urban case study held placements in the GAT class and wanted to belong and maintain their positions. All placements in the GAT classes were not permanent. Therefore, the possibility of failure and the trigger for self-doubt was always present. Even capable students like Kylie (non-Aboriginal student in selective GAT) were adversely affected by the competitive environment. The constant comparisons to others in a high-performing setting strengthened the BFLPE.

An interesting finding is that self-concept was adversely affected by the movement to a selective setting, except where there were downward comparisons or assimilation effects. The widespread practice of ability grouping, or streaming, accelerates the formation of ASC and a concept of intelligence as a static, fixed entity. Recent research (see Chapter 2) has highlighted the subterranean but extensive practice of tracking students from day one in local secondary schools (Johnston & Wildy, 2016). The prevalence of performance goals in transition as a result of secondary school culture makes it logical for students to make structured judgements and peer comparisons about their abilities in these

achievement-oriented cultures. Also, Lowe et al. (2019) recognised that accumulating in the context of Aboriginal underachievement are a number of complex issues and injustices entrenched in education structures through a long history of discrimination.

Recent reports (Bonnor et al., 2018) reveal an insidious, overarching problem existing within the public sector such that “the dynamics of our school system—rather than promoting inclusion and equity—are increasingly putting Indigenous students in a ‘class of their own’” (p. 4). To highlight the impact of these trends, the Grattan Institute (Goss et al., 2018), in their Australia-wide research, found the wealth and advantage of a school was a more powerful predictor of a student’s progress than their prior ability level. Their report found that Aboriginal students who attended disadvantaged schools were making much less than a year’s progress each school year. Concerning my study, the findings suggest that a student in a GAT class in a disadvantaged area could be progressing in numeracy at half the rate compared to the same high-track class in an advantaged school.

The main difference for high-ability Aboriginal students’ sense of self is the forced-choice dilemma between academic achievement and social identity. The dilemma involves either choosing an academic self, involving a competitive orientation with perhaps social limitations of time or peer group, or a social self, involving positive attitudes towards school work but with less academic growth (Pekrun et al., 2019).

### **Summary: Research Question 1**

Patterns in the self-concept consequences of streaming for high-ability Aboriginal students differed according to whether they were living in rural or urban areas. In rural areas, Aboriginal student participants’ ASC was less threatened by being in the mixed-ability classes than in the selective settings. Within the mixed classes in the rural case study, there was a higher percentage of other Aboriginal friends and family and students, and so students felt accepted by their classroom peers. Aboriginal students chose not to

stand out from their friends with their academic achievement in this class, because of either self-doubt or peer pressure. High-ability students may underachieve to be accepted socially. By not appearing to be a “nerd”, they protected their identity. However, the consequences of their behaviour, perhaps to gain social status, created a downward spiral of suspensions, absences, loss of learning time, and poor psychological wellbeing.

In the urban case study, the extent to which students felt that they were in control of their ability to succeed academically, the less they felt threatened by the GAT class. The widespread practice of ability grouping, or streaming, accelerated the formation of BFLPE and a concept of intelligence as a static, fixed entity. Therefore, as Aboriginal students are more vulnerable at either end of the achievement hierarchy to the effects of ASC, some Aboriginal students in competitive selective settings experienced self-doubt (the BFLPE) and anxiety and ultimately chose to leave the selective setting to join a GAT class at a local secondary school. This pattern of high-ability, minority students choosing to stay in high-poverty, low-performing urban schools has been identified in other research (Bunar, 2010; Granvik Saminathen et al., 2019).

## **Discussion Research Question 2: Impact on Social and Academic Outcomes**

### **Overview: Research Question 2**

Research Question 2 posed, “What is the impact on social and academic outcomes for students transitioning into secondary school?” The current study found that moving to a selective setting threatened self-concept, producing cycles of either positive or negative outcomes. The construction of elite learning environments such as “GAT classes” in comprehensive schools is not a neutral practice. These learning environments take on special salience and significance for different students depending on their race, wealth, and cultural values. For the two Aboriginal students who changed back to a less selective GAT

school, comparisons to others in the previous high-performing setting had strengthened the adverse effects of the BFLPE on self-concept.

At a surface level, the present research results echo previous (extensive) research that top-tracks produce high-quality learning environments and positive academic outcomes, and low-tracks have fewer educational advantages (Kelly & Carbonaro, 2012; Vervaeet et al., 2018). At a deeper level, findings show that social comparison, particularly in streamed settings, can have serious impacts on socio-emotional wellbeing (Boaler & Selling, 2017). The lens of Covington's (1992) quadripolar model facilitates a deeper understanding of how social environments assist or inhibit school-related goals.

### **Aboriginal Participants and Stakeholders in the Rural Demographic**

**Selective GAT Class.** The influence of high-ability peers on enhanced performance and academic growth is known as peer effects. Peer effects allow “education policymakers to use network design as a lever to improve academic outcomes” (Paloyo, 2020, p. 2010). High-ability Aboriginal and non-Aboriginal students showed positive attitudes to their transition experiences and towards school work and teachers in the rural high-ability track. This research suggests that the classroom climate of the GAT class promoted positive attitudes to school through sharing cultural capital and creative lessons, and stimulating learning, explicit feedback, and good relationships with teachers. This finding is corroborated by empirical evidence that high-achieving classes benefit from being composed of high-achieving students (Mayer et al., 2018). Lisa, an Aboriginal student, experienced accelerated academic progress in the GAT class. As result of her sporting prowess as well as her close friendship with the primary school dux (Kiarni), Lisa had a very strong sense of belonging within the GAT class. These positive relationships protected her and translated into higher school satisfaction and better adjustment. Groups

of high-ability students have a positive effect on the individual achievement of those within them (Marks, 2010; Opdenakker & van Damme, 2001; Paloyo, 2020).

Despite enjoying the status of the GAT class (the reflected glory effect), over the course of the transition the findings indicated some academic burn-out and limited leisure time. These findings are confirmed by other research revealing the robust and stable effects of the BFLPE (Lohberg & Freund, 2020). There is strong support for the BFLPE in the rural GAT class. Classroom level achievement, and the constant threat of being dropped from the class, has a negative effect on ASC (see Chapter 3 – Teacher Reference Norms). BFLPE's negative effects are related to ability-beliefs, not actual academic performance. In their individual self-evaluation, the rank order of each participant remained largely the same during the year. These results suggest that the rural GAT learning environment had a high success orientation (competitive climate) and a high fear of failure orientation on the adapted quadripolar matrix. These two characteristics of an Overstriving classroom more likely results in a more fixed view of intelligence and lower self-concepts, as the social reference norm is strongly associated with ability-related feedback.

An initial objective of the project was to identify impacts surrounding transition. Two impacts were found. First, self-beliefs can be powerfully susceptible to comparisons with others, both positively and negatively. The GAT classes implemented in Year 7 in comprehensive, selective environments became frames of reference, shaping the perspectives of the students in transition. Second, the impact of social comparison on self-concept was found—for example, Fay (Aboriginal student, selective GAT class) who on transition to Year 7 had performance-approach goals but experienced a growing fear of failure. As she grew more anxious, she tried not only to validate her ability but also to conceal her possible inferiority to protect her self-worth. This is an example of the BFLPE. The positive consequences from interacting with high-ability classmates may be mitigated

by the negative reaction to being in a more competitive classroom. The effect of self-doubt in the GAT experience, however, was not the same for all students. It differed depending on how much the students felt they could control the factors that contributed to success. Lisa was very supported in her GAT class by teachers and had friends inside the class who buddied up together to study. She thrived in the reflected glory of being with the high-achieving students. This finding is consistent with that of Marsh et al. (2000), who also found that some GAT students internalise the high value society places on the high-ability track.

**Mixed-Ability Class.** In the NSW education system, Year 7 classes in different schools and different classroom contexts have widely disparate achievement levels (Goss et al., 2018). Lower track classes, including mixed-ability, translate to less educational advantage and lower levels of educational achievement, especially in rural and low socioeconomic areas (Johnston & Wildy, 2018). Some high-ability Aboriginal students did not apply for selective placement due to low ASC and the forced-choice dilemma. Predictably patterns in the mixed-ability classes were more negative, with relationships with teachers being more negative, the work being less stimulating, and the environment more controlling (Duflo et al., 2011; Song et al., 2020). Findings from interviews as well as behaviour (e.g. suspensions) revealed negative mindsets (Results Research Question 1: Chronic Stress; Impact of Emotional Disorders). Peer effects in mixed-ability classes are linked to the intersectional and centrifugal nature of academic outcomes and wellbeing, which in turn is closely connected to geographical separation and disadvantage (Parker et al., 2020; Paloyo, 2020).

In Term 1, in the mixed-ability classes in the rural high school, friendship networks and social outcomes flourished, and according to Sam (Aboriginal student) lessons were “a little bit too easy”. However, there were fewer opportunities to play a sport in Year 7,

which increased boredom and encouraged “playing out” (Sam). The resulting suspensions inevitably led to large gaps in learning and a downward cycle of a sense of academic futility.

Further, by Term 4, the higher rate of suspension was correlated with students’ increasing difficulty in maintaining achievement levels, suggesting that enforced absenteeism was a contributing factor in the decrease in ASC in the mixed-ability group. For example, it may be that a decrease in positive ASC contributes to fixed-mindset beliefs where the students do not internalise personal beliefs about change. There is some evidence that some students may intellectually believe in the concept of growth but personally surrender to negative self-beliefs. These self-beliefs may have internalised over long periods of schooling or may have developed when they had been underprepared academically for new and challenging content. BFLPE’s negative effects are related to ability-beliefs, not actual academic performance.

**Quadripolar Model.** The quadripolar model documents the influence of individual- and group-level attainment to predict attitudes towards effort. Poor ASC, labelling of students’ depression, and anxiety can affect students at either end of the achievement spectrum in streamed classroom climates. Once in the vicious cycle of failing, it becomes difficult to break from negative attitudes towards school work (Pekrun et al., 2019). In a stratified and segregated education system, the achievement level of Year 7 “mixed-ability classes” in low-socioeconomic and rural schools may be as much as 4 years of progress behind commensurate peers in urban areas (Bonnor, 2018; CESE, 2020; Goss et al., 2018). Qualitative evidence from students such as Briony (Aboriginal student) suggests that there may be little movement out of the lower streams. Therefore, lower stream participation correlates with short-term impacts such as lower achievement and negative self-concept and self-esteem (Belfi et al., 2012; Francis et al., 2017; Mazonod et

al., 2019; Paloyo, 2020), and long-term impacts such as less favourable life outcomes and low-status futures (Boaler & Seller, 2017; Lipps et al., 2010). The adapted quadripolar model reveals that class climates with the dual characteristics of low success orientation and low fear of failure predict the acceptance of failure. Lester (2016) suggested the possibility that Aboriginal students in the low groups with low competency levels are at risk for delinquency and dropout.

### **Aboriginal Participants and Stakeholders in the Urban Demographic**

**Selective GAT Class.** The impact of social comparison on self-concept was found in the urban case study. My research found that some students, such as Fay (Aboriginal student), were trying as hard as they were able. She had tried a variety of approaches and was still finding it hard to be motivated. Although a conscientious and motivated student, Fay's performance was not going to be enhanced with greater effort. She self-identified her personal limit for investing academic effort (homework, exams, and assignments). Perceiving an inverse relationship between effort and achievement at Lewis High, Fay chose balance for her emotional wellbeing. Emotional wellbeing was achieved by attending a school where her self-concept was not threatened but supported.

Achievement motivation has been shown by researchers such as Wigfield and Koenka (2020) to be shaped by competence beliefs. Despite a desire to learn, there are differences, prior achievement levels, and limitations in people's intellectual capacity and potential. Across different schools, sectors, and classrooms, the rate of learning progress of students is known to be unequal, sometimes reflecting as much as a 3- to 5-year gap between students of the same age (Goss et al., 2018). Overall, the evidence emanating from this research suggests that the positive effects on achievement in a high-performing group need to be balanced by negative motivation effects (Fruehwirth, 2013; Pekrun et al., 2019). For some students, one source of motivation can be competitiveness, encouraging

them to invest more effort and work. The Vinson (2002) report recommended that the selection process for selective schools use interviews to target such students who flourish in competitive environments.

**Local GAT Class.** The local GAT classes at Drahner High and Fisher High were co-operative learning environments. From the perspectives of Mel (Aboriginal student) and Matt (Aboriginal student), it was a class climate based on high success orientation and low fear of failure. According to the quadripolar model, it was optimistic, and from the self-reports of participants, they thrived in learning environment. Mel and Matt valued school and maintained their personal best. Their Aboriginal cultural identity was supported by friends, community, and local community. The inclusive culture at the school prioritised teacher–student relations. The AVID program in place at both schools provided perceived competence support through developing effective learning habits for self-regulated learning, academic competence, and positive beliefs about their own competence.

Mel went to Drahner as a result of connections with the Aboriginal community and the importance of friendships and relationships at the school. Schools with high populations of Aboriginal students enable Aboriginal students to embrace their cultural identity and feel comfortable with others. My findings (Chapter 7) reveal that urban Aboriginal students developed a sense of belonging and wellbeing at school by building homophily networks of the adolescents, teachers, and learning community. Researchers acknowledge that minority groups self-segregate to protect themselves from discrimination and marginalisation as well as to develop their own sense of self (Bunar, 2010; Garcia, 2019).

### **Non-Aboriginal Participants and Stakeholders in the Rural Demographic**

**Selective GAT Class.** High-ability students are often competitive (Elliot, 2020). The non-Aboriginal students, Kiarni and Jarrod, thrived in the learning environment,

adopting personal goals to outperform others and pursuing grades in the service of competition. In their cases, competition in the cooperative GAT class appeared to have positive academic implications, fostering performance-oriented goals to achieve. These students worked hard, valued school, and achieved their personal best during the course of Year 7 and self-described themselves as wanting to learn. Others had personal struggles outside of school, as well as the increased pressure within school. Tyrone (non-Aboriginal student) showed high anxiety levels and self-doubt from not receiving perfect marks indicating a strong BFLPE. The underlying reason that evoked his negative reactions was the threat and potential shame of being dropped from the class. What is noteworthy from these findings is that competition can be beneficial if it predicts performance-approach goals, which in turn predict academic growth.

### **Non-Aboriginal Participants and Stakeholders in the Urban Demographic**

**Selective GAT Class.** After close examination of the data, it was found that the students in the GAT classes at Lewis High and Tarium High demonstrated a strong sense of belongingness to that class, perhaps because of the “reflected glory” (assimilation effects of BFLPE) and high status of being in the high-track class. Some students like Tim (non-Aboriginal student) at Tarium experienced anxiety levels and self-doubt (contrast effects of BFLPE). Previously, Tim had experienced self-doubt after being in an academically competitive primary school class. Kate (parent of non-Aboriginal student) and Tim were both aware of the prevalence of tutoring at Tarium (a partially selective school) to improve students’ rankings and results. Even though Tim was encouraged to apply for a DoE selective placement at Tarium in Year 8, Kate and Tim declined. Kate perceived herself choosing a less achievement-oriented environment, with fewer social comparisons, for her son. Other students such as Kylie and Jane (non-Aboriginal students at Lewis) harnessed their anxiety into positive effort and results. Kylie, a sportswoman,

described herself as having competitive traits, which suited the atmosphere of the class. Jane found solidarity with others in her culture at school. Both found strategies to deal with the performance-oriented classroom climate.

### **Summary: Research Question 2**

Top-tracks produce high-quality learning environments, and positive academic outcomes and low-tracks have fewer educational advantages (Paloyo, 2020). Both tracks had an influence on students' wellbeing in the transition, at a crucial time developmentally for their identity formation. This finding is consistent with a large body of research (e.g. Francis et al., 2020). Competence beliefs about oneself can be powerfully susceptible to positive and negative comparisons with others. High-ability Aboriginal students were underrepresented in high-performing selective settings in both case studies. Some did not apply for selective placement due to low ASC and the forced-choice dilemma. In the urban study, those that did not want to participate in competitive, overstriving class climates did not achieve the same academic outcomes as their commensurate non-Aboriginal peers. They felt a low sense of belongingness and felt isolated from the Aboriginal community.

The GAT classes implemented in Year 7 in comprehensive, selective environments became frames of reference, shaping the perspectives of the students in transition. The impact of social comparison on self-concept was found. There were negative effects of the BFLPE, which resulted in moving schools to be with friends and to protect their self-concept. The second transitions were successful as the educational environment supported students' academic and social goals for school. Aboriginal students in high-poverty, low-performing urban schools (Bunar, 2010; Granvik Saminathen et al., 2019) had improved psychological adjustment in the new contexts. In competitive classrooms, individuals can realise an inverse relationship between effort and achievement.

However, one rural Aboriginal student, Lisa, did apply for a competitive selective setting and experienced accelerated academic growth. Lisa integrated her social and academic goals and thrived in the perceived high-status GAT class. High-achieving students benefit academically from environments that are composed of other high-achieving students, a finding that is confirmed by peer effects research (Paloyo, 2020).

The mixed-ability classes in high school supported friendship networks and social outcomes. However, as there were fewer opportunities to play sport in Year 7, boredom encouraged “playing out” (Sam). The resulting suspensions and less challenging environment (“a little bit too easy”—Sam) inevitably led to large gaps in learning and a downward cycle commenced in secondary school of sense of academic futility.

### **Discussion Research Question 3: Academic and Effort-Related Adjustment During Transition—Peer Effect**

#### **Overview: Research Question 3**

Research Question 3 attempted to answer the question: “Are there relationships between effort, achievement, and sense of self for high-ability Aboriginal students transitioning into streamed classes in the first year of secondary school?” The purpose of the Research Question 3 was to understand the underlying reasoning processes that consolidate the academic identity of high-ability students in their first year of transitioning to secondary school. In the Year 6 to Year 7 transition, there was a shift in thinking about effort to focusing on performance in assessments, grades, and rankings. Grades and testing inevitably create a more competitive schooling environment. In the case of some of the participants, students who perceived themselves as receiving lower grades than others in the class were more vulnerable to declining interest in school. Consistent with research,

there was evidence of demotivation occurring in the early years of high school (Benner & Graham, 2009; Eccles & Roeser, 2011; Hulleman et al., 2010; Poorthuis et al., 2015).

The word-frequency count revealed that there were relations between effort, achievement, and sense of self for students across the Year 6 to Year 7 transition. The data also revealed that the types of class across rural and urban high schools differed in relation to their performance orientations and the strength of the BFLPE. The NAPLAN data revealed that the classroom average achievement levels across the case study schools differed as much as four NAPLAN bands (between selective GAT classes and rural mixed-ability classes). This is an important finding as it reveals that mixed-ability classes are not truly a mix of abilities. As indicated by Bonnor et al. (2018), and predicted by the Vinson (2002) report, rigid separation of students through various layers of selectivity in the NSW education system has resulted in distinct classroom climates across rural and urban areas. The power of the adapted quadripolar model is in redefining classroom climates, not according to GAT or mixed-ability but in identifying classroom climates in terms of two broad orientations: success orientation and failure avoidance.

### **Aboriginal Participants and Stakeholders in the Rural Demographic**

**Selective GAT Class.** Lisa's (Aboriginal student) success in Year 7 indicated that she received more academic benefit than others through her participation in the GAT class, and this had a buffering effect for her transition. The GAT class was a context of high success orientation and high fear of failure in terms of the relations between effort and achievement. There was a shift in thinking from "effort" in primary to "performance" in secondary.

**Mixed-Ability Class.** The rural Aboriginal mainstream mixed-ability students, with low ASCs, rejected entering a situation (the GAT class) where they did not feel they belonged. Sam (Aboriginal student) self-reported that different subjects and courses were

“too easy” and without challenge. In disadvantaged and low socioeconomic schools where the attainment of educational standards has been hindered, advanced students who choose to transfer to low-track classes are disadvantaged by patterns of boredom, failure, and disruptions to learning (Goss et al., 2018). In the case of Sam and Briony (Aboriginal students) at Denponse High, the lack of challenge in class combined with the lack of opportunities to build social networks, such as in sport, contributed to misbehaviour in class and eventually multiple suspensions. By the end of the year, gaps in learning contributed to a reciprocal decrease in level of ASC and academic engagement. Briony, who was considered for dux in primary school 12 months previously, chose to spend her time at school in the Re-engagement Centre at Denponse High.

The theoretical framework of ASC highlights the importance of social relationships (Marsh et al., 2020). A cycle of self-comparisons results when students feel threatened. If students such as Sam (Aboriginal student) and Briony (Aboriginal student) experience negative achievement attitudes, this pessimism is followed by low expectations and giving up. The significance of my current findings is that a fixed-mindset school system, one that believes in categorising students by an ability label, also results in avoidance of challenge. Quantitative researchers such as Pekrun et al. (2019) have also identified that achievement and effort “are linked by virtuous and vicious cycles” (p. 180), with success underpinning positive attitudes and failure connected with negative attitudes.

According to Dweck (2006, 2017), a fixed mindset results in negative outcomes such as avoidance of challenge, ignoring useful negative feedback, feeling threatened by the success of others, and giving up easily. The mainstream mixed-ability class developed an environment of low success expectation and a culture of academic futility. However, the quadripolar model provides a lens to understand the different types of mixed-ability classes in NSW on the continuum of fear of failure and success orientation (competitive climate).

For understudied populations such as Aboriginal Australian students, the operation of BFLPE processes may serve to explain why many gifted Aboriginal Australian students prefer mixed-ability, comprehensive secondary school settings to selective settings.

With increasing focus on the critical role of social context in education (e.g., Eccles & Wigfield, 2020; Schunk & DiBenedetto, 2020; Wigfield & Koenka, 2020) Matt is in a class-average composition there is some evidence for the creation of distinct ASC in specific high-ability contexts (Makel et al., 2012). In research that compared the level of competition and mastery learning across high-ability groupings, Makel et al. (2012) found that GAT classes that do not emphasise competition may induce a smaller BFLPE. They also hypothesised that in their study the high-ability context provided enough assimilation effects to outweigh the contrast effects of BFLPE.

This study has revealed the excellence gap in NSW between high-achieving students from different backgrounds. Excellence gaps refer to “differences between subgroups of students performing at the highest levels of achievement” (Plucker et al., 2010, p. 1). High-achieving students from lower socioeconomic or rural backgrounds tend to perform lower than their high-achieving peers from higher socioeconomic or urban backgrounds. Second, there is evidence of a racial- and ethnic-based excellence gap, with White and Asian high-achieving students consistently outperforming their Aboriginal and high-achieving counterparts (North et al., 2018). Given the known large disparity in competence levels in NSW schools (Goss et al., 2018), the use of syllabus documents to teach content and convey to students a sense of capability is undermined (Masters, 2020). The disparity between achievement levels in Year 7 across NSW schools as a result of selectivity in the education system (Goss et al., 2018) has implications for the planning, the delivery of the syllabus scope and sequence, as well as the quality of teaching of content (Ho, 2020; Masters, 2020).

### **Aboriginal Participants and Stakeholders in the Urban Demographic**

**Selective GAT Class.** The analysis of the data from Aboriginal students in the selective GAT class showed that between-student comparisons were also directed to effort, not just comparisons of intelligence. Matt's (Aboriginal student) prior achievement from a high-achieving primary school eased his transition into a high-track class in an average secondary school. So, he experienced a perception of positive effort–ability in comparison to his peers. However, he still chose to leave this environment because of the low ethnic congruence in classes. Initially, Fay (Aboriginal student) changed from an average primary school to a high-performing GAT class and appeared to experience an inverse perception of the effort–ability dynamic as a result. The value placed on intellect seems to be a key factor in estimating their worth and the regard of parents and teachers, especially for high-ability students.

My data indicated that academic motivation relies on the perception that a realistic amount of effort, invested in school work, would contribute to a positive academic outcome. This reasoning seems to corroborate the findings of previous work on the effort–ability dynamic theory (Muenks & Miele, 2017) where thinking about ability as a set of skills assumes that a reasonable effort will be rewarded by achievement and positive self-judgements about ability. If task-related difficulties are beyond the persistence of the individual and more related to a lack of prior learning, this factor may diminish enjoyment of the task and motivation to complete it. Reasoning may be based on within-participant assessments of personal competence on the task and partly on between-participant assessments within the class of ability and effort. When students compare the effort involved, they make judgements about the boundaries of skills as well as their capacity.

Coming from a low socioeconomic school where the attainment of educational standards had been slowed, advanced students such as Fay (Aboriginal student), who had

the opportunity to transfer to high-track classes, were disadvantaged by their lack of prior knowledge and skill. In the case of Fay at Lewis High, the threat of failure in actual performance contributed to a decrease in level of ASC. My research extends previous theory and research that the adapted quadripolar model can support student choices. Teachers and students may use the model to predict whether a class climate is a good “fit” by examining the dual characteristics of success orientation and fear of failure orientation (Eccles & Midgley, 1989). Eccles and Midgley’s (1989) stage-environment fit theory assumes that cooperative learning environments can have positive educational and wellbeing effects.

**Local GAT Class.** Overconfident belief in personal ability, such as with Matt (Aboriginal student), was shown to slow academic progress in the long term. Matt believed that his intelligence was an asset, stating “I am usually in the top 10 in Year 7 for a few subjects”. This particular view he held impacted his behaviour and effort. Matt is in a class-average composition of low achievers (relative to national norms) that has the label of “gifted and talented class”. This may have the effect of giving him a false sense of confidence in his ability and less incentive to invest effort. Students who are overconfident as a result of reduced competition and high ASC have been shown to have less academic persistence and reduced engagement (Kizilcec et al., 2017; Zeigler-Hill et al., 2013). Through labelling and separating students into achievement groupings, such as a GAT class versus mixed-ability classes, educators may inadvertently facilitate fixed mindsets and disincentivise investment in effort.

A GAT classroom is an institutionalised group-average achievement design with a lack of substantiated beneficial effects for all different types of Aboriginal students. While students like Lisa benefited from the GAT environment, others were more successful on a second transition to a mixed-ability or school-based GAT class where average ability was

lower. In the social environment of Drahner High, their perceived greater competence for Fay and Mel led to greater persistence and effort. Future research should further explore how perceived competence support—for example, in programs such as AVID—may function to moderate the relations between ASC and persistence and effort.

The significance and benefit of effort leading to increased ability is one element that could contribute to students' drive to persist and thrive. In intervention models such as the dual-instruction approach (Phan et al., 2019) and AVID, motivation is carefully nurtured to ensure that learning occurs within the students' cognitive capabilities. That is, we may guide students to maintain a positive interpretation of their initial competence and the potential of increasing that competence through increased effort. However, the findings also revealed that the context must be examined. Changes in classroom climate influence the motivation to work.

### **Non-Aboriginal Participants and Stakeholders in the Rural Demographic**

**Selective GAT Class.** For the non-Aboriginal students in the GAT class, there was a shift in thinking from “effort” in primary to “performance” in secondary. There was a difference in the attitudes of the significant adults in the GAT students' lives between Aboriginal and non-Aboriginal parents. Kiarni's parents had expressed concern about overwork exacerbating her already perfectionist approach to work in the GAT class. They believed that her academic success had been at the cost of other social interests during Year 7. The theme of the excessive “workload” in the GAT class was noticeable across all participants at Drahner High.

Three factors may contribute to the intensity of this selective GAT class at Denponse High: (a) There was always the fear of failure emanating from the fact that members who did not perform could be dropped from the class, (b) the selective academic environment provided a “safe place” that separated high-achieving students from people

“who did not want to learn” and who disrupted learning, and (c) rankings and results were publicly known and compared. For these reasons, this classroom climate was high on the quadripolar matrix for a high success/high fear of failure orientation. Data revealed students in the class strove for a combination of mastery and performance-oriented goals.

### **Non-Aboriginal Participants and Stakeholders in the Urban Demographic**

**Selective GAT Class.** In terms of the relations between effort and achievement, non-Aboriginal selective GAT participants increased thinking about performance and experienced a decrease in thinking about effort. Increased thinking about performance was pronounced in three out of four schools. This increase was most noticeable in schools whose population had a high Asian mix: Tarium High and Lewis High. This phenomenon echoes Ho’s (2020) study of performance-oriented Asian migrants in which she stated, “The promotion of school choice, the expansion of the selective school system and the growth in standardized testing have created a culture of competition in education that rewards competitive and strategic behaviour” (p. 71).

### **Impact of Cumulative Experiences Using the Quadripolar Model**

Students’ ability conceptions are a function of the current classroom climate, high- or low-track context, and of previously negotiated meaning, high or low ASC. Therefore, relationships between thinking about ability, effort, and achievement can be predicted by transitions between particular types of streamed contexts. Specific circumstances of classroom climates over time and past experiences allow for ability formation theories to predict the effort–ability dynamic (Bahník & Vranka, 2017). These thinking patterns about the effort–ability dynamic help to understand how particular transition contexts impact academic motivation and outcomes. This reasoning about intelligence, based on peer comparisons within or across streamed classes, impacts the belief system of students,

enabling or limiting what they can achieve. The new understanding generated from this research is to disaggregate the factors involved in the collocation of primary and secondary classroom compositions (achievement levels) that may impact social and academic outcomes.

Four distinct impacts result from four unique transcontextual experiences of streamed students that correlate with the four quadrants of the quadripolar model. First, for underachievers or failure acceptors, the results indicate a spiral effect when students are faced with the possibility of losing face or failure. Second, some enter either a self-protecting or optimistic class climate. The result of the choice of class may impact whether they are challenged in their learning. By not participating in the “gifted” class, they possibly forgo academic challenge and peer spillover effects of a class with a high success orientation (Paloyo, 2020). In this study, lack of academic challenge was an observable reaction that was linked to underachievement. Third, in a competitive environment, students are not comfortable exposing their mistakes, misunderstanding, or effort for fear of failure (Elliot, 2020; Schmidt et al., 2017). Therefore, some students’ perceptions were that excessive effort is to be avoided in risk situations. In the competitive climate, failure given high effort implied low-ability and feelings of shame (McKnight et al., 2018). This self-handicapping measure minimised the stigma of not achieving. However, it was important to protect their identity, and they still wanted to appear competent.

Overall, concerning the roles of fear of failure and success orientation in Year 7 students, using the quadripolar model, the findings underscore the potential of ability grouping to enhance or inhibit academic motivation and achievement. Ability grouping, through the mechanisms of BFLPE (Marsh, 1987) and DFSEC (Muenks & Miele, 2017), confines students’ achievement with low expectations in low groups and confines students’ achievement with stress in high groups (Boaler & Selling, 2017; Lipps et al., 2010). My

research describes the interplay of the various antecedents that shape achievement motivation (Bonnor, 2018; Goss et al., 2018). The quadripolar model predicts and describes the possible mediators in the achievement–attitude–effort relation across classroom contexts (Pekrun et al., 2019). The participants’ description of invested effort supported dynamic models of effort–ability of BFLPE (Marsh, 1984) and DFSEC (Muenks & Miele, 2017), confirming its importance. Over the transition period the achievement–attitude–effort relation impacted social as well as academic outcomes.

### **Summary: Research Question 3**

In the Year 6 to Year 7 transition, there was a shift in thinking to anxiety about performance in assessments and rankings. From the interview data, students’ focus on describing effort decreased in three out of four secondary schools in the study. The effect was different in the fourth school because there was a cooperative learning environment. Teachers in this school demonstrated and helped students build learning and organisational strategies and provided constructive feedback. In this environment, effort and collaboration were considered important rather than performance and rankings. In the local high school, GAT class conditions optimised student learning and reduced between-student competition. The self-concepts of all students in the GAT class were reinforced as comparisons were deliberately avoided. Relationships between thinking about ability, effort, and achievement can be predicted by transitions between particular types of streamed contexts. Four distinct impacts resulted from four unique transcontextual experiences of streamed students that correlate with the four quadrants of the quadripolar model: underachievement, self-protection, overstriving, and optimism.

## Discussion Research Question 4: Self-Segregation

### Overview: Research Question 4

New questions arose in response to the actions of focus participants in the metropolitan case study. Research Question 4 asked, “Why do some Aboriginal students change schools after transitioning to a selective academic environment?” This research question arose to understand the underlying reasoning processes that caused Aboriginal high-ability students to change schools in their first year of transitioning to secondary school. Aboriginal students may change schools because the values of a large high-performing comprehensive school may not form a part of their developing identity. There were two main characteristics of these schools. They both had high populations of non-English-speaking students, and their high-track streams had no other Aboriginal students. The evidence from teachers and principals at Lotown and Lewis indicated that there was little integration of cultural inclusiveness from an Aboriginal perspective in a very multiethnic population and no Aboriginal staff.

According to Berman and Paradies (2017), Asian students are socialised with messages about being a cultural straddler (Carter, 2006). Being bicultural, willingness to adapt across two cultures has benefits in many areas of personal development in adolescence. Many Asian students, like Jane at Lewis High, show the ability to identify with their racial–ethnic heritage and to identify with the school culture of academic achievement. In this way, there is a natural consistency between the messages from home and school because of the shared message of the importance of academic achievement (Cheah et al., 2013).

Also, Yu et al. (2015) identified other forms of socialisation from cultures with Confucius values. In motivating their students, they identified a parental strategy whereby social comparisons were made with other children who were academically superior to their

own. Valuing academic achievement in this competitive way may be contributing to the increased impact of the BFLPE in classrooms with high Asian immigrant populations such as Lotown High and Lewis High. McGee (2018) found in her research among college STEM students that

High-achieving Black students seek to defy stereotypes of intellectual inferiority while Asian students strive to uphold the racial stereotype about their intellectual superiority, yet both racial groups expend extra labour—both materially and psychologically—as a result of being stereotyped and marginalised. (p. 2)

Similarly, my research also found stereotypes of intellectual superiority along the lines of race among my focus participants; Jane, who is Japanese, had a morning study group with students from her culture. By doing so, she reinforced the stereotype of hardworking, high-achieving Asian people in the perceptions of students from non-Asian cultures like Aboriginal student Fay (Salili et al., 2001). At the end of Term 3, Fay felt that others in her class were not like her. Matt (Aboriginal student) and his mother also moved suburbs to relocate in an Aboriginal community with the family. Fay and Matt and their parents described wanting to be with similar others (social homophily), which may have been one of the reasons for the focus participants to move to schools with greater populations of Aboriginal peers. Other stakeholders seemed to agree with this reasoning. The embedded school values at Lotown and Lewis of prioritising academic achievement may have made some Aboriginal students feel they were different in these selective academic settings.

Therefore, classroom competition may be more compatible with the values of students from some cultures than others. Some research investigating immigrant background and achievement motivation found immigrant students tend to score higher in performance-oriented behaviour (Alivernini et al., 2018; Urdan, 2004). Performance-

approach goals have been shown to reinforce social comparisons in the classroom (Brophy, 2005). In this study, high-ability Aboriginal students held multiple moderate achievement goals: to follow social interests and to respond to academic demands. Similar to non-Aboriginal students, Aboriginal students sought to participate, learn, and fulfil expectations when settling into the new school life and experience the forced-choice dilemma.

However, my study found that some Aboriginal students were less prepared and ready for the pressures of a competitive, performance-oriented classroom climate. The selective academic educational environment may be a misfit of their individual developmental needs, as was the case for Fay and Matt.

### **Culturally Safe Schools**

Not only does a strong racial–ethnic identity have positive effects on self-esteem and achievement, there is evidence to suggest that it can also be a buffer against racial discrimination and racism. Roberts and Ali (2013) found that students who had a weak ethnic identity or who assimilated into Australian culture were more likely to be victimised by bullies. While diversity and inclusiveness need to be equally valued, social homophily has important benefits for developing Aboriginal adolescents.

In the multicultural milieu of Lotown High and Lewis High, there appeared to be few connections to the familiar culture or staff with whom my focus participants (Fay and Matt) may have a closer affinity. Positive role models and connection to the community are a key component in the development of a positive self-identity in Aboriginal students (Dillon et al., 2020; O’Brien et al., 2009). “Not fitting in” may have been one reason why they did not connect with the school in their first transition.

The importance of culture in maintaining social and familial connections and the strengthening of identity (McKay 2011; Prehn et al., 2020; Usborne et al. 2009) has resulted in clear national policy directives around the development of teaching Aboriginal

perspectives in the curriculum. My research reveals the danger for metropolitan schools with high ethnic populations.

The folklorisation of multiculturalism and culture results in public schools not only trivialising Aboriginal content and perspectives, but also conflating multiculturalism with Aboriginal education. This means that there is a very narrow space left for including Aboriginal education, and particularly for understanding what Aboriginal content might be included and how. (St. Denis, 2011, p. 314)

School leadership may be diverted by messages of diversity at the expense of acknowledging the First Nations peoples' heritage and experiences.

#### **Summary: Research Question 4**

The data showed that some Aboriginal students may change schools because the values of a large high-performing comprehensive school may not form a part of their developing identity. The factors that constrained Fay in the competitive climate were fear of failure, the BFLPE, and the high level of between-student competition. The feeling of being a little fish was magnified by comparisons with other ethnic groups, whereby upward comparisons are emphasised. The main factor that enabled students was a GAT class with a cooperative learning environment. Personal best and growth approach practices were self-referenced and limited in between-student comparisons. Teaching practices provided constructive strategies and feedback and supported student engagement. A higher percentage of Aboriginal peers and role models were involved in the school, and they provided social and academic support. This factor was helpful for motivation and engagement. Classroom competition is more compatible with the values of students from some cultures than others (Salili et al., 2001; Xu, 2020).

## **Discussion Research Question 5: Cooperative School Climates**

### **Overview: Research Question 5**

Research Question 5 also responds to the incongruity of students changing schools throughout Year 7 and asked, “What are the consequences of a student’s choice in making a second transition to a new academic environment?” The purpose of Research Question 5 was to understand if there were positive or negative consequences from making a second transition. The centrality of relationships and community in the new school, from the second transition, was a critical element described by the focus participants. Also, these students appeared to value their identities as Aboriginal as well as that of successful academic students. Their perseverance and strong personal identities were particularly evident in numerous stories told by themselves, as well as by parents and teachers.

### **Influence of Teachers and Schools**

Community schools facilitate a closer connection to kin and provide opportunities to integrate their social and academic goals. The importance of teachers and the school being committed to wellbeing is a contributing factor to student achievement. At Fisher and Drahner, the focus on students’ wellbeing and fostering cultural identity was also apparent in the stories relayed by students and teachers. The characteristics of these “value homophily” schools were “feeling valued and belonging” by the connections to community and the access to pastoral care and Aboriginal role models. As can be expected in large school staff, at Fisher there were differing views about the influence and importance of cultural identity among teachers. One expressed the deficit belief that cultural identity was more important for low-achieving Aboriginal students. The question of whether low-ability students do benefit more from developing their cultural identity is one that could be further

explored. However, it is unlikely that this was a formal school philosophy as cultural activities at Fisher were integrated into the school timetable for all Aboriginal students.

There were two ways in which Drahner and Fisher had been organised to simultaneously provide for students' socioemotional wellbeing and their achievement. First, both schools provided GAT classes. Second, both schools provided a gifted intervention program, AVID. It was apparent to students and their parents that the intervention program and the ability grouping together provided academic benefits to students placed in those GAT classes. In contrast to the responses given in many other rural and metropolitan GAT classes, the reasons students gave for approving of their new class were that the social relationships within the class, and with teachers, were positive.

The NSW DoE *Connected Communities Strategy Final Evaluation Report* (CESE, 2018b) found that

A key feature of the Connected Communities strategy is partnerships and co-leadership with the Aboriginal community. Local School Reference Groups are a key feature of the Connected Communities strategy and are intended to provide an avenue for the community to provide guidance and advice to the schools at the executive level. (p. 50)

The Connected Communities Strategy was implemented in NSW in 2013 to address the educational and social needs of disadvantaged and Aboriginal students in rural and remote schools. The Australian Council for Educational Research' (Dreise et al., 2016) report on Indigenous school attendance similarly focused on the importance of collaboration with community. It highlighted 15 recommendations, eight of which required connection with the local community "to devise strategies that are context-sensitive, culturally appropriate, collaborative, and re-energise a love of life-long learning" (p. 1).

**Summary: Research Question 5**

On the question of a second secondary transition, the social outcomes were a greater self-concept, sense of belonging, wellbeing, and the strengthening of cultural identity in the new, more supportive school. There were fewer between-student comparisons in the cooperative learning environment. Teaching practices and growth approach practices were self-referenced, provided constructive strategies and feedback, and supported student engagement. A higher percentage of Aboriginal teachers whose style of teaching was autonomy supportive were employed in the local school (Adams et al., 2016; Song et al., 2020).

**Theoretical Implications****Academic Self-Concept**

ASC is an underlying component of intrinsic motivation and optimisation in the classroom (Phan et al., 2017). It is the core concept in the three robust theories underpinning this research. The findings reveal it is impossible to function outside of the self-beliefs and self-image that have developed as a person's identity and based upon the nature of the classroom environment. After consolidating through adolescence and adulthood, there are invisible boundaries of behaviour that function automatically according to self-concept. At the critical time of transition, how ASC forms in a particular or general domain will determine future education pathways (Boaler, 2013; Bonnor, 2018). My findings reveal that a student will function in an intrinsically aligned and self-determined manner, without coercion, reward, or punishment, as a result of developing a healthy ASC.

A significant loss to teacher practice and student learning has been the relegation of this construct to "academic" scholarship in tertiary education. Kickett-Tucker and Shahid

(2019) argued that “this knowledge is imperative because research shows that a strong self-identity is correlated with positive self-esteem, behaviour, sense of effectiveness of oneself as an individual and ultimately positive mental health” (p. 196). ASC explains the reasoning underlying underachievement and provides a mechanism for reversing it. At a time when schools are struggling to control student behaviour through authoritarian means, this construct provides a mechanism for optimisation. Education and personal development are a human right (M. Black, 2004), and competence is a core component of optimal fulfilment (Ryan & Deci, 2001). The significance of ASC has not been understood or believed widely by education practitioners, yet protecting and enhancing high-ability Aboriginal students’ self-concepts is critical and yields multiple educational outcomes.

### **BFLPE**

The findings reveal new insights into the fear of failure that many students face in GAT classes, where the contrast effects of BFLPE obstruct their path to growth. Across rural and urban in Year 7 GAT classes, there is little difference in the relationship between performance orientation and level of competition for students. Across all geographical areas, there was a direct relationship between performance orientation and class-level achievement in heterogeneous Year 7 GAT classes. Reciprocal relations over the transition time linked achievement and negative emotions such as fear. This confirmed the functional importance of the level of in-class competition and rank ordering themselves in creating less favourable self-perceptions of ability. These comparisons were based on perceptions of their ability and perceptions of their effort source, consistent with the BFLPE.

### **Selective Accessibility Model**

In the development of self, assimilation findings related to social comparison level choice reveal the importance of interpretative and comparative processes arising in the

selective academic classroom setting. This diagnostic information is important in developing an identity. Unfavourable comparisons of academic ability with the whole class co-exist with the favourable as well as contrast effects of comparisons with others on ASC (Huguet et al., 2009).

The BFLPE is the net effect of these counterbalancing effects of positive and negative judgements of self. Negative contrast effects occur when grouped at the class level in selective academic environments. However, positive assimilation effects or favourable comparisons with high-achieving peers occur when they assumed greater similarity with the referent.

Favourable comparisons are likely when the comparer and the particular referent are grouped in the same class (Schwarz & Bless, 1992). In protecting one's self-concept, students resort to category differentiation, using a different standard to judge oneself. Replacing "conceptions of intelligence" with the category "effort source beliefs" presents an alternative standard of comparison but a realistic possibility. For example, in my research, participants chose "status" homophily, a category standard. Comparing oneself to the similarity of status—that is, membership in the GAT class—indicates self is high on the critical dimension of intelligence. In being removed from this class, as was threatened by the school processes, the potential loss of face, being shamed as "dumb", would be damaging for their ASC. However, in comparing oneself by using the standard "values" homophily—that is, a student who values equally social and academic goals—a comparison is made with a downward standard. To defend self-worth, the comparer judges that others in the class are different on the critical standard.

In protecting a healthy ASC, the student assumes they are dissimilar to the critical standard of comparison and selectively searches for evidence that this is so. My study provides evidence that membership in a GAT class could result in holding positive and

negative judgements of self in a balancing effect. An assimilation effect occurs with a positive effort source belief when belonging to the status of a GAT class. A contrast effect occurs when membership to that class is lost, or potentially will be lost, with an inverse effort source belief. The inverse effort source belief can potentially cause a cycle of failure and negative mindsets. Success and failure are cyclical. As has been shown, the vicious cycle of a contrast effect can result when a high-ability class is considered a referent. The findings reveal that social homophily can impact positively through assimilation and is a positive predictor of the spiral effects of healthy ASC and achievement. These findings established support for the forced-choice dilemma, especially social homophily, in the experience of high-ability Aboriginal students and investigated how effort source beliefs potentially impact interest in school and school work.

Further research should seek to examine empirically how different types of Aboriginal students may be impacted by assimilation and contrast effects differentially. Other questions are raised regarding the strength of assimilation effects when the threat of failure is ongoing in the context of GAT class settings in comprehensive schools. These settings are unique contexts where there is an imminent loss of academic status for high-ability students. Therefore, considering the strength of fear of failure and public humiliation, assimilation effects in this situation may exceed the contrast effect. Considering the ubiquitousness of these classes across NSW, this question should be researched further.

### **Similarity as Salient for BFLPE**

Testing for similarity is important in the process of selecting a comparison standard. In the selective accessibility model (Sailors & Heyman, 2019), people compare primarily with similar others and receive diagnostic feedback about their abilities. By selectively finding a standard that the referent is similar to themselves, the student builds

self-understanding. Therefore, other factors may be associated with differences in self-concept. One example mentioned in the literature includes negative racial stereotypes (Irizarry & Cohen, 2019; Kickett-Tucker & Shahid, 2019; Riley & Pidgeon, 2019) or race-biased teacher expectations and behaviours that give preference to White and Asian students (Copur-Gencturk et al., 2020; Fish, 2017; Ho, 2020; Kickett-Tucker & Shahid, 2019). My findings suggest that achievement groupings reiterate negative stereotypes and race-biased teacher beliefs and behaviours, possibly impacting Aboriginal students' ASC relative to others (Bonnor, 2018; Kickett-Tucker & Shahid, 2019).

In reversing an unhealthy ASC for high-ability Aboriginal students, other factors of importance were connection, advocacy, and sense of belonging. Increasing the connection with school, and developing a strong self-concept, results in increased levels of effort that becomes self-reinforcing (Yeager & Walton, 2011). These factors are useful in understanding the power of social and cultural structures to promote adaptive mindsets about competence and to create productive learning environments where everyone has the same opportunity to learn. A positive racial identity can be conducive to perseverance and academic success (T. Yip, 2018).

As a result of the controlling narratives of a system that values intelligence as a fixed entity, the logical conclusion for those within this system is a clear relationship between the formation of ability conceptions and the practice of streaming or sets. There is a pattern that can be observed reliably across transition cohorts of middle years students that shows a relationship between mindset and achievement. This study presents qualitative evidence that streaming/tracking structures reinforce the fixed mindset, and that relative to those in wealthier school settings students from poor families are less prone to hold a growth mindset (Claro et al., 2015). The individual's internal alignment of effort

and fixed ability forms a subjective conception of personal ability, and a self-identity is formed from this personal judgement or label.

### **Effort Source Beliefs**

Consistent with the expectancy–value theory of achievement motivation (Wigfield et al., 1991), participants’ beliefs about their ability alter in response to the stream they are placed into in Year 7. When students are in a setting that emphasises similarities and differences, they tend to conceptualise ability as a fixed trait. Then, students perceive that increasing the amount of effort needed to successfully complete a challenge may indicate a lack of ability. The impact of transition into GAT group membership has implications for drive in the classroom. The adapted quadripolar model (Covington, 1992) developed in this study for predicting positive and negative effects for achievement motivation indicates there may be hope in finding better ways to understand how to personalise learning for high-ability Aboriginal students. The division between “gifted student” and “others” is a fiction that has flourished Western culture (Boaler, 2013). Recent neuroscience has shown the neuroplasticity of the brain to grow and develop (Brunec et al., 2019). The result of the gifted student myth is a system that values intelligence as a fixed entity.

“Ability grouping as a practice rests upon fixed-mindset beliefs—it is implemented by schools and teachers who themselves have fixed beliefs about learning and potential and it communicates damaging fixed ability beliefs to students” (Boaler, 2013, p. 149). The logical conclusion for those within this system is a clear relationship between the formation of ability conceptions and the practice of streaming or sets.

In streaming initiatives that stereotype or suggest negative feedback, the outcomes are often fixed and high stakes (Boone & Demanet, 2020). Students function to position themselves advantageously, forming categories, labels, and judgement of themselves and others. In my research, focus participants maintained an investment of ability that had

calculated returns for the amount of effort. As has been discussed, the BFLPE represents the psychological mechanisms at play in the process of tracking: across-group and within-group comparisons (Marsh, 1984; Richer, 1976). The first dimension is the comparison of the style and rigour of the learning environment to which students are exposed (Mayer et al., 2018; Reichelt et al., 2019). The second dimension is the comparison of the ability and behaviour of their classroom peers (Isphording & Zölitz, 2020). A third psychological mechanism is at work. This comparison is internal as an individual aligns the amount of effort they invest with fixed ability in a subjective judgement of personal ability. The students construct their identities as learners according to how they want to present themselves in a particular context (Thurston et al., 2016). Often students' previous experiences with "ability" streaming practices adjust and limit their expectations and impact the way teachers and students behave towards each other (Mayer et al., 2018). In transition, these prior experiences and ability identifiers involve classroom examples from primary school (Boone & Demanet, 2020).

The impact of transition to high school is crucial (Bharara, 2019). It is at this time that the concept of "ability" is produced, reproduced, and transformed in the movement between across-group comparisons (Boone & Demanet, 2020). By changing to a school with lower class-average achievement but remaining in high-track class composition, students, such as Fay, "track drop" to protect themselves against shame. In terms of theory, internal alignment has been protected. Consistent with what is known regarding peer spillover effects (Griffith & Main, 2019), it appears peer spillover effects are stronger within race (Opper, 2019). Fay expended less effort (in the lower class-average achievement composition) with "fixed ability" in that she was still working in a GAT setting. Therefore, her subjective conception of personal ability, "giftedness", had not been

endangered. However, the overall consequence was that the overall pace and challenge of learning environment had decreased.

Impacts on the development of ASC as a result of track changes have also negative consequences for achievement for “track-droppers” (Wouters et al., 2012). Similarly, an increase in ASC and motivation but a decrease in the challenge can also occur for those who have prior experiences and identifiers of high-ability in primary school. The label of “ability” that is produced and integrated with a student’s self-concept often has lifelong implications (Boaler & Selling, 2017; Bygren & Rosenqvist, 2020; Lipps et al., 2010).

This chasm between research evidence and practice is most clearly reflected in the ability grouping practices used in schools that communicate to students that their ability is fixed, initiating the harmful fixed mindset beliefs that research has shown detract from students’ learning opportunities throughout life. (Boaler, 2013, p. 145)

The account presented reveals that identity processes, learning approaches, and contextual factors are the main gauges of students’ behaviour, development, and achievements.

This study reveals that the construction of elite learning environments such as “GAT classes” in comprehensive schools is not a neutral practice. These learning environments take on special salience and significance for different students depending on their race, wealth, and cultural values. The contribution of this study is to reveal that these classrooms and schools are not the same emotional contexts for all students. In-depth qualitative studies increase the understanding of the interaction of learning, the development of a sense of self in relation to others and belonging in these domains, as well as how stakeholder beliefs influence thinking about student progress and pedagogical practices. These narratives reveal how policies that emphasise standardised testing and

ability grouping tend to promote increased segregation to the disadvantage of young people from low-income and Aboriginal backgrounds.

Moving to a selective setting, or not, is a critical experience that affects motivation (Boone & Demanet, 2020; Song et al., 2020). Moreover, the effect of moving into a GAT class experience is not the same for all Year 7 students. The findings show that transition can differ depending on the factors that students attribute to success and failure (Scales et al., 2020). A student's perceptions as to why they succeeded or failed in a particular classroom climate will determine the amount of effort the student will engage. Students' self-perceptions are in flux in early adolescence. Self-perceptions are a blend of their beliefs about what social and academic goals they want to achieve, beliefs about their intelligence and their ability to develop that, and their sense of whether a competitive or noncompetitive academic setting suits their needs.

The adapted quadripolar model proposes that young people cognitively evaluate causal properties about each classroom climate they enter. When students evaluate a classroom climate with less competition and high expectancy of future success climate, such attributions should result in a greater willingness to engage in the educational setting. However, if in another classroom setting those students evaluate the competitiveness and low expectancy of future success, it will be avoided. Eventually, such affective and cognitive assessment of the learning climate of a class influences future behaviour that students encounter in school settings. Using this approach, parents and teachers can learn to predict their high-ability students' future scenarios of their possible engagement and maintenance of effort.

### **Implications for Gifted Education in NSW**

This section provides an important opportunity to advance the understanding of the contribution of school contexts to the field of gifted education for high-ability students. To

implement possibly important factors connected with high-ability students' achievement, greater emphasis needs to be placed on contextual factors to know which practices and policies have the greatest influence on gifted Aboriginal and non-Aboriginal experiences and outcomes.

In any situation, context counts. Context is essential for making sense of any person, action or event. In writing narratives, the person in context is of prime interest and the purpose is to make meaning of their experiences, and to share understanding with readers. (Pepper & Wildy, 2009, p. 19)

As evidenced by the CESE (2020) review (North et al., 2018), the structural factors of the school context remain an under researched issue in gifted research, both in the NSW DoE analysis and internationally. Prior studies have been criticised for their biotic approach, or their lack of empirical methodology, and focusing on the individual factors of students in differentiating the differences between achieving and underachieving gifted students.

The findings extend the BFLPE theory, expanding and supporting the strategies used by high-ability students to manage the representation of their identities in school to maintain a positive ASC. Two upward comparisons of BFLPE theory were found in specific situations: self-protection and optimism using the quadripolar model matrix. First, in the self-protection scenario, by moving to a low-track associated with a lower success orientation, a high-ability student can feel confident but does not need to strive to succeed. The self-protector feels more confident making downward comparisons to lower achieving peers. Second, by moving to a GAT class in a lower achieving secondary school, high-ability students benefit from the "reflected glory" of being in a selective academic class as well as decreasing the between-student comparison and high fear of failure characterised

by selective academic environments in higher achieving schools (Ho, 2020). My research supports and extends the application of the BFLPE theory to Aboriginal students.

Covington's (1992) quadripolar model identifies characteristics of gifted, underachieving students, but his model has not captured the complexity of what students experience in the context of structural school-related factors. The present study attempted to overcome each of these issues and hence contribute a conceptually, methodologically, and theoretically considered body of research to extend GAT research. The use of the quadripolar model to understand the impact of differentiation and acceleration programs, the quality of teaching programs, and the intensity of streaming practices on student motivation is principally important for research.

The acknowledgement of the importance of context in the gifted education field may have additional benefits. As individual factors still dominate the research designs, lessening the importance of not having clearly defined methods for identifying gifted and nongifted students could be beneficial. The rigour and validity of future research in this area will be increased by capturing the complexity of an individual in context, rather than the individual whose identification and measurement as "gifted" has been a known methodological anomaly for the field (S. L. White et al., 2018). The field of gifted underachievement education has sought explanations and tried to influence issues of high performance in individual students through the limited lens of fixed-ability beliefs.

### **Practical Implications**

There are important considerations of the findings for practice. First, teachers could consider as a priority reinforcing and enhancing the self-concepts of high-ability Aboriginal students in both GAT and mixed-ability settings. This could be achieved by using self-concept enhancement strategies based on attributional feedback (see Chapter 3) that also employs performance feedback that reinforces feelings of and addresses the

universal need for competence. The reinforcement of the self-concepts of all students in GAT settings could also involve reducing competition to try to reduce social comparison as well as emphasising upward assimilation effects and reflected glory of being in a GAT class.

Second, the findings of this study have implications for explaining how classroom conditions optimise student learning and reduce between-student competition. Teacher practice and classroom intervention can encourage students through autonomy-supportive strategies to engage and motivate high-ability Aboriginal students (Filippello et al., 2020). Autonomy-supportive teachers do not threaten their students' self-concept and do not induce feelings of anxiety. Instead, the supportive teacher will give feedback, provide challenge, scaffold learning, and share power (Scales et al., 2020). As a normal part of development in adolescence, students are forming their social and academic goals and are gauging the climate of competence support in class. Learning increases in goal-focused and adaptive education climates. Therefore, it is critical that students receive help in setting goals, overcoming challenging tasks, and monitoring their personal best.

The insights gained from this study hold implications for renewed emphasis on personal learning plans (PLPs) and revitalising Secondary Personalised Learning Career Pathways for Aboriginal students. PLPs are the process of creating learning goals. They are an opportunity for a three-way consultation with students, teachers, and parents, to identify personalised targets for a student's academic growth. Part of the *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*, PLPs are intended to be implemented for students throughout their primary and secondary education. PLPs can readily be utilised as a growth goal-setting intervention. Despite PLPs not being compulsory in secondary schools, both Drahner High and Fisher High prioritised the development of PLPs with carers/parents, and set aside resources, to ensure all Aboriginal

students at their school had a goal-directed learning plan in place. There is a strong relationship between the effective promotion of growth goal-setting interventions and positive outcomes for student engagement (Ginns et al., 2018). Prior studies have noted the importance of personal best and growth approaches that lessen the emphasis on fear of failure and social comparisons (Burns et al., 2019). Burns et al. (2019) presented effective ways for goal setting to be relevant to students as well as promoted and implemented by teachers and parents. Practical implementation of personal learning plans has been constrained by effective transfer during the movement from primary to secondary school (Craven et al., 2014). They need to be connected back to students' aspirations so that learning has relevance and meaning for the future. The development of new relationships is vital during the Year 6 to Year 7 transition. Support from and accountability to others (e.g., teachers or parents) encourage students to achieve their personal best (Martin & Elliot, 2016; Travers et al., 2015).

In the course of my study, a difference was found between primary schools and some secondary schools in the relevance and importance they placed on the PLP process for Aboriginal students. Primary schools and secondary schools such as Drahner High and Fisher High used the PLP process to engage and communicate with parents and students. Melita, the Aboriginal transition officer, prioritised PLPs on the first day of Year 7 as a way to support Year 7 students and families and welcome them into the new school. She used goal setting and regular progress tracking to benefit all Aboriginal students and connect with parents/carers.

One reason that Drahner High and Fisher High may have had less competitive learning environments may have been that PLPs redirected the focus of students to personal best rather than comparisons with others. Fisher High allocated funding so that teachers and AEOs had time to meet with Aboriginal families. To reduce the workload for

teachers, engage parents, and increase the ownership of the process by students, one school used an online electronic portfolio, like MGoals, to keep records. In upper primary and secondary schools, where the PLP can be managed by the student, this process solves the problem of continuity between primary and secondary contexts. An online portfolio facilitates the involvement of significant others in reminding and assessing students' growth goal attainment (Martin & Elliot, 2016).

Another finding is consistent with the research of Craven et al. (2014). Rural high-ability students indicated that the need to travel long distances or having to moving away from home and community were important considerations in not applying or accepting a selective placement. The observations also agree with the results reported by the *Review of Selective Education Access* (North et al., 2018). However, for a complexity of reasons investigated in this study, rural, disadvantaged, and Aboriginal students are also not at an achievement level commensurate with students in higher performing schools. Government institutions establish growth targets and expend much effort (time, money, and resources) to achieve them. However, they need to be accountable for the structures that they put in place, such as selective settings. For example, the online Aurora College selective program was established to address the access to selective programs. Research is needed to examine whether selectivity in the education system and hypercompetitive society continues to leave rural, disadvantaged, and Aboriginal students, who do not have the prior achievement levels, unable to access this program. These government institutions create barriers to the very targets that they have established and in which they have invested.

The results demonstrate programs that support students' learning in groups, such as AVID, impact each individual's learning and motivation. The AVID program develops student motivation by taking advantage of the support of like-minded peers. The effects of social comparison on ASC were diminished because of students working cooperatively

with others. The program also involved “tutors” (AEOs), which may have resulted in less teacher-controlled learning, more autonomy, and better student–teacher relationships. Participants reported less social comparison and competition. The research on cooperative learning reveals an increase in achievement, engagement, and enjoyment in learning (Slavin, 2020). The AVID program is unique in that it is a whole-school approach, bringing teachers together to work in teams. Students can create communities of learners and support each other’s learning and achievement. The principals of Drahner High and Fisher High understood the depth and breadth of the structural obstacle faced in addressing their students’ academic growth. Therefore, both principals researched, then implemented, AVID that was rooted in theory and could be adapted and sensitive to their school context. In my interviews, both principals took the position that long-term results would require commitment and long-term investment. Schools should invest long term in AVID.

As a result, three recommendations are gleaned from the data, which echo the recommendations in the education review (Gonski, 2018). In the absence of an explicit policy approach to ability grouping (Clarke, 2014; Johnston & Wildy, 2016; Luke et al., 2013; Spina, 2019), the first recommendation is to form a task force to review the lack of impact of research-based evidence of what works in education (Gonski, 2018, p. ix). The two-types-of-quality system is compounded by the style of standardised testing and summative assessment and work practices that are implemented from the beginning of secondary school. In fact, the NSW DoE procedures that promote *siphon* tracking (Clarke, 2014) result in the “residualisation of the strugglers” (Bonnor, 2018, p. 5) and the low and declining resilience of our disadvantaged students (OECD, 2017) and Aboriginal students (Bonnor, 2018; Spina, 2019).

Another recommendation is to allow students to consolidate the transition process for the first full year of secondary school before segregation or streaming, allowing them to

establish themselves into the school community without being labelled as “gifted”, or not. By delaying the streaming process to later years, students would be able to further manage their learning without stereotypes, labelling, or ability formations and develop metacognitive skills. The education review contended that desegregation should include a curriculum independent of year or age and benchmarked by learning progressions (Gonski, 2018). Such environments would have formative practices for supporting student growth and progress.

Finally, I suggest integrating more towards positive psychology for Indigenous thriving approaches (Craven et al., 2016) into preservice teacher education, as part of a review of the content of personal development and wellbeing curriculum (Adams et al., 2016). Such education could assist in educating teachers to consider strengths-based approaches, solutions not problems, and the critical role of psychosocial drivers of school engagement and achievement. The link between strengthening student–teacher relationships and significant improvements in motivation and achievement is found in the transformative power of an adult relationship to change the way an adolescent sees themselves (Scales et al., 2020). Indeed, previous research has demonstrated the reciprocal relationship between self-concept and achievement (Marsh & Craven, 2006). It is essential to prepare students with life skills, emotional self-regulation, and self-awareness.

Academic achievement motivation should be at the core of interventions that target self-regulation and learning strategies in underachieving students (Adams et al., 2016; Scales et al., 2020). Therefore, ongoing explicit teaching of adolescents as to how to develop academic achievement motivation is recommended to meet the needs of students. Particularly in the area of low ASC, learning involves a change in self-organisation—in the perception of oneself. A learning environment that trains students to reason with positive self-produced thoughts that develop self-regulated learning will bridge the gap between the

cognitive belief (the reasoning) about one's academic self and the tangible results (achievement) that confirm it. In light of these results, there is a strong justification to include the applied science of psychology for preservice teacher training as an essential factor in understanding how to enhance the self-concepts and motivation of high-ability students.

### **Chapter Summary**

This chapter identified the results of the findings of the themes that emerged from the in-depth interviews and survey data from the two cases (see Chapter 6 and Chapter 7) and offered research evidence for the validity of these findings. The quadripolar model (Covington, 1992; Martin et al., 2001) identifies different profiles depending on the unique transcontextual meaning in each transition (high achieving to low achieving or low achieving to high achieving). The effect of class-average composition on ASC (BFLPE) from the primary school on self-concept compared with the BFLPE from tracking (high or low) in the first year of a secondary school operated differently for different students. The data revealed that the effect depended on the contrast effect or assimilation effect from the school-average achievement of their primary school and the class-average composition of their new secondary school (Arens & Watermann, 2015; Hoferichter et al., 2018; Robbers et al., 2018). This psychosocial phenomenon is an adverse effect on students' self-perceptions, not directly on actual achievement. "Gifted" and "mainstream" groups differed by cultural capital, perceived academic and social status, perceived quality of teachers, and the style of the learning environment. Unfortunately, those caught in a downward cycle of belief and motivational processes could experience poorer subsequent academic performance.

In regard to motivation and self-beliefs, high-ability Aboriginal students differed from non-Aboriginal students in social overconfidence, effort source beliefs, and the

stigma of intelligence. Interestingly, in this study, differences in achievement status were not found across genders but across track type and geographical area. Aboriginal students were underrepresented in high-track classes irrespective of other background characteristics. High-ability Aboriginal students were misallocated to settings that they had difficulty flourishing in or chose to attend low-track classes. In a stratified education system such as NSW's, "mixed-ability classes" are not simply low performing. As investigated in this study, these classes are impacted by peer effects. They are the result of a complex mix of influences and hence are structural barriers that hinder some students with potential from achieving (Paloyo, 2020). My findings do not comply with a one-size-fits-all approach to finding the best learning environment for high-ability Aboriginal students. As was illustrated in these results, psychosocial needs are integral to academic development, especially in the secondary education transition (OECD, 2020). Therefore, more longitudinal research is needed to examine nuanced characteristics that support the academic growth of high-ability students with differing psychosocial needs over time, through the early years of secondary school. The adapted quadripolar model identified four domains of classroom climates: self-protectors, overstrivers, optimists, and failure acceptors. In doing so, the model detected the likely enablers and constraints of academic success for each learning environment.

### **Conclusion**

There were two primary aims of this study: (a) to investigate why high-ability Aboriginal students in Australia experience a greater decline in their ASC and motivation during transition and (b) to ascertain if students' reasoning about the source of effort may be a contributing factor. A combination of quantitative and qualitative approaches was used in the data analysis. Aboriginal students were the focus of the case studies while non-Aboriginal students were compared to these cases. The data showed that the mechanics of

the BFLPE and DFSEC operated in the thinking of high-ability Aboriginal students. These thinking processes can be further explained by Covington's (1992) quadripolar model that elaborated these effects. The results identify the impact of heterogeneity of GAT classes across public schools in the state of NSW and their impact on the social, emotional, and psychological development of high-ability students. The findings suggest that many high-ability students can be potentially held back from progress by either low fear of failure or weak success orientations, which may be a result of the streaming systems that produce contextual changes in learning. The more selectivity there is in an education system, the more distortion occurs to all students' self-concepts across the whole school system. Noncompetitive GAT classes provide social support, effective learning habits, and the development of cooperative and engaged learning. Recent research has described the social division in NSW schools as apartheid in schools (Bonnor, 2018; Hattie, 2015). These findings point to the importance of creating low fear of failure and promoting high success orientation during transition from primary to secondary school.

## References

- Abraham, J. (1995). *Divide and school: Gender and class dynamics in comprehensive education*. Falmer Press.
- Adams, C. M., Ware, J. K., Miskell, R. C., & Forsyth P. B. (2016). Self-regulatory climate: A positive attribute of public schools. *The Journal of Educational Research*, *109*(2), 169–180. <https://doi.org/10.1080/00220671.2014.934419>
- Alivernini, F., Manganelli, S., & Lucidi, F. (2018). Personal and classroom achievement goals: Their structures and relationships. *Journal of Psychoeducational Assessment*, *36*(4), 354–365. <https://doi.org/10.1177/0734282916679758>
- Allen, A., Scott, L., & Lewis, C. (2013). Racial microaggressions and African American and Hispanic students in urban schools: A call for culturally affirming education. *Interdisciplinary Journal of Teaching and Learning*, *3*(2), 117–129.
- Allport, G. W. (1985). The historical background of social psychology. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology* (Vol. 1, pp. 1–46). Random House.
- Alspaugh, J. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research*, *92*(1), 20–25.
- Alvesson, M., & Skoldberg, K. (2009). *Reflexive methodology: New vistas for qualitative research*. Sage Publications.
- Anderman, E. M., & Patrick, H. (2012). Achievement goal theory, conceptualization of ability/intelligence, and classroom climate. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 173–191). Springer. [https://doi.org/10.1007/978-1-4614-2018-7\\_8](https://doi.org/10.1007/978-1-4614-2018-7_8)

- Anderson, J., & Boyle, C. (2019). Looking in the mirror: reflecting on 25 years of inclusive education in Australia. *International Journal of Inclusive Education*, 23(7–8), 796–810. <https://doi.org/10.1080/13603116.2019.1622802>
- Anderson, L., Jacobs, J., Schramm, S., & Splittgerber, F. (2000). School transitions: Beginning of the end or a new beginning? *International Journal of Educational Research*, 33(4), 325–339. [https://doi.org/10.1016/S0883-0355\(00\)00020-3](https://doi.org/10.1016/S0883-0355(00)00020-3)
- Arens, A. K., Schmidt, I., & Preckel, F. (2019). Longitudinal relations among self-concept, intrinsic value, and attainment value across secondary school years in three academic domains. *Journal of Educational Psychology*, 111(4), 663–684. <https://doi.org/10.1037/edu0000313>
- Arens, A. K., & Watermann, R. (2015). How an early transition to high-ability secondary schools affects students' academic self-concept: Contrast effects, assimilation effects, and differential stability. *Learning and Individual Differences*, 37, 64–71. <https://doi.org/10.1016/j.lindif.2014.11.007>
- Arens, A., Yeung, A., Craven, R., Watermann, R., & Hasselhorn, M. (2013). Does the timing of transition matter? Comparison of German students' self-perceptions before and after transition to secondary school. *International Journal of Educational Research*, 57, 1–11. <https://doi.org/10.1016/j.ijer.2012.11.001>
- Australian Bureau of Statistics (ABS). (2016a). Cultural diversity in Australia. *Census population and housing: Reflecting Australia—stories from the census*, cat. no. 2071.0. <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Cultural%20Diversity%20Data%20Summary~30>
- Australian Bureau of Statistics (ABS). (2016b). Aboriginal and Torres Strait Islander population. *Census population and housing: Reflecting Australia—stories from the*

*census*, cat. no. 2071.0.

<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Aboriginal%20and%20Torres%20Strait%20Islander%20Population%20Article~12>

Australian Curriculum, Assessment and Reporting Authority (ACARA). (n.d.-a). *The*

*Aboriginal and Torres Strait Islander histories and cultures cross-curriculum*

*section*. [https://www.australiancurriculum.edu.au/f-10-curriculum/cross-](https://www.australiancurriculum.edu.au/f-10-curriculum/cross-curriculum-priorities/aboriginal-and-torres-strait-islander-histories-and-cultures/#)

[curriculum-priorities/aboriginal-and-torres-strait-islander-histories-and-cultures/#](https://www.australiancurriculum.edu.au/f-10-curriculum/cross-curriculum-priorities/aboriginal-and-torres-strait-islander-histories-and-cultures/#)

Australian Curriculum, Assessment and Reporting Authority (ACARA). (n.d.-b). *My*

*school*. <https://www.myschool.edu.au/>

Australian Department of the Prime Minister and Cabinet. (2018). *Closing the gap Prime*

*Minister's report 2018*. Commonwealth of Australia.

[https://www.pmc.gov.au/sites/default/files/reports/closing-the-gap-](https://www.pmc.gov.au/sites/default/files/reports/closing-the-gap-2018/sites/default/files/ctg-report-20183872.pdf?a=1)

[2018/sites/default/files/ctg-report-20183872.pdf?a=1](https://www.pmc.gov.au/sites/default/files/ctg-report-20183872.pdf?a=1)

Australian Government Department of Education. (2015). *National Aboriginal and Torres*

*Strait Islander education strategy*. [https://www.education.gov.au/national-](https://www.education.gov.au/national-aboriginal-and-torres-strait-islander-education-strategy)

[aboriginal-and-torres-strait-islander-education-strategy](https://www.education.gov.au/national-aboriginal-and-torres-strait-islander-education-strategy)

Backer-Grøndahl, A., Nærde, A., & Idsoe, T. (2019). Hot and cool self-regulation,

academic competence, and maladjustment: Mediating and differential relations.

*Child Development*, 90(6), 2171–2188. <https://doi.org/10.1111/cdev.13104>

Bahnik, Š., & Vranka, M. A. (2017). Growth mindset is not associated with scholastic

aptitude in a large sample of university applicants. *Personality and Individual*

*Differences*, 117, 139–143. <https://doi.org/10.1016/j.paid.2017.05.046>

- Bakadorova, O., & Raufelder, D. (2020). The relationship of school self-concept, goal orientations and achievement during adolescence. *Self and Identity, 19*(2), 235–249.  
<https://doi.org/10.1080/15298868.2019.1581082>
- Ball, S. J. (1981). *Beachside comprehensive: a case study of secondary schooling*. Cambridge University Press.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(3), 359–373.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. WF Freeman.
- Bandura, A. (2010). Self-Efficacy. In I. B. Weiner & W. E. Craighead (Eds.), *The Corsini encyclopedia of psychology (pp. 1-3)*. John Wiley & Sons.  
<https://doi.org/10.1002/9780470479216.corpsy0836>
- Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science, 13*(2), 130–136.  
<https://doi.org/10.1177/1745691617699280>
- Barab, S. A., Kling, R., & Gray, J. H. (2004). *Designing for virtual communities in the service of learning*. Cambridge University Press.  
<https://doi.org/10.1017/CBO9780511805080>
- Barber, C., & Wasson, J. W. (2015). A comparison of adolescents' friendship networks by advanced coursework participation status. *Gifted Child Quarterly, 59*(1), 23–37.  
<https://doi.org/10.1177/0016986214559639>
- Baumeister, R. F. (1999). Self-concept, self-esteem, and identity. In V. J. Derlega, B. A. Winstead, & W. H. Jones (Eds.), *Nelson-Hall series in psychology. Personality: Contemporary theory and research (pp. 339–375)*. Nelson-Hall Publishers.
- Becker, M., Lüdtke, O., Trautwein, U., Köller, O., & Baumert, J. (2012). The differential effects of school tracking on psychometric intelligence: Do academic-track schools

make students smarter? *Journal of Educational Psychology*, *104*(3), 682.

<https://doi.org/10.1037/a0027608>

Becker, M., & Neumann, M. (2016). Context-related changes in academic self-concept development: On the long-term persistence of big-fish-little-pond effects. *Learning and Instruction*, *45*, 31–39. <https://doi.org/10.1016/j.learninstruc.2016.06.003>

Becker, M., Neumann, M., Tetzner, J., Bose, S., Knoppick, H., Maaz, K., Baumert, J., & Lehmann, R. (2014). Is early ability grouping good for high-achieving students' psychosocial development? Effects of the transition into academically selective schools. *Journal of Educational Psychology*, *106*(2), 555–568.

<https://doi.org/10.1037/a0035425>

Belfi, B., Goos, M., De Fraine, B., & Van Damme, J. (2012). The effect of class composition by gender and ability on secondary school students' school well-being and academic self-concept: A literature review. *Educational Research Review*, *7*(1), 62–74. <https://doi.org/10.1016/j.edurev.2011.09.002>

Benner, A. D. (2011). The transition to high school: Current knowledge, future directions. *Educational Psychology Review*, *23*(3), 299–328. <https://doi.org/10.1007/s10648-011-9152-0>

Benner, A. D., & Crosnoe, R. (2011). The racial/ethnic composition of elementary schools and young children's academic and socioemotional functioning. *American Educational Research Journal*, *48*(3), 621–646.

<https://doi.org/10.3102/0002831210384838>

Benner, A. D., & Graham, S. (2007). Navigating the transition to multi-ethnic urban high schools: Changing ethnic congruence and adolescents' school-related affect. *Journal of Research on Adolescence*, *17*(1), 207–220.

<https://doi.org/10.1111/j.1532-7795.2007.00519.x>

- Benner, A. D., & Graham, S. (2009). The transition to high school as a developmental process among multi-ethnic urban youth. *Child Development, 80*(2), 356–376.  
<https://doi.org/10.1111/j.1467-8624.2009.01265.x>
- Berman, G., & Paradies, Y. (2010). Racism, disadvantage and multiculturalism: Towards effective anti-racist praxis. *Ethnic and Racial Studies, 33*(2), 214–232.  
<https://doi.org/10.1080/01419870802302272>
- Berryman, M., & Eley, E. (2017). Succeeding as Māori: Māori students' views on our Stepping Up to the Ka Hikitia Challenge. *New Zealand Journal of Educational Studies, 52*(1), 93–107. <https://doi.org/10.1007/s40841-017-0076-1>
- Betts, J. R., & Fairlie, R. W. (2003). Does immigration induce “native flight” from public schools into private schools? *Journal of Public Economics, 87*(5–6), 987–1012.  
[https://doi.org/10.1016/S0047-2727\(01\)00164-5](https://doi.org/10.1016/S0047-2727(01)00164-5)
- Bharara, G. (2019). Factors facilitating a positive transition to secondary school: A systematic literature review. *International Journal of School & Educational Psychology. https://doi.org/10.1080/21683603.2019.1572552*
- Biddle, N., & Edwards, B. (2017). *The characteristics and potential effects of the schools that Indigenous Australians attend*. CAEPR Working Paper No. 119/2017. Canberra, Australia: Centre for Aboriginal Economic Policy Research, Australian National University College of Arts & Social Sciences.  
[https://caepr.cass.anu.edu.au/sites/default/files/docs/Working\\_Paper\\_119\\_2017\\_1.pdf](https://caepr.cass.anu.edu.au/sites/default/files/docs/Working_Paper_119_2017_1.pdf)
- Biddle, N., & Heyes, S. (2014). *Education segregation in Australia: The history, patterns and potential effects for Indigenous Australians*. Paper given at Joint Econometric Society Australasian and Australian Conference of Economists meeting, Hobart, 1–

- 4 July, 2014. [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=ESAMACE2014&paper\\_id=340](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=ESAMACE2014&paper_id=340)
- Bishop, A. P. (2019). *The evaluation and effect of middle school to high school transition with regards to academics, behavior, and attendance*. (Publication No. 13899732) [Doctoral dissertation, California State University]. ProQuest Dissertations Publishing.  
<https://search.proquest.com/openview/0ebdf80f2639b13a23074ea713f93cf8/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Bishop, R., Berryman, M., Tiakiwai, S., & Richardson, C. (2003). Te Kōtahitanga: The experiences of Year 9 and 10 Māori students in mainstream classrooms. *Report to the Ministry of Education. Ministry of Education.*  
[www.minedu.govt.nz/goto/tekotahitanga](http://www.minedu.govt.nz/goto/tekotahitanga)
- Bishop, R., Ladwig, J., & Berryman, M. (2014). The centrality of relationships for pedagogy: The whanaungatanga thesis. *American Educational Research Journal*, 51(1), 184–214. <https://doi.org/10.3102/0002831213510019>
- Blaas, S. (2014). The relationship between social-emotional difficulties and underachievement of gifted students. *Journal of Psychologists and Counsellors in Schools*, 24(2), 243–255. <https://doi.org/10.1017/jgc.2014.1>
- Black, A., Little, C., McCoach, D., Purcell, J., & Siegle, D. (2008). Advancement via individual determination: Method selection in conclusions about program effectiveness. *The Journal of Educational Research*, 102(2), 111–124.  
<https://doi.org/10.3200/JOER.102.2.111-124>
- Black, M. (2004). *Children first: The story of UNICEF, past and present*.  
[https://www.unicef.org/publications/index\\_pubs\\_1996.html](https://www.unicef.org/publications/index_pubs_1996.html)

- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*, 246–263.  
<https://doi.org/10.1111/j.1467-8624.2007.00995.x>
- Blazar, D., & Kraft, M. (2017). Teacher and teaching effects on students' attitudes and behaviors. *Educational Evaluation and Policy Analysis, 39*(1), 146–170.  
<https://doi.org/10.3102/0162373716670260>
- Blossfeld, H., Buchholz, S., Skopek, J., & Triventi, M. (2016). *Models of secondary education and social inequality: an international comparison*. Edward Elgar Publishing.
- Blyth, D. A., Simmons, R. G., & Carlton-Ford, S. (1983). The adjustment of early adolescents to school transitions. *The Journal of Early Adolescence, 3*(1–2), 105–120. <https://doi.org/10.1177/027243168331008>
- Boaler, J. (2013). Ability and mathematics: The mindset revolution that is reshaping education. *Forum, 55*(1), 143–152. [https://www.youcubed.org/wp-content/uploads/14\\_Boaler\\_FORUM\\_55\\_1\\_web.pdf](https://www.youcubed.org/wp-content/uploads/14_Boaler_FORUM_55_1_web.pdf)
- Boaler, J., & Selling, S. K. (2017). Psychological imprisonment or intellectual freedom? A longitudinal study of contrasting school mathematics approaches and their impact on adults' lives. *Journal for Research in Mathematics Education, 48*(1), 78–105.  
[https://www.nctm.org/Publications/Journal-for-Research-in-Mathematics-Education/2017/Vol48/Issue1/Psychological-Imprisonment-or-Intellectual-Freedom\\_-A-Longitudinal-Study-of-Contrasting-School-Mathematics-Approaches-and-Their-Impacton-Adults\\_-Lives/](https://www.nctm.org/Publications/Journal-for-Research-in-Mathematics-Education/2017/Vol48/Issue1/Psychological-Imprisonment-or-Intellectual-Freedom_-A-Longitudinal-Study-of-Contrasting-School-Mathematics-Approaches-and-Their-Impacton-Adults_-Lives/)
- Bodkin-Andrews, G. H., Dillon, A. G., & Craven, R. (2010). Bangawarra' gumada—strengthening the spirit: Causal modelling of academic self-concept and patterns of

disengagement for Indigenous and non-Indigenous Australian students. *Australian Journal of Indigenous Education*, 39(1), 24–39.

<https://doi.org/10.1375/S1326011100000892>

Bodkin-Andrews G., Lovelock R., Paradies Y., Denson N., Franklin C., & Priest N.

(2017). Not my family: Understanding the prevalence and impact of racism beyond individualistic experiences. In M. Walter, K. Martin, & G. Bodkin-Andrews (Eds.), *Indigenous children growing up strong*. Palgrave Macmillan.

[https://doi.org/10.1057/978-1-137-53435-4\\_9](https://doi.org/10.1057/978-1-137-53435-4_9)

Bodkin-Andrews, G. H., O'Rourke, V., Dillon, A., Craven, R. G., & Yeung, A. S. (2012).

Engaging the disengaged? A longitudinal analysis of the relations between Indigenous and non-Indigenous Australian students' academic self-concept and disengagement. *Journal of Cognitive Education and Psychology*, 11(2), 179–195.

<https://doi.org/10.1891/1945-8959.11.2.179>

Bodkin-Andrews, G. H., Page, S., & Trudgett, M. (2019). Working towards accountability in embedding Indigenous studies: Evidence from an Indigenous Graduate Attribute evaluation instrument. *Australian Journal of Education*, 63(2), 232–260.

<https://doi.org/10.1177/0004944119863927>

Bodkin-Andrews, G. H., Paradies, Y., Parada, R., Denson, N., Priest, N., & Bansel, P.

(2012). Theory and research on bullying and racism from an Aboriginal Australian perspective. In *AARE 2012: Proceedings of the Australian Association for Research in Education 2012 conference* (pp. 1–14). Australian Association for Research in Education. <http://dro.deakin.edu.au/view/DU:30052923>

Bodkin-Andrews, G. H., Seaton, M. F., Nelson, G. G., Craven, R. S., & Yeung, A. (2010).

Questioning the general self-esteem vaccine: General self-esteem, racial discrimination, and standardised achievement across Indigenous and non-

- Indigenous students. *Australian Journal of Guidance and Counselling*, 20(1), 1–21.  
<https://doi.org/10.1375/ajgc.20.1.1>
- Boissicat, N., Pansu, P., & Bouffard, T. (2020). Does classroom social comparison bias students' evaluation of their own competence?. *Social Psychology of Education*, 23(5), 1303–1326. <https://doi.org/10.1007/s11218-020-09582-y>
- Bolland, A. C., Besnoy, K. D., Tomek, S., & Bolland, J. M. (2019). The effects of academic giftedness and gender on developmental trajectories of hopelessness among students living in economically disadvantaged neighbourhoods. *Gifted Child Quarterly*, 63(4), 225–242. <https://doi.org/10.1177/0016986219839205>
- Bong, M. (2002). Predictive utility of subject-, task-, and problem-specific self-efficacy judgments for immediate and delayed academic performances. *The Journal of Experimental Education*, 70(2), 133–162.  
<https://doi.org/10.1080/00220970209599503>
- Bong, M. (2009). Age-related differences in achievement goal differentiation. *Journal of Educational Psychology*, 101(4), 879–896. <https://doi.org/10.1037/a0015945>
- Bonnor, C. (2019). *Separating scholars: How Australia abandons its struggling schools*. Centre for Policy Development. <https://cpd.org.au/2019/01/separating-scholars/>
- Bonnor, C., Ho, C., & Richards, G. (2018). *A creeping Indigenous separation*. Centre for Policy Development. <https://cpd.org.au/2019/01/class-series-201819/>
- Boone, S., & Demanet, J. (2020). Track choice, school engagement and feelings of perceived control at the transition from primary to secondary school. *British Educational Research Journal*. <https://doi.org/10.1002/berj.3606>
- Borman, G. D., Rozek, C. S., Pyne, J., & Hanselman, P. (2019). Reappraising academic and social adversity improves middle school students' academic achievement,

- behavior, and well-being. *Proceedings of the National Academy of Sciences*, 116(33), 16286–16291. <https://doi.org/10.1073/pnas.1820317116>
- Bourke, C., Rigby, K., & Burden, J. (2000). *Better practice in school attendance: Improving the school attendance of Indigenous students*. Canberra, ACT: Department of Education.
- Boykin, A. W., & Noguera, P. (2011). *Creating the opportunity to learn: Moving from research to practice to close the achievement gap*. Online: ASCD.
- Boykin, A. W., & Toms, F. D. (1985). Black child socialization: A conceptual framework. In H. P. McAdoo & J. L. McAdoo (Eds.), *Black children: Social, educational, and parental environments*, 72, (pp. 33–51). Sage Publications.
- Branscombe, N. R., Schmitt, M. T., & Harvey, R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, 77(1), 135–149. <https://doi.org/10.1037/0022-3514.77.1.135>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bridges, E. B. (2019). *Migration, displacement and education: Building bridges, not walls*. Global Education Monitoring Report. United Nations Educational, Scientific and Cultural Organisation. <https://en.unesco.org/gem-report/report/2019/migration>
- Brody, N. (2004). What cognitive intelligence is and what emotional intelligence is not. *Psychological Inquiry*, 15(3), 234–238.
- Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75(5), 631.

- Brophy, J. (2005). Goal theorists should move on from performance goals. *Educational Psychologist, 40*(3), 167–176. [https://doi.org/10.1207/s15326985ep4003\\_3](https://doi.org/10.1207/s15326985ep4003_3)
- Browman, A. S., & Miele, D. (2019). *Americans visualize low-ability students as lazy, unmotivated, and undeserving of support*. PsyArXiv. <https://psyarxiv.com/anq9e>
- Brunec, I. K., Robin, J., Patai, E. Z., Ozubko, J. D., Javadi, A., Barense, M. D., Spiers, H. J., & Moscovitch, M. (2019). Cognitive mapping style relates to posterior–anterior hippocampal volume ratio. *Hippocampus, 29*(8), 748–754. <https://doi.org/10.1002/hipo.23072>
- Bugno, L. (2018). Clues to the wind’s direction: Sailing on teachers’ beliefs about cultural diversity. Results from semi-structured interviews in the Italian context. *Studia Paedagogica, 23*(4), 129–144. <https://doi.org/10.5817/SP2018-4-7>
- Bunar, N. (2010). The geographies of education and relationships in a multicultural city: Enrolling in high-poverty, low-performing urban schools and choosing to stay there. *Acta Sociologica, 53*(2), 141–159. <https://doi.org/10.1177/0001699310365732>
- Burgess, C., Tennent, C., Vass, G., Guenther, J., Lowe, K., & Moodie, N. (2019). A systematic review of pedagogies that support, engage and improve the educational outcomes of Aboriginal students? *The Australian Educational Researcher, 46*(2), 297–318. <https://doi.org/10.1007/s13384-019-00315-5>
- Burnette, J. L., O’Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: A meta-analytic review of implicit theories and self-regulation. *Psychological Bulletin, 139*(3), 655–701. <http://dx.doi.org/10.1037/a0029531>
- Burns, E. C., Martin, A. J., & Collie, R. J. (2019). Understanding the role of personal best (PB) goal setting in students’ declining engagement: A latent growth model.

*Journal of Educational Psychology*, 111(4), 557.

<https://doi.org/10.1037/edu0000291>

Burris, C. C., Heubert, J. P., & Levin, H. M. (2006). Accelerating mathematics achievement using heterogeneous grouping. *American Educational Research Journal*, 43(1), 137–154. <https://doi.org/10.3102/00028312043001105>

Burris, C. C., & Welner, K. G. (2005). Closing the achievement gap by detracking. *Phi Delta Kappan*, 86(8), 594–598. <https://link-gale-com.ezproxy.une.edu.au/apps/doc/A131334226/AONE?u=dixson&sid=AONE&xid=49a36a11>

Bygren, M., E., & Rosenqvist, E. (2020). Elite schools, elite ambitions? The consequences of secondary-level school choice sorting for tertiary-level educational choices, *European Sociological Review*, jcaa008. <https://doi.org/10.1093/esr/jcaa008>

Campbell, A., Craig, T., & Collier-Reed, B. (2020). A framework for using learning theories to inform “growth mindset” activities. *International Journal of Mathematical Education in Science and Technology*, 51(1), 26–43. <https://doi.org/10.1080/0020739X.2018.1562118>

Camprubí, R., & Coromina, L. (2016). Content analysis in tourism research. *Tourism Management Perspectives*, 18, 134–140. <https://doi.org/10.1016/j.tmp.2016.03.002>

Cappella, E., & Weinstein, R. (2006). The prevention of social aggression among girls. *Social Development*, 15, 434–462. <https://doi.org/10.1111/j.1467-9507.2006.00350.x>

Carbonaro, W. (2005). Tracking, students’ effort, and academic achievement. *Sociology of Education*, 78(1), 27–49. <https://doi.org/10.1177/003804070507800102>

- Carbonneau, N., Vallerand, R., Fernet, C., & Guay, F. (2008). The role of passion for teaching in intrapersonal and interpersonal outcomes. *Journal of Educational Psychology, 100*(4), 977–987. <https://doi.org/10.1037/a0012545>
- Carlson, B., & Frazer, R. (2018). Yarning circles and social media activism. *Media International Australia, 169*(1), 43–53. <https://doi.org/10.1177/1329878X18803762>
- Carter, P. (2006). Straddling boundaries: Identity, culture, and school. *Sociology of Education, 79*(4), 304–328. <https://doi.org/10.1177/003804070607900402>
- Cave, L., Shepherd, C. J., Cooper, M. N., & Zubrick, S. R. (2019). Racial discrimination and the health and wellbeing of Aboriginal and Torres Strait Islander children: Does the timing of first exposure matter? *SSM—Population Health, 9*. <https://doaj.org/article/3c0a9d003302458496c81b4fa47090fa>
- Centre for Education Statistics and Evaluation (CESE). (2018a). *Schools and students: 2018 statistical bulletin*. NSW Department of Education. <https://www.cese.nsw.gov.au/publications-filter/schools-and-students-2018-statistical-bulletin>
- Centre for Education Statistics and Evaluation (CESE). (2018b). *Connected Communities Strategy final evaluation report*. NSW Department of Education. [https://www.cese.nsw.gov.au//images/stories/PDF/Connected-Communities\\_FA6\\_AA.pdf](https://www.cese.nsw.gov.au//images/stories/PDF/Connected-Communities_FA6_AA.pdf)
- Centre for Education Statistics and Evaluation (CESE). (2020). *Evaluation of the rural and remote education blueprint: Final report*. NSW Department of Education.
- Chaffey, G. W., Bailey, S. B., & Vine, K. W. (2015). Identifying high academic potential in Australian Aboriginal children using dynamic testing. *Australasian Journal of Gifted Education, 24*(2), 24–37. <https://doi.org/10.21505/ajge.2015.0014>

- Charmaz, K. (2020). Grounded theory: Main characteristics. In M. Järvinen & N. Mik-Meyer (Eds.), *Qualitative analysis: Eight approaches for the social sciences* (pp. 195–221). Sage Publications.
- Chavous, T., Rivas-Drake, D., Smalls, C., Griffin, T., & Cogburn, C. (2008). Gender matters, too: The influences of school racial discrimination and racial identity on academic engagement outcomes among African American adolescents. *Developmental Psychology, 44*(3), 637–654. <https://doi.org/10.1037/0012-1649.44.3.637>
- Cheah, C. S., Leung, C. Y., & Zhou, N. (2013). Understanding “tiger parenting” through the perceptions of Chinese immigrant mothers: Can Chinese and US parenting coexist? *Asian American Journal of Psychology, 4*(1), 30–40. <https://doi.org/10.1037/a0031217>
- Chen, B., Chiu, H., & Wang, W. (2015). The relationship among academic self-concept, learning strategies, and academic achievement: A case study of national vocational college students in Taiwan via SEM. *The Asia-Pacific Education Researcher, 24*(2), 419–431. <https://doi.org/10.1007/s40299-014-0194-1>
- Cheng, R., & Lam, S. (2007). Self-construal and social comparison effects. *British Journal of Educational Psychology, 77*(1), 197–211. <https://doi.org/10.1348/000709905X72795>
- Chmielewski, A. K., (2014). An international comparison of achievement inequality in within- and between-school tracking systems. *American Journal of Education, 120*(3), 293–324. <https://doi.org/10.1086/675529>
- Chmielewski, A. K., Dumont, H., & Trautwein, U. (2013). Tracking effects depend on tracking type: An international comparison of students’ mathematics self-concept.

*American Educational Research Journal*, 50(5), 925–957.

<https://doi.org/10.3102/0002831213489843>

Choi, Y., Park, M., Lee, J. P., & Lee, M. (2020). Explaining the Asian American youth paradox: Universal factors versus Asian American family process among Filipino and Korean American youth. *Family Process*. <https://doi.org/10.1111/famp.12532>

Chung, Y., Bong, M., & Kim, S. I. (2019). Performing under challenge: The differing effects of ability and normative performance goals. *Journal of Educational Psychology*, 112(4), 823–840. <https://doi.org/10.1037/edu0000393>

Clarke, M. (2014). Dialectics and dilemmas: Psychosocial dimensions of ability grouping policy. *Critical Studies in Education*, 55(2), 186–200.

<https://doi.org/10.1080/17508487.2014.891146>

Claro, S., Paunesku, D., & Dweck, C. S. (2015). *Mindset equals income as a predictor of achievement*. Unpublished manuscript. Stanford University, Stanford, CA.

[https://web.stanford.edu/~paunesku/articles/claro\\_2016.pdf](https://web.stanford.edu/~paunesku/articles/claro_2016.pdf)

Coelho, V. A., Marchante, M., and Jimerson, S. R. (2017). Promoting a positive middle school transition: A randomized-controlled treatment study examining self-concept and self-esteem. *Journal of Youth Adolescence*, 46, 558–569.

<https://doi.org/10.1007/s10964-016-0510-6>

Coffey, A. (2013). Relationships: The key to successful transition from primary to secondary school? *Improving Schools*, 16(3), 261–271.

<https://doi.org/10.1177/1365480213505181>

Coleman, L. J., & Cross, T. L. (2005). *Being gifted in school: An introduction to development, guidance, and teaching*. Prufrock Press.

Colquhoun, S., & Dockery, A. M. (2012). *The link between Indigenous culture and wellbeing: Qualitative evidence for Australian Aboriginal peoples*.

[http://www.ncsehe.edu.au/wp-content/uploads/2013/09/2012.01\\_LSIC\\_qualitative\\_CLMR1.pdf](http://www.ncsehe.edu.au/wp-content/uploads/2013/09/2012.01_LSIC_qualitative_CLMR1.pdf)

Cooke, M., Mitrou, F., Lawrence, D., Guimond, E., & Beavon, D. (2007). Indigenous well-being in four countries: An application of the UNDP'S human development index to indigenous peoples in Australia, Canada, New Zealand, and the United States. *BMC International Health and Human Rights*, 7(1), 9.

<https://bmcinthealthhumrights.biomedcentral.com/articles/10.1186/1472-698X-7-9>

Copur-Gencturk, Y., Cimpian, J. R., Lubienski, S. T., & Thacker, I. (2020). Teachers' bias against the mathematical ability of female, black, and Hispanic students.

*Educational Researcher*, 49(1), 30–43. <https://doi.org/10.3102/0013189X19890577>

Corenblum, B. (2014). Relationships between racial–ethnic identity, self-esteem and in-group attitudes among First Nation children. *Journal of Youth and Adolescence*, 43(3), 387–404. <https://doi.org/10.1007/s10964-013-0081-8>

Cotterell, J. (2013). *Social networks in youth and adolescence*. Routledge.

Council of Australian Governments. (2012). *National Partnership Agreement for More Support for Students with Disabilities*.

[http://www.federalfinancialrelations.gov.au/content/npa/education/national-partnership/past/student\\_disability\\_support\\_NP.pdf](http://www.federalfinancialrelations.gov.au/content/npa/education/national-partnership/past/student_disability_support_NP.pdf)

Council of Australian Governments Education Council. (2019). *2019 Alice Springs (Mparntwe) Declaration of Education*. Department of Education, Skills and Employment, Australian Government.

<https://docs.education.gov.au/documents/alice-springs-mparntwe-education-declaration>

Covington, M. V. (1992). *Making the grade: A self-worth perspective on motivation and school reform*. Cambridge University Press.

- Cox, S., & Kennedy, S. (2008). Students' achievement as they transition from primary to secondary schooling. *Education counts*. Research Division, Ministry of Education. <https://www.educationcounts.govt.nz/publications/schooling/31857>
- Craven, R. G., & Marsh, H. W. (2008). The centrality of the self-concept construct for psychological wellbeing and unlocking human potential: Implications for child and educational psychologists. *Educational and Child Psychology*, 25, 104–118.
- Craven, R. G., Marsh, H. W., & Print, M. (2000). Gifted, streamed and mixed-ability programs for gifted students: Impact on self-concept, motivation, and achievement. *Australian Journal of Education*, 44(1), 51–75. <https://doi.org/10.1177/000494410004400106>
- Craven, R. G., Ryan, R. M., Mooney, J., Vallerand, R. J., Dillon, A., Blacklock, F., & Magson, N. (2016). Toward a positive psychology of Indigenous thriving and reciprocal research partnership model. *Contemporary Educational Psychology*, 47, 32–43. <https://doi.org/10.1016/j.cedpsych.2016.04.003>
- Craven, R. G., & Yeung, A. S. (2008). *Why self-concept matters for teacher education: Examples from performance, mathematics and reading, and Aboriginal Studies research*. Australian Association for Research in Education Conference, Brisbane, Australia. <https://www.aare.edu.au/data/publications/2008/cra08833.pdf>
- Craven, R. G., & Yeung, A. S. (2015). Motivation in Australian Aboriginal populations. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (pp. 899–906). Online: Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.26097-2>
- Craven, R. G., Yeung, A. S., Seaton, M., Dillon, A., McCloughan, G., Pollak, M. & Barclay, L. (2014). *Cultivating capability: Explicating what works for gifted Aboriginal primary and secondary students. Final report*. University of Western

Sydney. <https://uat.acu.edu.au/research/our-research-institutes/institute-for-positive-psychology-and-education/-/media/4855650f0cba448db609f9e61b06a97d.ashx>

- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist, 35*(2), 236–264. <https://doi.org/10.1177/0011000006287390>
- Cross, T. L., Coleman, L. J., & Terhaar-Yonkers, M. (2014). The social cognition of gifted adolescents in schools: Managing the stigma of giftedness. *Journal for the Education of the Gifted, 37*(1), 30–39. <https://doi.org/10.1177/016235329101500106>
- Cross, J. R., Frazier, A. D., Kim, M., & Cross, T. L. (2018). A comparison of perceptions of barriers to academic success among high-ability students from high-and low-income groups: Exposing poverty of a different kind. *Gifted Child Quarterly, 62*(1), 111–129. <https://doi.org/10.1177/0016986217738050>
- Crowley, M., Supplee, L., Scott, T., & Brooks-Gunn, J. (2019). The role of psychology in evidence-based policymaking: Mapping opportunities for strategic investment in poverty reduction. *American Psychologist, 74*(6), 685–697. <https://doi.org/10.1037/amp0000466>
- Crul, M., & Mollenkopf, J. (2012). Challenges and opportunities. In M. Crul & J. Mollenkopf (Eds.), *The changing face of world cities: Young adult children of immigrants in Europe and the United States* (pp. 235–259). Russell Sage Foundation.
- Dandy, J., Durkin, K., Barber, B. L., & Houghton, S. (2015). Academic expectations of Australian students from Aboriginal, Asian and Anglo backgrounds: Perspectives of teachers, trainee-teachers and students. *International Journal of Disability,*

*Development and Education*, 62(1), 60–82.

<https://doi.org/10.1080/1034912X.2014.984591>

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020).

Implications for educational practice of the science of learning and development.

*Applied Developmental Science*, 24(2), 97–140.

<https://doi.org/10.1080/10888691.2018.1537791>

Dean, J. (2018). Segregation effects on Australian Indigenous primary school

achievement. *Asia Pacific Journal of Education*, 38(3), 361–377.

<https://doi.org/10.1080/02188791.2018.1509057>

Debrosse, R., Rossignac-Milon, M., & Taylor, D. M. (2018). When “who we are” and

“who I desire to be” appear disconnected: Introducing collective/personal self-discrepancies and investigating their relations with minority students’

psychological health. *European Journal of Social Psychology*, 48(3), 255–268.

<https://doi.org/10.1002/ejsp.2320>

De Castella, K., Byrne, D., & Covington, M. (2013). Unmotivated or motivated to fail? A

cross-cultural study of achievement motivation, fear of failure, and student disengagement. *Journal of Educational Psychology*, 105(3), 861–880.

<https://doi.org/10.1037/a0032464>

De Castella, K., Platow, M. J., Tamir, M., & Gross, J. J. (2018). Beliefs about emotion:

Implications for avoidance-based emotion regulation and psychological health.

*Cognition and Emotion*, 32(4), 773–795.

<https://doi.org/10.1080/02699931.2017.1353485>

De Cuir-Gunby, J. T. (2009). A review of the racial identity development of African

American adolescents: The role of education. *Review of Educational Research*,

79(1), 103–124. <https://doi.org/10.3102/0034654308325897>

- Demagnet, J., Van den Broeck, L., & Van Houtte, M. (2018). Social inequality in attitudes and behavior: The implications of the Flemish tracking system for equity. In L. D. Hill & F. J. Levine (Eds.), *Global perspectives on education research* (pp. 159–181). Routledge.
- Demagnet, J., & Van Houtte, M. (2012). School belonging and school misconduct: The differing role of teacher and peer attachment. *Journal of Youth and Adolescence*, *41*(4), 499–514. <https://doi.org/10.1007/s10964-011-9674-2>
- Demagnet, J., & Van Houtte, M. (2019). School effects on deviance: An international perspective. In J. Demagnet & M. Van Houtte (Ed.), *Resisting education: A cross-national study on systems and school effects* (pp. 3–26). Springer. [https://doi.org/10.1007/978-3-030-04227-1\\_1](https://doi.org/10.1007/978-3-030-04227-1_1)
- Demagnet, J., Van Praag, L., & Van Houtte, M. (2016). About ethnicity, fitting in, and acting out: Applying the person–environment fit framework to school misconduct. *Journal of Cognitive Education and Psychology*, *15*(2), 293–319. <https://doi.org/10.1891/1945-8959.15.2.293>
- Demetriou, H., Goalen, P., & Rudduck, J. (2000). Academic performance, transfer, transition and friendship: Listening to the student voice. *International Journal of Educational Research*, *33*(4), 425–441. [https://doi.org/10.1016/S0883-0355\(00\)00026-4](https://doi.org/10.1016/S0883-0355(00)00026-4)
- Department of Education and Training, Victoria. (2016). *Marrung Aboriginal Education Plan (2016–2026)*. [https://www.education.vic.gov.au/Documents/about/programs/aboriginal/Marrung\\_Aboriginal\\_Education\\_Plan\\_2016-2026.pdf](https://www.education.vic.gov.au/Documents/about/programs/aboriginal/Marrung_Aboriginal_Education_Plan_2016-2026.pdf)

- Desmet, O. A., Pereira, N., & Peterson, J. S. (2020). Telling a tale: How underachievement develops in gifted girls. *Gifted Child Quarterly*, *64*(2), 85–99.  
<https://doi.org/10.1177/0016986219888633>
- DeWit, D. J., Karioja, K., & Rye, B. J. (2010). Student perceptions of diminished teacher and classmate support following the transition to high school: Are they related to declining attendance? *School Effectiveness and School Improvement*, *21*(4), 451–472. <https://doi.org/10.1080/09243453.2010.532010>
- Dicke, T., Marsh, H., Parker, P., Pekrun, R., Guo, J., & Televantou, I. (2018). Effects of school-average achievement on individual self-concept and achievement: Unmasking phantom effects masquerading as true compositional effects. *Journal of Educational Psychology*, *110*(8), 1112–1126. <https://doi.org/10.1037/edu0000259>
- Dickhauser, O., Janke, S., Praetorius, A. K., & Dresel, M. (2017). The effects of teachers' reference norm orientations on students' implicit theories and academic self-concepts. *Zeitschrift für Pädagogische Psychologie*, *31*, 205–219.  
<https://doi.org/10.1024/1010-0652/a000208>
- Dickson, J. M., Cruise, K., McCall, C. A., & Taylor, P. J. (2019). A systematic review of the antecedents and prevalence of suicide, self-harm and suicide ideation in Australian Aboriginal and Torres Strait Islander youth. *International Journal of Environmental Research and Public Health*, *16*(17), 3154.  
<https://doi.org/10.3390/ijerph16173154>
- Dillon, A., Craven, R. G., Kaur, G., & Yeung, A. S. (2020). Support for Aboriginal and non-Aboriginal Australian students' wellbeing at school. *International Journal of Educational Research*, *99*. <https://doi.org/10.1016/j.ijer.2019.101520>
- DiMaggio, P., & Garip, F. (2012). Network effects and social inequality. *Annual Review of Sociology*, *38*, 93–118. <https://doi.org/10.1146/annurev.soc.012809.102545>

- Dinham, S., & Rowe, K. (2007). *Teaching and learning in middle schooling: A review of the literature—a report to the New Zealand Ministry of Education*. Australian Council for Educational Research.
- Dinnen, H. L., Baker, J., Dallal, R., Brann, K., & Flaspohler, P. D. (2020). An exploration of school mobility: Risks and protective factors in late elementary. *Psychology in the Schools*. <https://doi.org/10.1002/pits.22393>
- Dobia, B., & O'Rourke, V. (2011). *Promoting the mental health and wellbeing of Indigenous children in Australian primary schools*. Commonwealth of Australia.
- Dockery, A. M. (2010). Culture and wellbeing: The case of Indigenous Australians. *Social Indicators Research*, 99(2), 315–332. <https://doi.org/10.1007/s11205-010-9582-y>
- Dockx, J., De Fraine, B., & Vandecandelaere, M. (2019). Tracks as frames of reference for academic self-concept. *Journal of School Psychology*, 72, 67–90. <https://doi.org/10.1016/j.jsp.2018.12.006>
- Donovan, M. J. (2015). Aboriginal student stories, the missing voice to guide us towards change. *The Australian Educational Researcher*, 42(5), 613–625. <https://doi.org/10.1007/s13384-015-0182-3>
- Dooley, K., Liu, L. L., & Yin, M. Y. (2020). Supplying private tuition: Edu-business and Asian migration in Australia. *Discourse: Studies in the Cultural Politics of Education*, 41(1), 98–109. <https://doi.org/10.1080/01596306.2018.1461063>
- Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and school engagement among African American youth: The roles of racial discrimination, racial socialization, and ethnic identity. *Applied Development Science*, 13(2), 61–73. <https://doi.org/10.1080/10888690902801442>

- Doyle, J. (2015). *Educational transitions*. Victorian Auditor General. Victorian Government Printer. <https://www.audit.vic.gov.au/sites/default/files/20150318-Education-transitions.pdf>
- Doyle, L., & Hill, R. (2007). Our children, our future: Achieving improved primary and secondary outcomes for Indigenous students. *Social Ventures Australia*.  
[http://socialventures.com.au/assets/Our\\_Children\\_Our\\_Future.pdf](http://socialventures.com.au/assets/Our_Children_Our_Future.pdf)
- Dreeben, R., & Barr, R. (1988). The formation and instruction of ability groups. *American Journal of Education*, 97(1), 34–64. <https://doi.org/10.1086/443912>
- Dreise, T., Milgate, G., Perrett, B., & Meston, T. (2016). *Indigenous school attendance: Creating expectations that are “really high” and “highly real”*. Issue 4. Australian Council for Educational Research.  
<https://research.acer.edu.au/cgi/viewcontent.cgi?article=1003&context=policyinsights>
- Duchatelet, D., Bursens, P., Usherwood, S., & Oberle, M. (2020). Beyond descriptions and good practices: Empirical effects on students’ learning outcomes of active learning environments in political science curricula. *European Political Science*.  
<https://doi.org/10.1057/s41304-020-00259-w>
- Dudovitz, R., Wong, M., Perez-Aguilar, G., Kim, G., & Chung, P. (2019). Update on how school environments, social networks, and self-concept impact risky health behaviors. *Academic Pediatrics*, 19(2), 133–134.  
<https://doi.org/10.1016/j.acap.2018.09.014>
- Duflo, E., Dupas, P., & Kremer, M. (2011). Peer effects, teacher incentives, and the impact of tracking: Evidence from a randomized evaluation in Kenya. *American Economic Review*, 101(5), 1739–74.  
<https://www.aeaweb.org/articles?id=10.1257/aer.101.5.1739>

- Dulay, S. (2017). The effect of self-concept on student achievement. In E. Karada (Ed.), *The factors effecting student achievement meta-analysis of empirical studies* (pp. 117–132). Springer. <https://doi.org/10.1007/978-3-319-56083-0>
- Dumont, H., Klinge, D., & Maaz, K. (2019). The many (subtle) ways parents/carers game the system: Mixed-method evidence on the transition into secondary-school tracks in Germany. *Sociology of Education*, *92*(2), 199–228. <https://doi.org/10.1177/0038040719838223>
- Dumont, H., Protsch, P., Jansen, M., & Becker, M. (2017). Fish swimming into the ocean: How tracking relates to students' self-beliefs and school disengagement at the end of schooling. *Journal of Educational Psychology*, *109*(6), 855–870. <https://doi.org/10.1037/edu0000175>
- Dunn, K. M. (2003, February 18-20). *Racism in Australia: Findings of a survey on racist attitudes and experiences of racism*. National European Centre Paper No.77. The Challenges of Immigration and Integration in the European Union and Australia. Sydney, Australia.
- Dunstan, L., Hewitt, B., & Tomaszewski, W. (2017). Indigenous children's affective engagement with school: The influence of socio-structural, subjective and relational factors. *Australian Journal of Education*, *61*(3), 250–269. <https://doi.org/10.1177/0004944117732637>
- Dupeyrat, C., & Mariné, C. (2005). Implicit theories of intelligence, goal orientation, cognitive engagement, and achievement: A test of Dweck's model with returning to school adults. *Contemporary Educational Psychology*, *30*(1), 43–59. <https://doi.org/10.1016/j.cedpsych.2004.01.007>
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.

- Dweck, C. S. (2017). From needs to goals and representations: Foundations for a unified theory of motivation, personality, and development. *Psychological Review*, *124*(6), 689. <https://doi.org/10.1037/rev0000082>
- Dweck, C. S., & Master, A. (2009). Self-theories and motivation: Students' beliefs about intelligence. In K. R. Wenzel & A. Wigfield (Eds.), *Educational psychology handbook series. Handbook of motivation at school*, (p. 123–140). Routledge.
- Eccles, J. S., & Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for young adolescents. *Research on Motivation in Education*, *3*(1), 139–186.
- Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence*, *21*(1) 225–241.  
<https://doi.org/10.1111/j.1532-7795.2010.00725.x>
- Eccles, J. S., & Wigfield, A. (2020). From expectancy-value theory to situated expectancy-value theory: A developmental, social cognitive, and sociocultural perspective on motivation. *Contemporary Educational Psychology*, 101859.  
<https://doi.org/10.1016/j.cedpsych.2020.101859>
- Eccles, J. S., Wigfield, A., Midgley, C., Reuman, D., Iver, D. M., & Feldlaufer, H. (1993). Development during adolescence. The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, *48*(2), 90–101.
- Education Council. (2014). *Aboriginal and Torres Strait Islander Education Action Plan 2010–2014*.  
[http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/ATSI%20documents/ATSIEAP\\_web\\_version\\_final.pdf](http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/ATSI%20documents/ATSIEAP_web_version_final.pdf)

Education Council. (2015). *National Aboriginal and Torres Strait Islander Education Strategy 2015*. Department of Education.

[http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/ATSI%20documents/NATSI\\_EducationStrategy\\_v3.pdf](http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/ATSI%20documents/NATSI_EducationStrategy_v3.pdf)

Education Review Office (ERO). (2012). *Evaluation at a glance: Transition from primary to secondary*. Education Review Office, New Zealand Government.

<https://www.ero.govt.nz/publications/evaluation-at-a-glance-transitions-from-primary-to-secondary-school/>

Efferson, C., Lalive, R., & Fehr E. (2008). The coevolution of cultural groups and ingroup favoritism. *Science*, *321*(5897), 1844–1849.

<https://doi.org/10.1126/science.1155805>

Eisenhardt, K. M., & Graebner, M. A. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, *50*(1), 25–32.

<https://doi.org/10.5465/AMJ.2007.24160888>

Elliot, A. J. (2020). Competition and achievement outcomes: A hierarchical motivational analysis. *Motivation Science*. <https://doi.org/10.1037/mot0000164>

Elliot, A. J., & McGregor, H. A. (2001). A 2×2 achievement goal framework. *Journal of Personality and Social Psychology*, *80*(3), 501–519. <https://doi.org/10.1037/0022-3514.80.3.501>

Ellis, L., Marsh, H., & Craven, R. (2009). Addressing the challenges faced by early adolescents: A mixed-method evaluation of the benefits of peer support. *American Journal of Community Psychology*, *44*(1–2), 54–75.

<https://doi.org/10.1007/s10464-009-9251-y>

Emmel, N. (2013). *Sampling and choosing cases in qualitative research: A realist approach*. Sage Publications. <https://doi.org/10.4135/9781473913882>

- Epple, D., & Romano, R. E. (2011). Peer effects in education: A survey of the theory and evidence. In J. Benhabib, A. Bisin, & M. Jackson (Eds.), *Handbook of social economics* (Vol. 1, pp. 1053–163). Elsevier.
- Erikson, E. H. (Ed.). (1963). *Youth: Change and challenge*. Basic Books.
- Evangelou, M., Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj-Blatchford, I. (2008). *Effective Pre-school, Primary and Secondary Education 3–14 Project (EPPSE 3–14): What makes a successful transition from primary to secondary school?* Department for Children, Schools and Families, Institute of Education, University of London.  
<http://discovery.ucl.ac.uk/10005267/1/Taggart2008Whatmakesasuccessful1.pdf>
- Evans, D., Borriello, G. A., & Field, A. P. (2018). A review of the academic and psychological impact of the transition to secondary education. *Frontiers in Psychology, 9*, 1482. <https://doi.org/10.3389/fpsyg.2018.01482>
- Faaea-Semeatu, M. (2011). Celebrating gifted Indigenous roots: Gifted and talented Pacific Island (Pasifika) students. *Giftedness from an Indigenous Perspective*, 116–122.  
<http://www.aaegt.net.au/DEEWR%20Books/10%20Indig.pdf>
- Fang, J., Huang, X., Zhang, M., Huang, F., Li, Z., & Yuan, Q. (2018). The big-fish-little-pond effect on academic self-concept: A meta-analysis. *Frontiers in Psychology, 9*, 1569. <https://doi.org/10.3389/fpsyg.2018.01569>
- Fauth, B., Atlay, C., Dumont, H., & Decristan, J. (2021). Does what you get depend on who you are with? Effects of student composition on teaching quality. *Learning and Instruction, 71*, 101355. <https://doi.org/10.1016/j.learninstruc.2020.101355>
- Fielding, N. G. (2012). Triangulation and mixed methods designs: Data integration with new research technologies. *Journal of Mixed Methods Research, 6*(2), 124–136.  
<https://doi.org/10.1177/1558689812437101>

- Filippello, P., Buzzai, C., Costa, S., Orecchio, S., & Sorrenti, L. (2020). Teaching style and academic achievement: The mediating role of learned helplessness and mastery orientation. *Psychology in the Schools, 57*(1), 5–16. [https://doi-org.ezproxy1.acu.edu.au/10.1002/pits.22315](https://doi.org.ezproxy1.acu.edu.au/10.1002/pits.22315)
- Fish, R. E. (2017). The racialized construction of exceptionality: Experimental evidence of race/ethnicity effects on teachers' interventions. *Social Science Research, 62*, 317–334. <https://doi.org/10.1016/j.ssresearch.2016.08.007>
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin, 51*(4), 327–358. <https://doi.org/10.1037/h0061470>
- Fogarty, W., Lovell, M., Langenberg, J., & Heron, M. J. (2018). *Deficit discourse and strengths-based approaches: Changing the narrative of Aboriginal and Torres Strait Islander health and wellbeing*. Lowitja Institute.
- Folmer, A. S., Cole, D. A., Sigal, A. B., Benbow, L. D., Satterwhite, L. F., Swygert, K. E., & Ciesla, J. A. (2008). Age-related changes in children's understanding of effort and ability: Implications for attribution theory and motivation. *Journal of Experimental Child Psychology, 99*(2), 114–134. <https://doi.org/10.1016/j.jecp.2007.09.003>
- Forrest, J., & Dunn, K. (2006). Racism and intolerance in Eastern Australia: A geographic perspective. *Australian Geographer, 37*(2), 167–186. <https://doi.org/10.1080/00049180600711082>
- Francis, B., Connolly, P., Archer, L., Hodgen, J., Mazenod, A., Pepper, D., Sloan, S., Taylor, B., Tereshchenko, A., & Travers, M. (2017). Attainment grouping as self-fulfilling prophesy? A mixed methods exploration of self-confidence and set level among Year 7 students. *International Journal of Educational Research, 86*, 961–988. <https://doi.org/10.1016/j.ijer.2017.09.001>

- Francis, B., Craig, N., Hodgen, J., Taylor, B., Tereshchenko, A., Connolly, P., & Archer, L. (2020). The impact of tracking by attainment on pupil self-confidence over time: demonstrating the accumulative impact of self-fulfilling prophecy. *British Journal of Sociology of Education, 41*(5), 626–642.  
<https://doi.org/10.1080/01425692.2020.1763162>
- Frank, J. L. (2020). School-based practices for the 21st century: Noncognitive factors in student learning and psychosocial outcomes. *Policy Insights from the Behavioral and Brain Sciences, 7*(1), 44–51. <https://doi.org/10.1177/2F2372732219898703>
- French, S. E., Seidman, E., Allen, L., & Aber, J. L. (2000). Racial/ethnic identity, congruence with the social context, and the transition to high school. *Journal of Adolescent Research, 15*(5), 587–602. <https://doi.org/10.1177/0743558400155004>
- Fries, S., Schmid, S., Dietz, F., & Hofer, M. (2005). Conflicting values and their impact on learning. *European Journal of Psychology of Education, 20*(3), 259–273.  
<https://doi.org/10.1007/BF03173556>
- Fruehwirth, J. C. (2013). Identifying peer achievement spillovers: Implications for desegregation and the achievement gap. *Quantitative Economics, 4*(1), 85–124.  
<https://doi.org/10.3982/QE93>
- Fuhs, M. W., Nesbitt, K. T., Farran, D. C., & Dong, N. (2014). Longitudinal associations between executive functioning and academic skills across content areas. *Developmental Psychology, 50*(6), 698–1709. <https://doi.org/10.1037/a0036633>
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report, 20*(9), 1408–1416.  
<http://search.proquest.com/docview/1721368991/>

- Gagné, G. (2004). Transforming gifts into talents: The DMGT as a developmental theory. *High Ability Studies, 15*(2), 119–147.  
<https://doi.org/10.1080/1359813042000314682>
- Gale, A., & Dorsey, M. (2020). Does the context of racial discrimination matter for adolescent school outcomes? The impact of in-school racial discrimination and general racial discrimination on black adolescents' outcomes. *Race and Social Problems, 12*(2), 171–185. <https://doi.org/10.1007/s12552-020-09286-0>
- Galton, M. (2009). Moving to secondary school: Initial encounters and their effects. *Perspectives on Education, 2*, 5–21.  
[https://dlcs.io/file/wellcome/5/b17260036\\_Primary%20secondary.pdf](https://dlcs.io/file/wellcome/5/b17260036_Primary%20secondary.pdf)
- Gamoran, A. (1986). Instructional and institutional effects of ability grouping. *Sociology of Education, 59*(4), 185–198. <https://doi.org/10.2307/2112346>
- Gamoran, A. (1992). Access to excellence: Assignment to honors English classes in the transition from middle to high school. *Educational Evaluation and Policy Analysis, 14*(3), 185–204. <https://doi.org/10.2307/1164408>
- Garcia, C. E. (2020). Belonging in a predominantly White institution: The role of membership in Latina/o sororities and fraternities. *Journal of Diversity in Higher Education, 13*(2), 181–193. <https://doi.org/10.1037/dhe0000126>
- Garvey, D. (2008). Review of the social and emotional wellbeing of Indigenous Australian peoples: Considerations, challenges and opportunities. *Australian Indigenous Health Bulletin, 8*(4), 1–29. <https://healthinfonet.ecu.edu.au/key-resources/publications/14208>
- Geisz, M. B., & Nakashian, M. (2018). *Adolescent wellness: Current perspectives and future opportunities in research, policy, and practice: A learning report*. Robert Wood Johnson Foundation.

<https://www.rwjf.org/en/library/research/2018/06/inspiring-and-powering-the-future--a-new-view-of-adolescence.html>

- Gentrup, S., Lorenz, G., Kristen, C., & Kogan, I. (2020). Self-fulfilling prophecies in the classroom: Teacher expectations, teacher feedback and student achievement. *Learning and Instruction, 66*, 101296.  
<https://doi.org/10.1016/j.learninstruc.2019.101296>
- Georgiades, K., Boyle, M. H., & Fife, K. A. (2013). Emotional and behavioral problems among adolescent students: The role of immigrant, racial/ethnic congruence and belongingness in schools. *Journal of Youth and Adolescence, 42*(9), 1473–1492.  
<https://doi.org/10.1007/s10964-012-9868-2>
- Gerring, J. (2007). *Case study research: Principles and practices*. Cambridge University Press.
- Gertsakis, N., Kroustallaki, D., & Sideridis, G. D. (2020). How do classroom goal structures matter? The impact on grammar achievement, perceived autonomy support, flow, and affect. *International Journal of School & Educational Psychology, 1–17*. <https://doi.org/10.1080/21683603.2019.1694111>
- Gfellner, B. M., & Armstrong, H. D. (2013). Racial-ethnic identity and adjustment in Canadian Indigenous adolescents. *The Journal of Early Adolescence, 33*(5), 635–662. <https://doi.org/10.1177/0272431612458036>
- Gibbert, M., & Ruigrok, W. (2010). The “what” and “how” of case study rigor: Three strategies based on published work. *Organizational Research Methods, 13*(4), 710–737. <https://doi.org/10.1177/1094428109351319>
- Giel, L. I., Noordzij, G., Wijnia, L., Noordegraaf-Eelens, L., & Denktaş, S. (2020). When birds of the same feather fly together: The impact of achievement goal

compatibility in collaborative learning. *Educational Psychology*, 1–20.

<https://doi.org/10.1080/01443410.2020.1787352>

- Gillan, K. P., Mellor, S., & Krakouer, J. (2017). The case for urgency: Advocating for Indigenous voice in education. *Australian Education Review*. Australian Council for Research.
- Ginns, P., Martin, A. J., Durksen, T. L., Burns, E. C., & Pope, A. (2018). Personal best (PB) goal-setting enhances arithmetical problem-solving. *The Australian Educational Researcher*, 45(4), 533–551. <https://doi.org/10.1007/s13384-018-0268-9>
- Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach*. Duquesne University Press.
- Glock, S., Krolak-Schwerdt, S., & Pit-ten Cate, I. (2015). Are school placement recommendations accurate? The effect of students' ethnicity on teachers' judgments and recognition memory. *European Journal of Psychology of Education*, 30(2), 169–188. <https://doi.org/10.1007/s10212-014-0237-2>
- Goings, R. B., & Ford, D. Y. (2018). Investigating the intersection of poverty and race in gifted education journals: A 15-year analysis. *Gifted Child Quarterly*, 62(1), 25–36. <https://doi.org/10.1177/0016986217737618>
- Golinkoff, R. M., Hoff, E., Rowe, M. L., Tamis-LeMonda, C. S., & Hirsh-Pasek, K. (2019). Language matters: Denying the existence of the 30-million-word gap has serious consequences. *Child Development*, 90(3), 985–992. <https://doi.org/10.1111/cdev.13128>
- Gonski, D., Arcus, T., Boston, K., Gould, V., Johnson, W., O'Brien, L., Perry, L., & Roberts, M. (2018). Through growth to achievement: Report of the review to

- achieve educational excellence in Australian schools. *Canberra: Commonwealth of Australia*. <https://www.education.gov.au/educationalexcellencereview>
- Goss, P., Sonnemann, J., & Emslie, O. (2018). *Measuring student progress: A state-by-state report card*. Grattan Institute. [https://grattan.edu.au/wp-content/uploads/2018/10/Mapping\\_Student\\_Progress.pdf](https://grattan.edu.au/wp-content/uploads/2018/10/Mapping_Student_Progress.pdf)
- Graham, J., Meyer, L. H., McKenzie, L., McClure, J., & Weir, K. F. (2010). Maori and Pacific secondary student and parent perspectives on achievement, motivation and NCEA. *Assessment Matters*, 2, 132. <https://www.nzcer.org.nz/nzcerpress/assessment-matters/articles/m-ori-and-pacific-secondary-student-and-parent-perspectives>
- Grammer, J. K., Coffman, J. L., Ornstein, P. A., & Morrison, F. J. (2013). Change over time: Conducting longitudinal studies of children's cognitive development. *Journal of Cognition and Development*, 14(4), 515–528. <https://doi.org/10.1080/15248372.2013.833925>
- Granvik Saminathen, M., Laftman, S. B., & Modin, B. (2019). School choice at a cost? Academic achievement, school satisfaction and psychological complaints among students in disadvantaged areas of Stockholm. *International Journal of Environmental Research and Public Health*, 16(11), 1912. <https://doi.org/10.3390/ijerph16111912>
- Gray, D. L., Hope, E. C., & Matthews, J. S. (2018). Black and belonging at school: A case for interpersonal, instructional, and institutional opportunity structures. *Educational Psychologist*, 53(2), 97–113. <https://doi.org/10.1080/00461520.2017.1421466>
- Gray, J., & Beresford, Q. (2008). A “formidable challenge”: Australia's quest for equity in Indigenous education. *Australian Journal of Education*, 52, 197–223. <https://doi.org/10.1177/000494410805200207>

- Greene, J. A., Cartiff, B. M., & Duke, R. F. (2018). A meta-analytic review of the relationship between epistemic cognition and academic achievement. *Journal of Educational Psychology, 110*(8), 1084–1111. <https://doi.org/10.1037/edu0000263>
- Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural Pathways Through Universal Development. *Annual Review of Psychology, 54*(1), 461–490. <https://doi.org/10.1146/annurev.psych.54.101601.145221>
- Griffith, A. L., & Main, J. B. (2019). First impressions in the classroom: How do class characteristics affect student grades and majors? *Economics of Education Review, 69*, 125–137. <https://doi.org/10.1016/j.econedurev.2019.02.001>
- Grissom, J. A., Kalogrides, D., & Loeb, S. (2015). The micro-politics of educational inequality: The case of teacher–student assignments. *Peabody Journal of Education, 90*(5), 601–614. <https://doi.org/10.1080/0161956X.2015.1087768>
- Groome, H., & Hamilton, A. (1995). *Meeting the educational needs of Aboriginal adolescents*. Australian Government Publishing Service.
- Guenther, J., & Osbourne, S. (2020). Choice-less choice for rural boarding students and their families. *Australian and International Journal of Rural Education, 30*(2), 111–126. <https://www.journal.spera.asn.au/index.php/AIJRE/article/view/257>
- Guill, K., Lüdtke, O., & Köller, O. (2017). Academic tracking is related to gains in students' intelligence over four years: Evidence from a propensity score matching study. *Learning and Instruction, 47*, 43–52. <https://doi.org/10.1016/j.learninstruc.2016.10.001>
- Gunstone, A. (2012). Indigenous education 1991–2000: Documents, outcomes and governments. *The Australian Journal of Indigenous Education, 41*(2), 75–84. <https://doi.org/10.1017/jie.2012.26>

- Guo, J., Marsh, H., Morin, A., Parker, P., & Kaur, G. (2015). Directionality of the associations of high school expectancy-value, aspirations, and attainment: A longitudinal study. *American Educational Research Journal*, *52*(2), 3714–02. <https://doi.org/10.3102/0002831214565786>
- Guo, J., Marsh, H. W., Parker, P. D., & Dicke, T. (2018). Cross-cultural generalizability of social and dimensional comparison effects on reading, math, and science self-concepts for primary school students using the combined PIRLS and TIMSS data. *Learning and Instruction*, *58*, 210–219. <https://doi.org/10.1016/j.learninstruc.2018.07.007>
- Gurel, Ç., Brummelman, E., Sedikides, C., & Overbeek, G. (2020). Better than my past self: Temporal comparison raises children’s pride without triggering superiority goals. *Journal of Experimental Psychology: General*. Advance online publication. <https://doi.org/10.1037/xge0000733>
- Guthrie, J. T. (2018). Promoting multiple-text comprehension through motivation in the classroom. In J. Braasch, I. Braten, & M. McCrudden, (Eds.), *Handbook of multiple source use* (pp. 382–400). Routledge.
- Gutman, L. M., & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American students during the middle school transition. *Journal of Youth and Adolescence*, *29*(2), 223–249. <https://doi.org/10.1023/A:1005108700243>
- Hafen, C. A., Hamre, B. K., Allen, J. P., Bell, C. A., Gitomer, D. H., & Pianta, R. C. (2015). Teaching through interactions in secondary school classrooms: Revisiting the factor structure and practical application of the Classroom Assessment Scoring System—Secondary. *The Journal of Early Adolescence*, *35*(5–6), 651–680. <https://doi.org/10.1177/0272431614537117>

- Halsey, J. (2018). *Independent review into regional, rural and remote education—final report*. Commonwealth of Australia. <https://www.education.gov.au/independent-review-regional-rural-and-remote-education>
- Hammersley, M. (2008). *Questioning qualitative inquiry critical essays*. Sage Publications. <https://dx.doi.org/10.4135/9780857024565>
- Hammersley, M., & Atkinson, P. (2007). The process of analysis. In M. Hammersley & P. Atkinson (Eds.), *Ethnography: Principles in practice* (pp. 158–190). Routledge.
- Hanewald, R. (2013). Transition between primary and secondary school: Why it is important and how it can be supported. *Australian Journal of Teacher Education*, 38(1), 62–74. <https://doi.org/10.14221/ajte.2013v38n1.7>
- Hannover, B., & Zander, L. (2020). How personal and social selves influence the development of children and adolescents at school. *Journal of Educational Psychology*, 34, 65–85. <https://doi.org/10.1024/1010-0652/a000261>
- Hanushek, E. A. (2020). Education production functions. In Bradley, S., & Green, C. (Eds.), *The economics of education: A comprehensive overview*, (pp. 161–170). Academic Press. <http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%202020%20Education%20Production%20Functions.pdf>
- Hanushek, E. A., & Wößmann, L. (2006). Does educational tracking affect performance and inequality? Differences-in-differences evidence across countries. *The Economic Journal*, 116(510), C63–C76. <https://doi.org/10.1111/j.1468-0297.2006.01076.x>
- Hargreaves, D. H. (2006). *Social relations in a secondary school*. Taylor and Francis. <https://doi.org/10.4324/9780203001837>

- Harris, S. (2018). *Voices from the asphalt: Teacher expectations and student perceptions in an urban high school* [ProQuest Dissertations Publishing].  
<http://search.proquest.com/docview/2086037867/>
- Harrison, N., & Greenfield, M. (2011). Relationship to place: Positioning Aboriginal knowledge and perspectives in classroom pedagogies. *Critical Studies in Education*, 52(1), 65–76. <https://doi.org/10.1080/17508487.2011.536513>
- Harter, S. (1990). Causes, correlates and functional role of global self-worth: A life span perspective. In J. Kolligan & R. Sternberg (Eds.), *Perceptions of competence and incompetence across life span* (pp. 67–98). Yale University Press.
- Harter, S. (1999). The normative development of self-representations during adolescence. In K. W. Fischer & E. T. Higgins (Eds.), *The construction of the self; A developmental perspective* (pp. 59–88). The Guildford Press.
- Harter, S. (2006). Developmental and individual difference perspectives on self-esteem. In D. K. Mroczek & T. D. Little (Eds.), *Handbook of personality development* (pp. 311–334). Lawrence Erlbaum Associates, Inc.
- Hattie, J. A. (2002). Classroom composition and peer effects. *International Journal of Educational Research*, 37(5), 449–481. [https://doi.org/10.1016/S0883-0355\(03\)00015-6](https://doi.org/10.1016/S0883-0355(03)00015-6)
- Hattie, J. (2009). The contributions from teaching approaches-part 1. In J. Hattie (Ed.), *Visible learning: A synthesis of over 800 meta-analyses* (pp. 1611–99). Routledge.
- Hattie, J. (2015, December 4). *Why does ability grouping or tracking have a negative effect size?* [Video file]. YouTube. <https://www.youtube.com/watch?v=m6czhy6kPpc>
- Hayes, L., Ciarrochi, J., & Hayes, S. C. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. New Harbinger.

- Heard-Garris, N. J., Cale, M., Camaj, L., Hamati, M. C., & Dominguez, T. P. (2018). Transmitting trauma: A systematic review of vicarious racism and child health. *Social Science and Medicine*, *199*, 230–240. <https://doi.org/10.1016/j.socscimed.2017.04.018>
- Heaton, A. (2019). Combatting racism to create a better Australia: The potential of the national cross-curriculum priority of teaching Aboriginal histories and cultures. *Australian Aboriginal Studies*, *1*, 41. <https://search.informit.com.au/documentSummary;dn=531343513215418;res=IELIN>
- Helme, S. (2005). Indigenous students and vocational education and training in schools: Ladder of opportunity or corrugated iron ceiling? *Australian Journal of Education*, *49*(2), 169–181. <https://doi.org/10.1177/000494410504900205>
- Henson, K., & Eller, B. (1999). *Educational psychology for effective teaching*. Wadsworth Publications.
- Hernández-Torrano, D. (2018). Urban–rural excellence gaps: Features, factors, and implications. *Roeper Review*, *40*(1), 36–45. <https://doi.org/10.1080/02783193.2018.1393610>
- Herrmann, J., Schmidt, I., Kessels, U., & Preckel, F. (2016). Big fish in big ponds: Contrast and assimilation effects on math and verbal self-concepts of students in within-school gifted tracks. *British Journal of Educational Psychology*, *86*(2), 222–240. <https://doi.org/10.1111/bjep.12100>
- Heyman, G. D., Gee, C. L., & Giles, J. W. (2003). Preschool children’s reasoning about ability. *Child Development*, *74*(2), 516–534. <https://doi.org/10.1111/1467-8624.7402013>

- Hirsch, C. (2019). *Attachment to the social construct of success and the myth of the “good college”: Effects of toxic stress on affluent adolescents*. (Publication No. 125) [Doctoral dissertation, University of Pennsylvania]. University of Pennsylvania Repository. [https://repository.upenn.edu/edissertations\\_sp2/125](https://repository.upenn.edu/edissertations_sp2/125)
- Ho, C. (2020). *Aspiration and anxiety: Asian migrants and Australian schooling*. Melbourne University Publishing.
- Ho, C., & Bonnor, C. (2018). *Institutionalised separation*. Centre for Policy Development. <https://cpd.org.au/wp-content/uploads/2018/07/Institutionalised-Separation-Report-13-July.pdf>
- Hodge, E. M. (2019). “Common” instruction? Logics of ability and teacher decision making across tracks in the era of common Standards. *American Educational Research Journal*, 56(3), 638–675. <https://doi.org/10.3102/0002831218803328>
- Hoferichter, F., Lätsch, A., Lazarides, R., & Raufelder, D. (2018). The big-fish-little-pond effect on the four facets of academic self-concept. *Frontiers in Psychology*, 9, 1247. <https://doi.org/10.3389/fpsyg.2018.01247>
- Hoffman, A. J., Kurtz-Costes, B., & Shaheed, J. (2020). Ethnic-racial identity, gender identity, and well-being in Cherokee early adolescents. *Cultural Diversity and Ethnic Minority Psychology*. Advance online publication. <https://doi.org/10.1037/cdp0000354>
- Hofman, R. H., Hofman, W. A., & Guldemon, H. (1999). Social and cognitive outcomes: A comparison of contexts of learning. *School Effectiveness and School Improvement*, 10(3), 352–366. <https://doi.org/10.1076/sesi.10.3.352.3499>
- Hopkins, K., Taylor, C., & Zubrick, S. (2018). Psychosocial resilience and vulnerability in Western Australian Aboriginal youth. *Child Abuse and Neglect*, 78, 85–95. <https://doi.org/10.1016/j.chiabu.2017.11.014>

- Hopwood, B., Hay, I., & Dymont, J. (2016). The transition from primary to secondary school: Teachers' perspectives. *The Australian Educational Researcher*, 43(3), 289–307. <https://doi.org/10.1007/s13384-016-0200-0>
- Horn, D., Keller, T., & Róbert, P. (2016). Early tracking and competition: A recipe for major inequalities in Hungary. In H. Blossfeld, S. Buchholz, J. Skopek, & M. Triventi (Eds.). *Models of secondary education and social inequality: An international comparison* (pp. 129–148). Edward Elgar Publishing.
- Howard-Wagner, D. (2019). Success in closing the socio-economic gap, but still a long way to go: Urban Aboriginal disadvantage, trauma, and racism in the Australian city of Newcastle. *International Indigenous Policy Journal*, 10(3). <https://doi.org/10.18584/iipj.2019.10.1.3>
- Howes, C., & Wu, F. (1990). Peer interactions and friendships in an ethnically diverse school setting. *Child Development*, 61(2), 537–541. <https://doi.org/10.2307/1131113>
- Howick, S., & Ackermann, F. (2011). Mixing or methods in practice: Past, present and future directions. *European Journal of Operational Research*, 215(3), 503–511. <https://doi.org/10.1016/j.ejor.2011.03.013>
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Huang, G. C., Soto, D., Fujimoto, K., & Valente, T. W. (2014). The interplay of friendship networks and social networking sites: Longitudinal analysis of selection and influence effects on adolescent smoking and alcohol use. *The American Journal of Public Health*, 104(8), e51–9. <https://doi.org/10.2105/AJPH.2014.302038>

- Huebner, E. S., & Gilman, R. (2006). Students who like and dislike school. *Applied Research in Quality of Life*, 1(2), 139–150. <https://doi.org/10.1007/s11482-006-9001-3>
- Hughes, H., & Hughes, M. (2012). The denial of private property rights to aborigines. *Quadrant*, 56(5), 25. <https://quadrant.org.au/magazine/2012/05/the-denial-of-private-property-rights-to-aborigines/>
- Hughes, P., More, A. J., & Williams, M. (2004). *Aboriginal ways of learning*. Paul Hughes.
- Huguet, P., Dumas, F., Marsh, H., Wheeler, L., Seaton, M., Nezlek, J., Suls, J., & Regner, I. (2009). Clarifying the role of social comparison in the big-fish–little-pond effect (BFLPE): An integrative study. *Journal of Personality and Social Psychology*, 97(1), 156–170. <https://doi.org/10.1037/a0015558>
- Hulleman, C. S., Schragger, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels?. *Psychological Bulletin*, 136(3), 422–449. <https://doi.org/10.1037/a0018947>.
- Hynds, A., Averill, R., Hindle, R., & Meyer, L.H. (2017). School expectations and student aspirations: The influence of schools and teachers on Indigenous secondary students. *Ethnicities*, 17, 546–573. <https://doi.org/10.1177/1468796816666590>
- Ireson, J., Hallam, S., & Plewis, I. (2001). Ability grouping in secondary schools: Effects on pupils' self-concepts. *British Journal of Educational Psychology*, 71(2), 315–326. <https://doi.org/10.1348/000709901158541>
- Irizarry, Y., & Cohen, E. D. (2019). Of promise and penalties: How student racial–cultural markers shape teacher perceptions. *Race and Social Problems*, 11(2), 93–111. <https://doi.org/10.1007/s12552-018-9231-7>

- Isphording, I. E., & Zölitz, U. (2020). *The value of a peer*. University of Zurich, Department of Economics, Working Paper No. 342.  
<http://dx.doi.org/10.2139/ssrn.3553833>
- Jackson, R., Sweeney, K., & Welcher, A. (2014). It just happens: Colorblind ideology and undergraduate explanations of racial interaction on campus. *Education, Citizenship and Social Justice*, 9(3), 191–208. <https://doi.org/10.1177/1746197914542553>
- Jacobs, B., & Wolbers, M. H. (2018). Inequality in top performance: an examination of cross-country variation in excellence gaps across different levels of parental socioeconomic status. *Educational Research and Evaluation*, 24(1–2), 68–87.  
<https://doi.org/10.1080/13803611.2018.1520130>
- Jindal-Snape, D., Hannah, E. F. S., Cantali, D., Barlow, W., & MacGillivray, S. (2020). Systematic literature review of primary-secondary transitions: International research. *Review of Education*. <https://doi.org/10.1002/rev3.3197>
- Johnson, P. S. (2017). Aboriginal and Torres Strait Islander teachers in Australian schools. *Professional Voice*, (12)1, 40–46.  
[https://www.aeuvic.asn.au/sites/default/files/PV\\_12\\_1\\_Complete\\_WEB.pdf](https://www.aeuvic.asn.au/sites/default/files/PV_12_1_Complete_WEB.pdf)
- Johnston, O., & Wildy, H. (2016). The effects of streaming in the secondary school on learning outcomes for Australian students: A review of the international literature. *Australian Journal of Education*, 60(1), 42–59.  
<https://doi.org/10.1177/0004944115626522>
- Johnston, O., & Wildy, H. (2018). Teachers' perspectives of lower secondary school students in streamed classes: A Western Australian case study. *Educational Studies*, 44(2), 212–229. <https://doi.org/10.1080/03055698.2017.1347494>
- Johnston, O., Wildy, H., & Shand, J. (2019). A decade of teacher expectations research 2008–2018: Historical foundations, new developments, and future pathways.

*Australian Journal of Education*, 63(1), 44–73.

<https://doi.org/10.1177/0004944118824420>

Jolly, J. L., & Chessman, A. (2017). The landscape of Australian gifted education research: 1992–2013. *Gifted and Talented International*, 32(2), 87–98.

<https://doi.org/10.1080/15332276.2018.1522935>

Jonasson, J. T. (2016). Educational change, inertia and potential futures. *European Journal of Futures Research*, 4, Article 7. <https://doi.org/10.1007/s40309-016-0087-z>

Jordan, W. J. (2010). Defining equity: Multiple perspectives to analyzing the performance of diverse learners. *Review of Research in Education*, 34(1), 142–178.

[doi.org/10.3102/0091732X09352898](https://doi.org/10.3102/0091732X09352898)

Jung, J. Y., McCormick, J., & Gross, M. U. M. (2012). The forced choice dilemma: A model incorporating idiocentric/allocentric cultural orientation. *Gifted Child Quarterly*, 56(1), 15–24. <https://doi.org/10.1177/0016986211429169>

<https://doi.org/10.1177/0016986211429169>

Jussim, L., & Harber, K. D. (2005). Teacher expectations and self-fulfilling prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality and Social Psychology Review*, 9(2), 131–155.

[https://doi.org/10.1207/s15327957pspr0902\\_3](https://doi.org/10.1207/s15327957pspr0902_3)

Juvonen, J. (2007). Reforming middle schools: Focus on continuity, social connectedness, and engagement. *Educational Psychologist*, 42(4), 197–208.

<https://doi.org/10.1080/00461520701621046>

Kadir, M. S., Yeung, A. S., & Diallo, T. M. (2017). Simultaneous testing of four decades of academic self-concept models. *Contemporary Educational Psychology*, 51, 429–446. <https://doi.org/10.1016/j.cedpsych.2017.09.008>

Kadir, M. S., Yeung, A. S., Ryan, R. M., Forbes, A., & Diallo, T. M. (2018). Effects of a dual-approach instruction on students' science achievement and motivation.

- Educational Psychology Review*, 32, 571–602. <https://doi.org/10.1007/s10648-018-9449-3>
- Kail, R. V., & Cavanaugh, J. C. (2018). *Human development: A life-span view*. Cengage Learning.
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632–1641. doi:10.1177/1049732309350879
- Kalogrides, D., Loeb, S., & Béteille, T. (2013). Systematic sorting: Teacher characteristics and class assignments. *Sociology of Education*, 86(2), 103–123. <https://doi.org/10.1177/0038040712456555>
- Kaplan, G., & Eckermann, A. K. (1996). Identity and culture shock: Aboriginal children and schooling in Australia. *McGill Journal of Education/Revue des Sciences de l'Éducation de McGill*, 31(001). <https://mje.mcgill.ca/article/view/8274>
- Kavanagh, L. (2020). Academic self-concept formation: Testing the internal/external frame of reference model, big-fish-little-pond model, and an integrated model at the end of primary school. *European Journal of Psychology of Education*, 35(1), 93–109. <https://doi.org/10.1007/s10212-019-00416-w>
- Kelly, S., & Carbonaro, W. (2012). Curriculum tracking and teacher expectations: Evidence from discrepant course taking models. *Social Psychology of Education*, 15(3), 271–294. <https://doi.org/10.1007/s11218-012-9182-6>
- Kennelly, L., & Monrad, M. (2007). *Easing the transition to high school: Research and best practices designed to support high school learning*. National High School Center. <https://files.eric.ed.gov/fulltext/ED501073.pdf>
- Khoo, S. E., & Birrell, B., (2002). The progress of young people of migrant origin in Australia. *People and Place*, 10(2), 30. <https://search.informit.com.au/documentSummary;dn=200207365;res=IELAPA>

- Kickett-Tucker, C. S. (2008). How Aboriginal peer interactions in upper primary school sport support Aboriginal identity. *The Australian Journal of Indigenous Education*, 37(1), 138–151. <https://doi.org/10.1017/S1326011100016185>
- Kickett-Tucker, C. S. (2009). Moorn (Black)? Djardak (White)? How come I don't fit in Mum? Exploring the racial identity of Australian Aboriginal children and youth. *Health Sociology Review*, 18(1), 119–136. <https://doi.org/10.5172/hesr.18.1.119>
- Kickett-Tucker, C., & Shahid, S. (2019). In the Nyitting Time: The journey of identity development for Western Australian Aboriginal children and youth and the interplay of racism. In H. Fitzgerald, D. Johnson, D. Qin-Hilliard, F. Villarruel, & J. Norder (Eds.), *Handbook of children and prejudice* (pp. 193–211). Springer.
- Kim, B., Kim, E., & Lee, S. M. (2017). Examining longitudinal relationship among effort reward imbalance, coping strategies and academic burnout in Korean middle school students. *School Psychology International*, 38(6), 628–646. <https://doi.org/10.1177/0143034317723685>
- King, R. (2017). *School organisation and pupil involvement: A study of secondary schools* (Vol. 31). Routledge. <https://doi.org/10.4324/9781315211190>
- King, N., Horrocks, C., & Brooks, J. (2018). *Interviews in qualitative research*. SAGE Publications Limited.
- Knigge, M., & Hannover, B. (2011). Collective school-type identity: Predicting students' motivation beyond academic self-concept. *International Journal of Psychology*, 46(3), 191–205. <https://doi.org/10.1080/00207594.2010.529907>
- Kobayashi, A., & Peake, L. (2000). Racism out of place: Thoughts on Whiteness and an antiracist geography in the new millennium, *Annals of the Association of American Geographers*, 90(2), 392–403, <https://doi.org/10.1111/0004-5608.00202>

- Kondrat, M. E. (1999). Who is the “self” in self-aware: Professional self-awareness from a critical theory perspective. *Social Service Review*, 73(4), 451-477.  
<https://doi.org/10.1086/514441>
- Kostenko, K., & Merrotsy, P. (2009). Cultural and social capital and talent development: A study of a high-ability Aboriginal student in a remote community. *Gifted and Talented International*, 24(2), 39–50.  
<https://doi.org/10.1080/15332276.2009.11673528>
- Krackhardt, D., & Kilduff, M. (1999). Whether close or far: Social distance effects on perceived balance in friendship networks. *Journal of Personality and Social Psychology*, 76(5), 770–782. <https://doi.org/10.1037/0022-3514.76.5.770>
- Kulakow, S. (2020). Academic self-concept and achievement motivation among adolescent students in different learning environments: Does competence-support matter? *Learning and Motivation*, 70, 101632.  
<https://doi.org/10.1016/j.lmot.2020.101632>
- Kulik, C. L. C., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. *American Educational Research Journal*, 19(3), 415–428. <https://doi.org/10.3102/00028312019003415>
- Kizilcec, R. F., Pérez-Sanagustín, M., & Maldonado, J. J. (2017). Self-regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education*, 104, 18–33.  
<https://doi.org/10.1016/j.compedu.2016.10.001>
- LaFontana, K. M., & Cillessen, A. H. (2010). Developmental changes in the priority of perceived status in childhood and adolescence. *Social Development*, 19(1), 130–147. <https://doi.org/10.1111/j.1467-9507.2008.00522.x>

- Langenkamp, A. G. (2010). Academic vulnerability and resilience during the transition to high school: The role of social relationships and district context. *Sociology of Education*, 83(1), 1–19. <https://doi.org/10.1177/0038040709356563>
- Larina, G., & Markina, V. (2019). Hidden mechanisms of differentiation: Teachers' beliefs about student diversity. *Journal of Mathematics Teacher Education*.  
<https://doi.org/10.1007/s10857-019-09436-1>
- Latrofa, M., Vaes, J., & Cadinu, M. (2012). Self-stereotyping: The central role of an ingroup threatening identity. *The Journal of Social Psychology*, 152(1), 92–111.  
<https://doi.org/10.1080/00224545.2011.565382>
- Lau, S., & Nie, Y. (2008). Interplay between personal goals and classroom goal structures in predicting student outcomes: A multilevel analysis of person-context interactions. *Journal of Educational Psychology*, 100(1), 15–29.  
<https://doi.org/10.1037/0022-0663.100.1.15>
- Lau, C., Wong, M., & Dudovitz, R. (2017). School disciplinary style and adolescent health. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 62(2), 136–142.  
<https://doi.org/10.1016/j.jadohealth.2017.08.011>
- Lauermann, F., Meißner, A., & Steinmayr, R. (2020). Relative importance of intelligence and ability self-concept in predicting test performance and school grades in the math and language arts domains. *Journal of Educational Psychology*, 112(2), 364–383. <https://doi.org/10.1037/edu0000377>
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

- Lee, M., & Bong, M. (2016). In their own words: Reasons underlying the achievement striving of students in schools. *Journal of Educational Psychology, 108*(2), 274–294. <https://doi.org/10.1037/edu0000048>
- Legette, K. B. (2020). A social–cognitive perspective of the consequences of curricular tracking on youth outcomes. *Educational Psychology Review, 1–16*.  
<https://doi.org/10.1007/s10648-020-09521-5>
- Legette, K. B., & Kurtz-Costes, B. (2020). Math track placement and reflected classroom appraisals are related to changes in early adolescents' math self-concept. *Educational Psychology*. <https://doi.org/10.1080/01443410.2020.1760212>
- Lerang, M. S., Ertesvåg, S. K., & Havik, T. (2019). Perceived classroom interaction, goal orientation and their association with social and academic learning outcomes. *Scandinavian Journal of Educational Research, 63*(6), 913–934.  
<https://doi.org/1080/00313831.2018.1466358>
- Lessard, V., Larose, S., & Duchesne, S. (2020). Does mathematics tracking influence student motivation? Exploring the classroom experience. *International Journal of School and Educational Psychology, 8*(1), 21–35.  
<https://doi.org/10.1080/21683603.2018.1506957>
- Lester, J. (2016). *Why do Aboriginal kids switch off school?* (Unpublished PhD thesis). University of Newcastle.
- Lipps, G. E., Lowe, G. A., Halliday, S., Morris-Patterson, A., Clarke, N., & Wilson, R. N. (2010). The association of academic tracking to depressive symptoms among adolescents in three Caribbean countries. *Child and Adolescent Psychiatry and Mental Health, 4*(1), Article 16. <https://doi.org/10.1186/1753-2000-4-16>
- Liu, W. C., Wang, C. K. J., & Parkins, E. J. (2005). A longitudinal study of students' academic self-concept in a streamed setting: The Singapore context. *British Journal*

*of Educational Psychology*, 75(4), 567–586.

<https://doi.org/10.1348/000709905X42239>

Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73(1), 91.

Loeb, S., Kalogrides, D., & Béteille, T. (2012). Effective schools: Teacher hiring, assignment, development, and retention. *Education Finance and Policy*, 7(3), 269–304.

Lohbeck, A., & Freund, P. A. (2020). Students' own and perceived teacher reference norms: how are they interrelated and linked to academic self-concept?. *Educational Psychology*, 1–18. [doi.org/10.1080/01443410.2020.1746239](https://doi.org/10.1080/01443410.2020.1746239)

Lohoar, S., Butera, N., & Kennedy, E. (2014). *Strengths of Australian Aboriginal cultural practices in family life and child rearing*. Australian Institute of Family Studies.

<https://doi.org/10.1037/0022-3514.73.1.91>

Loveless, T. (2013). *The 2013 Brown Center report on American education: How well are American students learning?* The Brookings Institution.

<http://search.proquest.com/docview/1791031095/>

Lowe, K., Tennent, C., Guenther, J., Harrison, N., Burgess, C., Moodie, N., & Vass, G.

(2019). “Aboriginal Voices”: An overview of the methodology applied in the systematic review of recent research across ten key areas of Australian Indigenous education. *The Australian Educational Researcher*, 46(2), 213–229.

<https://doi.org/10.1007/s13384-019-00307-5>

Lucas, S. R. (2001). Effectively maintained inequality: Education transitions, track mobility, and social background effects. *American Journal of Sociology*, 106(6),

1642–1690. <https://doi.org/10.1086/321300>

- Ludemann, E., & Schwerdt, G. (2012). Migration background and educational tracking. *Journal of Population Economics*, 26, 455–481. <https://doi.org/10.1007/s00148-012-0414-z>
- Luke, A., Cazden, C., Coopes, R., Klenowski, V., Ladwig, J., Lester, J. Macdonald, S., Phillips, D., Shield, P., Spina, N., Theroux, P., Tones, M., Villegas, M., & Woods, A. (2013). *A summative evaluation of the Stronger Smarter Learning Communities Project*. Vol 1 and Vol 2. Queensland University of Technology. <http://eprints.qut.edu.au/59535/>
- Luthar, S. S., Kumar, N. L., & Zillmer, N. (2019). High-achieving schools connote risks for adolescents: Problems documented, processes implicated, and directions for interventions. *American Psychologist*. <https://psycnet.apa.org/doi/10.1037/amp0000556>
- Luthar, S. S., Suh, B. C., Ebbert, A. M., & Kumar, N. L. (2020). Students in high-achieving schools: Perils of pressures to be “standouts”. *Adversity and Resilience Science*, 1–13. <https://doi.org/10.1007/s42844-020-00009-3>
- Lyman, E. L., & Luthar, S. S. (2014). Further evidence on the “costs of privilege”: perfectionism in high-achieving youth at socioeconomic extremes. *Psychology in the Schools*, 51(9), 913–930. <https://doi.org/10.1002/pits.21791>.
- Macedo, D. M., Smithers, L. G., Roberts, R. M., Paradies, Y., & Jamieson, L. M. (2019). Effects of racism on the socio-emotional wellbeing of Aboriginal Australian children. *International Journal for Equity in Health*, 18(1), 132. <https://doi.org/10.1186/s12939-019-1036-9>
- Maehr, M. L., & Zusho, A. (2009). Achievement goal theory: The past, present, and future. In K. R. Wenzel & A. Wigfield (Eds.), *Educational psychology handbook series. Handbook of motivation at school* (pp. 77–104). Routledge.

- Maguire, B., & Yu, M. (2015). Transition to secondary school. *Annual Statistical Report 2014*, 83–103. <https://growingupinaustralia.gov.au/sites/default/files/asr2014.pdf>
- Makel, M. C., Lee, S. Y., Olszewki-Kubilius, P., & Putallaz, M. (2012). Changing the pond, not the fish: Following high-ability students across different educational environments. *Journal of Educational Psychology*, *104*(3), 778. <https://doi.org/10.1037/a0027558>
- Malik, R. S. (2015). Revisiting the occupational aspirations and destinations of Anglo-Australian and Chinese-Australian high school students. *Asia Pacific Journal of Education*, *35*(1), 27–39. <https://doi.org/10.1080/02188791.2013.860010>
- Mander, D. J. (2015). Enabling voice: Aboriginal parents, experiences and perceptions of sending a child to boarding school in Western Australia. *The Australian Journal of Indigenous Education*, *44*(2), 173–183. <https://doi.org/10.1017/jie.2015.21>
- Mander, D. J., Cohen, L., & Pooley, J. A. (2015). “If I wanted to have more opportunities and go to a better school, I just had to get used to it”: Aboriginal students’ perceptions of going to boarding school in Western Australia. *The Australian Journal of Indigenous Education*, *44*(1), 26–36. <https://doi.org/10.1017/jie.2015.3>
- Mansfield, K. C. (2015). Giftedness as property: Troubling whiteness, wealth, and gifted education in the United States. *International Journal of Multicultural Education*, *17*(1), 1–18. <https://doi.org/10.18251/ijme.v17i1.841>
- Marks, G. N. (2010). School sector and socioeconomic inequalities in university entrance in Australia: The role of the stratified curriculum. *Educational Research and Evaluation*, *16*(1), 23–37. <https://doi.org/10.1080/13803611003711310>
- Marks, G. (2017). Is SES really that important for educational outcomes in Australia? A review and some recent evidence. *Australian Educational Researcher*, *44*(2), 191–211. <https://doi.org/10.1007/s13384-016-0219-2>

- Marks, G. N., Cresswell, J., & Ainley, J. (2006). Explaining socioeconomic inequalities in student achievement: The role of home and school factors. *Educational Research and Evaluation: Cross-Cultural Comparison of Group-Related Educational Inequality: The PISA 2000 Study*, 12(2), 105–128.  
<https://doi.org/10.1080/13803610600587040>
- Marsh, H. W. (1984). Self-concept: The application of a frame of reference model to explain paradoxical results. *Australian Journal of Education*, 28(2), 165–181.  
<https://doi.org/10.1177/000494418402800207>
- Marsh, H. W. (1987). The big-fish-little-pond effect on academic self-concept. *Journal of Educational Psychology*, 79(3), 280–295. <https://doi.org/10.1037/0022-0663.79.3.280>
- Marsh, H. W. (1990). The causal ordering of academic self-concept and academic achievement: A multiwave, longitudinal panel analysis. *Journal of Educational Psychology*, 82, 646–656. <https://doi.org/10.1037/0022-0663.82.4.646>
- Marsh, H. W. (1993). Academic self-concept: Theory, measurement, and research. In J. M. Suls (Ed.), *Psychological perspectives on the self, Vol. 4. The self in social perspective* (pp. 59–98). Lawrence Erlbaum Associates, Inc.
- Marsh, H. W., Abduljabbar, A. S., Parker, P. D., Morin, A. J. S., Abdelfattah, F., & Nagengast, B. (2014). The big-fish-little-pond effect in mathematics: A cross-cultural comparison of U.S. and Saudi Arabian TIMSS responses. *Journal of Cross-Cultural Psychology*, 45(5), 777–804.  
<https://doi.org/10.1177/0022022113519858>
- Marsh, H. W., Chessor, D., Craven, R., & Roche, L. (1995). The effects of gifted and talented programs on academic self-concept: The big fish strikes again. *American*

*Educational Research Journal*, 32(2), 285–319.

<https://doi.org/10.3102/00028312032002285>

- Marsh, H. W., & Craven, R. (1997). Academic self-concept: Beyond the dustbowl. In G. Phye (Ed.), *Handbook of classroom assessment: Learning, achievement, and adjustment* (pp. 131–198). Academic Press. <https://doi.org/10.1016/B978-0-12-554155-8.X5000-5>
- Marsh, H. W., & Craven, R. (2002). The pivotal role of frames of reference in academic self-concept formation: The “big fish-little pond” effect. In T. C. Urdan & F. Pajares (Eds.), *Academic motivation of adolescents (adolescence and education)* (pp. 83–123). Information Age Publishing.
- Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on Psychological Science*, 1(2), 133–163. <https://doi.org/10.1111/j.1745-6916.2006.00010.x>
- Marsh, H. W., & Hau, K.T. (2003). Big-fish-little-pond effect on academic self-concept: A cross-cultural (26-country) test of the negative effects of academically selective schools. *American Psychologist*, 58(5), 364–376. <http://dx.doi.org/10.1037/0003-066X.58.5.364>
- Marsh, H. W., Hau, K. T., & Kong, C. K. (2002). Multilevel causal ordering of academic self-concept and achievement: Influence of language of instruction (English compared with Chinese) for Hong Kong students. *American Educational Research Journal*, 39(3), 727–763. <https://doi.org/10.3102/00028312039003727>
- Marsh, H., Kong, C., & Hau, K. (2000). Longitudinal multilevel models of the big-fish-little-pond effect on academic self-concept: Counterbalancing contrast and

- reflected-glory effects in Hong Kong schools. *Journal of Personality and Social Psychology*, 78(2), 337–349. <https://doi.org/10.1037/0022-3514.78.2.337>
- Marsh, H. W., Abduljabbar, A. S., Morin, A. J., Parker, P., Abdelfattah, F., Nagengast, B., & Abu-Hilal, M. M. (2015). The big-fish-little-pond effect: Generalizability of social comparison processes over two age cohorts from Western, Asian, and Middle Eastern Islamic countries. *Journal of Educational Psychology*, 107(1), 258–274. <http://dx.doi.org/10.1037/a0037485>
- Marsh, H. W., Ludtke, O., Nagengast, B., Trautwein, U., Abduljabbar, A. S., Abdelfattah, F., & Jansen, M. (2015). Dimensional comparison theory: Paradoxical relations between self-beliefs and achievements in multiple domains. *Learning and Instruction*, 35, 16–32. <https://doi.org/10.1016/j.learninstruc.2014.08.005>
- Marsh, H. W., Martin, A. J., Yeung, A. S., & Craven, R. (2017). Competence self-perceptions. In A. J. Elliot., C. Dweck., & D. Yeager (Eds.), *Handbook of competence and motivation: Theory and application* (pp. 85–115). The Guilford Press.
- Marsh, H. W., Parada, R. H., Yeung, A. S., & Healey, J. (2001). Aggressive school troublemakers and victims: A longitudinal model examining the pivotal role of self-concept. *Journal of Educational Psychology*, 93(2), 411–419. <https://doi.org/10.1037/0022-0663.93.2.411>
- Marsh, H. W., Parker, P. D., Guo, J., Pekrun, R., & Basarkod, G. (2020). Psychological comparison processes and self-concept in relation to five distinct frame-of-reference effects: Pan-human cross-cultural generalizability over 68 countries. *European Journal of Personality*, 34(2), 180–202. <https://doi.org/10.1002/per.2232>

- Marsh, H. W., Pekrun, R., Lichtenfeld, S., Guo, J., Arens, A. K., & Murayama, K. (2016). Breaking the double-edged sword of effort/trying hard: Developmental equilibrium and longitudinal relations among effort, achievement, and academic self-concept. *Developmental Psychology, 52*(8), 1273–1290. <https://doi.org/10.1037/dev0000146>
- Marsh, H., Trautwein, U., Lüdtke, O., Köller, O., & Harris, K. R. (2008). Social comparison and big-fish–little-pond effects on self-concept and other self-belief constructs: Role of generalized and specific others. *Journal of Educational Psychology, 100*(3), 510–524. <https://doi.org/10.1037/0022-0663.100.3.510>
- Marshall, C., & Rossman, G.B. (2016). *Designing qualitative research*. Sage Publications.
- Martin, A. J. (2010). *Building classroom success: Eliminating academic fear and failure*. Continuum International Publishing Group.
- Martin, A. J., & Elliot, A. J. (2016). The role of personal best (PB) goal setting in students' academic achievement gains. *Learning and Individual Differences, 45*, 222–227. <https://doi.org/10.1016/j.lindif.2015.12.014>
- Martin, A. J., Marsh, H. W., & Debus, R. L. (2001). A quadripolar need achievement representation of self-handicapping and defensive pessimism. *American Educational Research Journal, 38*(3), 583–610. <https://doi.org/10.3102/00028312038003583>
- Martinková, P., Hladká, A., & Potužníková, E. (2020). Is academic tracking related to gains in learning competence? Using propensity score matching and differential item change functioning analysis for better understanding of tracking implications. *Learning and Instruction, 66*, 101286. <https://doi.org/10.1016/j.learninstruc.2019.101286>
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. Association for Supervision and Curriculum Development.

- Masters, G. N. (2020). *Nurturing Wonder and Igniting Passion, designs for a new school curriculum: NSW Curriculum Review*. Australian Council for Educational Research. <https://research.acer.edu.au/nswcurriculumreview/6/>
- Maxwell, J. A. (2012). *A realist approach for qualitative research*. Sage Publications.
- Maxwell, J. A., & Mittapalli, K. (2008). Explanation. In L. M. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 323–326). Sage Publications. <http://doi.org/10.4135/9781412963909>
- Maxwell, S., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2017). The impact of school climate and school identification on academic achievement: Multilevel modelling with student and teacher data. *Frontiers in Psychology, 8*, 2069–2081. <https://doi.org/10.3389/fpsyg.2017.02069>
- Mayer, A., LeChasseur, K., & Donaldson, M. (2018). The structure of tracking: Instructional practices of teachers leading low-and high-track classes. *American Journal of Education, 124*(4), 445–477. <https://doi.org/10.1086/698453>
- Mayes, R. D., Hines, E. M., & Harris, P. C. (2014). Working with twice-exceptional African American students: Information for school counsellors. *Interdisciplinary Journal of Teaching and Learning, 4*(2), 125–139.
- Mazenod, A., Francis, B., Archer, L., Hodgen, J., Taylor, B., Tereshchenko, A., & Pepper, D. (2019). Nurturing learning or encouraging dependency? Teacher constructions of students in lower attainment groups in English secondary schools. *Cambridge Journal of Education, 49*(1), 53–68. <https://doi.org/10.1080/0305764X.2018.1441372>
- McCallumore, K. M., & Sparapani, E. F. (2010). The importance of the ninth grade on high school graduation rates and student success in high school. *Education, 130*(3).

- McCourt, B. (2017). *The role of student engagement in the transition from primary to secondary school*. Learning Curve 19. Centre for Education Statistics and Evaluation (CESE). NSW, Australia: NSW Department of Education.  
<https://www.cese.nsw.gov.au/publications-filter/the-role-of-student-engagement-in-the-transition-from-primary-to-secondary-school>
- McDool, E. (2020) Ability grouping and children's non-cognitive outcomes, *Applied Economics*, 52(28), 3035–3054, <https://doi.org/10.1080/00036846.2019.1705239>
- McFarland, D. A., Moody, J., Diehl, D., Smith, J. A., & Thomas, R. J. (2014). Network ecology and adolescent social structure. *American Sociological Review*, 79(6), 1088–1121. <https://doi.org/10.1177/0003122414554001>
- McGee, C., Ward, R., Gibbons, J., & Harlow, A. (2003). *Transition to secondary school: A literature review. A report to the Ministry of Education*. University of Waikato.  
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.621.2039&rep=rep1&type=pdf>
- McGee, E. (2018). “Black genius, Asian fail”: The detriment of stereotype lift and stereotype threat in high-achieving Asian and Black STEM students. *AERA Open*, 4(4). <https://doi.org/10.1177/2332858418816658>
- McGregor, H. A., & Elliot, A. J. (2002). Achievement goals as predictors of achievement-relevant processes prior to task engagement. *Journal of Educational Psychology*, 94(2), 381–395. <https://doi.org/10.1037/0022-0663.94.2.381>
- McGregor, H. A., & Elliot, A. J. (2005). The shame of failure: Examining the link between fear of failure and shame. *Personality and Social Psychology Bulletin*, 31(2), 218–231. <https://doi.org/10.1177/0146167204271420>
- McInerney, D. M. (2008). Personal investment, culture and learning: Insights into school achievement across Anglo, Aboriginal, Asian and Lebanese students in Australia.

*International Journal of Psychology*, 43(5), 870–879.

<https://doi.org/10.1080/00207590701836364>

McInerney, D. M. (2012). Conceptual and methodological challenges in multiple goal research among remote and very remote Indigenous Australian students. *Applied Psychology*, 61(4), 634–668. <https://doi.org/10.1111/j.1464-0597.2012.00509.x>

McKay, G. R. (2011). Policy and Indigenous languages in Australia. *Australian Review of Applied Linguistics*, 34(3), 297–319. [10.1075/ara1.34.3.03mck](https://doi.org/10.1075/ara1.34.3.03mck)

McKnight, A., Harwood, V., McMahon, S., Priestly, A., & Trindorfer, J. (2018). “No shame at AIME”: Listening to Aboriginal philosophy and methodologies to theorise shame in educational contexts. *The Australian Journal of Indigenous Education*, 49(1), 46–56. <https://doi.org/10.1017/jie.2018.14>

McNeil, L. (2000). *The contradictions of school reform*. Routledge.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27(1), 415–444. <https://doi.org/10.1146/annurev.soc.27.1.415>

Meegan, C. K., & Kashima, E. S. (2010). Emotional and self-esteem consequences of perceiving discrimination against a new identity group. *Asian Journal of Social Psychology*, 13(3), 195–201. [doi.org/10.1111/j.1467-839X.2010.01316.x](https://doi.org/10.1111/j.1467-839X.2010.01316.x)

Mellor, D. (2003). Contemporary racism in Australia: The experiences of Aborigines. *Personality and Social Psychology Bulletin*, 29(4), 474–486. <https://doi.org/10.1177/0146167202250914>

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. Jossey-Bass Publishers.

Merrotsy, P. (2013). Invisible gifted students. *Journal of Talent Development and Excellence*, 5(2), 31–42. <http://www.iratde.com/index.php/jtde/article/view/33>

- Merrottsy, P. (2016). Teaching talented Aboriginal and Torres Strait Islander students. In N. Harrison & J. Sellwood (Eds.), *Teaching and learning in Aboriginal education* (pp. 100–117). Oxford University Press.
- Miele, D., Browman, A., & Vasilyeva, M. (2019). Individual differences in students' effort source beliefs predict their judgments of ability. *Motivation Science*, 6(2), 110–132. <http://dx.doi.org/10.1037/mot0000124>
- Ministry of Education, New Zealand (2016). *Education for Maori: Using information to improve Maori educational success*. <https://oag.parliament.nz/2016/education-for-maori/docs/maori-education.pdf>
- Mockler, N., & Groundwater-Smith, S. (2015). *Engaging with student voice in research, education and community: Beyond legitimation and guardianship*. Springer. <http://doi.org/10.1007/978-3-319-01985-7>
- Montuoro, P., & Lewis, R. (2018). Personal responsibility and behavioral disengagement in innocent bystanders during classroom management events: The moderating effect of teacher aggressive tendencies. *The Journal of Educational Research*, 111(4), 439–445. <https://doi.org/10.1080/00220671.2017.1291486>
- Moodie, N., Maxwell, J., & Rudolph, S. (2019). The impact of racism on the schooling experiences of Aboriginal and Torres Strait Islander students: A systematic review. *The Australian Educational Researcher*, 46(2), 273–295. <https://link.springer.com/article/10.1007/s13384-019-00312-8>
- Moon, S. (2006). Developing a definition of giftedness. In J. H. Purcell & R. D. Eckert (Eds.), *Designing services and programs for high-ability learners: A guidebook for gifted education* (pp. 23–31). Corwin Press. <http://dx.doi.org/10.4135/9781483329307.n3>

- Mooney, J., Seaton, M., Kaur, G., Marsh, H. W., & Yeung, A. S. (2016). Cultural perspectives on Indigenous and non-Indigenous Australian students' school motivation and engagement. *Contemporary Educational Psychology, 47*, 11–23. <https://doi.org/10.1016/j.cedpsych.2016.04.006>
- Muenks, K., & Miele, D. B. (2017). Students' thinking about effort and ability: The role of developmental, contextual, and individual difference factors. *Review of Educational Research, 87*(4), 707–735. <https://doi.org/10.3102/0034654316689328>
- Muenks, K., Miele, D. B., & Wigfield, A. (2017). How students' perceptions of the source of effort influence their ability evaluations of other students. *Journal of Educational Psychology, 108*(3), 438–454. <https://doi.org/10.1037/edu0000068>
- Muenks, K., Wigfield, A., & Eccles, J. S. (2018). I can do this! The development and calibration of children's expectations for success and competence beliefs. *Developmental Review, 48*, 24–39. <https://doi.org/10.1016/j.dr.2018.04.001>
- Muijs, D., Harris, A., Chapman, C., Stoll, L., & Russ, J. (2004). Improving schools in socioeconomically disadvantaged areas: A review of research evidence. *School Effectiveness and School Improvement, 15*(2), 149–175. <https://doi.org/10.1076/sesi.15.2.149.30433>
- Muller, C. M., Hofmann, V., Fleischli, J., & Studer, F. (2016). Effects of classroom composition on the development of antisocial behavior in lower secondary school. *Journal of Research on Adolescence, 26*(2), 345–359. <https://doi.org/10.1111/jora.12195>
- Muller, C., & Zurbriggen, C. (2016). An overview of classroom composition research on social–emotional outcomes: Introduction to the special issue. *Journal of Cognitive Education and Psychology, 15*(2), 163–184. <https://doi.org/10.1891/1945-8959.15.2.163>

- Munns, G., Martin, A., & Craven, R. (2008). To free the spirit? Motivation and engagement of Indigenous students. *The Australian Journal of Indigenous Education*, 37(1), 98–107. <https://doi.org/10.1017/S1326011100016148>
- Muradoglu, M., & Cimpian, A. (2019). Children's intuitive theories of academic performance. *Child Development*, 91(4), 902–918. <https://doi.org/10.1111/cdev.13325>
- Murayama, K., & Elliot, A. J. (2012). The competition–performance relation: A meta-analytic review and test of the opposing processes model of competition and performance. *Psychological Bulletin*, 138(6), 1035–1070. <https://doi.org/10.1037/a0028324>
- Nagaoka, J., Farrington, C., Ehrlich, S., Heath, R., Johnson, D., Dickson, S., Turner, A., Mayo, A., & Hayes, K. (2015). *Foundations for young adult success: A developmental framework*. The Wallace Foundation. <https://www.wallacefoundation.org/knowledge-center/Documents/Foundations-for-Young-Adult-Success.pdf>
- Nagengast, B., & Marsh, H. W. (2012). Big fish in little ponds aspire more: Mediation and cross-cultural generalizability of school-average ability effects on self-concept and career aspirations in science. *Journal of Educational Psychology*, 104(4), 1033–1053. <https://doi.org/10.1037/a0027697>
- Nathan, S., Newman, C., & Lancaster, K. (2019). Qualitative interviewing. In P. Liamputtong (Ed.), *Handbook of research methods in health social sciences* (pp. 391–410). Springer. [https://doi.org/10.1007/978-981-10-5251-4\\_77](https://doi.org/10.1007/978-981-10-5251-4_77)
- New South Wales Aboriginal Education Consultative Group (NSW AECG) Incorporated & New South Wales Department of Education and Training (NSW DET). (2004). *The report of the review of Aboriginal education—Yanigurra muya: Ganggurrinyma*

*yaarri guurulaw yirringin.gurray [Freeing the spirit: Dreaming an equal future].*

Sydney, Australia: NSW DET.

[https://teachingmattersamy.weebly.com/uploads/1/3/9/9/13999466/aer2003\\_04.pdf](https://teachingmattersamy.weebly.com/uploads/1/3/9/9/13999466/aer2003_04.pdf)

New South Wales Legislative Council Standing Committee. (2012). *Transition support for students with additional or complex needs and their families.*

<https://www.parliament.nsw.gov.au/lcdocs/inquiries/2165/120306%20Final%20report.pdf>

New South Wales Department of Education & Training (NSW DET). (2005). *Futures report: "One size doesn't fit all"*. NSW DET.

<https://www.yumpu.com/en/document/read/4762898/one-size-doesnt-fit-all-nsw-department-of-education-and-training>

Noguera, P. A. (2012). Saving Black and Latino boys: What schools can do to make a difference. *Phi Delta Kappan Magazine*, 93(5), 8–12.

<https://doi.org/10.1177/003172171209300503>

Nolen, S. B. (2020). A situative turn in the conversation on motivation theories.

*Contemporary Educational Psychology*, 101866.

<https://doi.org/10.1016/j.cedpsych.2020.101866>

North, B., Dennis, C., Buchan, H., Whalan, J., Griffin, P., Peters, S. J., & Curtis, D.

(2018). Review of selective education access. *Centre for Education Statistics and Evaluation*, New South Wales Department of Education.

<https://www.cese.nsw.gov.au/evaluation-repository-search/review-of-selective-education-access>

Nystrand, M., & Gamoran, A. (1991). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English*, 25(3), 261–290.

[www.jstor.org/stable/40171413](http://www.jstor.org/stable/40171413)

- Oakes, J. (1987). Tracking in secondary schools: A contextual perspective. *Educational Psychologist*, 22(2), 129–153. [https://doi.org/10.1207/s15326985ep2202\\_3](https://doi.org/10.1207/s15326985ep2202_3)
- O'Brien, M., Paradies, Y., Reilly, R., Shoeborn, D., Crumpen, T., Briggs, P., Chisolm, M., & Firebrace, B. (2009) Leadership and role models for young Indigenous Australians involved in the Rumbalara Football Netball Club. *Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health* 7(2), 201–224. [http://www.pimatisiwin.com/online/?page\\_id=656](http://www.pimatisiwin.com/online/?page_id=656)
- Ockenden, L. (2014). *Positive learning environments for indigenous children and young people. Resource Sheet No. 33*. Produced by Closing the Gap Clearinghouse. Canberra: Australian Institute of Health and Welfare & Melbourne, Australia: Australian Institute of Family Studies.
- Ohinata, A., & van Ours, J. C. (2013). How immigrant children affect the academic achievement of native Dutch children. *The Economic Journal*, 123(570), F308–F331. <https://doi.org/10.1111/eoj.12052>
- Ooka, E., & Wellman, B. (2006). Does social capital pay off more within or between ethnic groups? Analyzing job searchers in five Toronto ethnic groups. In E. Fong (Ed.), *Inside the mosaic* (pp. 199–226). University of Toronto Press.
- Opdenakker, M. C., & Van Damme, J. (2001). Relationship between school composition and characteristics of school process and their effect on mathematics achievement. *British Educational Research Journal*, 27(4), 407–432. <https://doi.org/10.1080/01411920120071434>
- Opper, I. M. (2019). Does helping John help Sue? Evidence of spillovers in education. *American Economic Review*, 109(3), 1080–1115. <https://doi.org/10.1257/aer.20161226>

- Organisation for Economic Co-operation and Development (OECD). (2013). *PISA 2012 Results: What makes schools successful (vol. IV): Resources, Policies and Practices*. OECD Publishing. <https://doi.org/10.1787/9789264201156-en>
- Organisation for Economic Co-operation and Development (OECD). (2017). *Promising practices in supporting success for Indigenous students*. OECD Publishing. <http://dx.doi.org/10.1787/9789264279421-en>
- Organisation for Economic Co-operation and Development (OECD). (2020). Student co-operation and competition. In *PISA 2018 results (vol. III): What school life means for students' lives*. OECD Publishing. <https://doi.org/10.1787/0d62bf6c-en>
- Ouweneel, E., Le Blanc, P. M., & Schaufeli, W. B. (2011). Flourishing students: A longitudinal study on positive emotions, personal resources, and study engagement. *The Journal of Positive Psychology, 6*(2), 142–153. <https://doi.org/10.1080/17439760.2011.558847>
- Owens, C. M., Ford, D. Y., Lisbon, A. J., & Owens, M. T. (2016). Shifting paradigms to better serve twice-exceptional African-American learners. *Behavioral Disorders, 41*(4), 196–208. <https://doi.org/10.17988/bedi-41-04-196-208.1>
- Ozer, M., & Perc, M. (2020). Dreams and realities of school tracking and vocational education. *Palgrave Communications, 6*(34), 1-7. <https://doi.org/10.1057/s41599-020-0409-4>
- Packer-Muti, B. (2010). Conducting a focus group. *The Qualitative Report, 15*(4), 1023–1037. <https://nsuworks.nova.edu/tqr/vol15/iss4/20>
- Pahljina-Reinić, R., & Kolić-Vehovec, S. (2017). Average personal goal pursuit profile and contextual achievement goals: Effects on students' motivation, achievement emotions, and achievement. *Learning and Individual Differences, 56*, 167–174. <https://doi.org/10.1016/j.lindif.2017.01.020>

- Paloyo, A. R. (2020). Peer effects in education: recent empirical evidence. In S. Bradley & C. Green (Eds.), *The Economics of Education* (pp. 291–305). Academic Press.  
<https://doi.org/10.1016/B978-0-12-815391-8.00021-5>
- Park, K. (2020). Adolescents' relative position in school and educational attainment: The mediating role of educational expectations. *Social Science Research*, 102520.  
<https://doi.org/10.1016/j.ssresearch.2020.102520>
- Parker, M. A., Eliot, J., & Tart, M. (2013). An exploratory study of the influence of the advancement via individual determination (AVID) program on African American young men in southeastern North Carolina. *Journal of Education for Students Placed at Risk (JESPAR)*, 18(2), 153–167.  
<https://doi.org/10.1080/10824669.2013.791963>
- Parker, P. (n.d.). Are selective schools good or bad for our kids? *Impact*. From the Australian Catholic University website:  
<https://www.impact.acu.edu.au/community/are-selective-schools-good-or-bad-for-our-kids>
- Parker, P., Dicke, T., Guo, J., & Marsh, H. (2019). A macro context theory of academic self-concept: Ability stratification and the big-fish-little-pond effect. *PsyArXiv*.  
<https://doi.org/10.31234/osf.io/bwy59>
- Partington, G., & Gray, J. (2003). Classroom management and Aboriginal students. In Q. Beresford & G. Partington (Eds.), *Reform and resistance in Aboriginal education: The Australian experience* (pp. 164–184). University of Western Australia Press.
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, 1(3), 261–283.  
<https://doi.org/10.1177/1473325002001003636>
- Patton, M. Q. (2015). *Qualitative research and evaluation methods*. Sage Publications.

- Pekrun, R., Murayama, K., Marsh, H. W., Goetz, T., & Frenzel, A. C. (2019). Happy fish in little ponds: Testing a reference group model of achievement and emotion. *Journal of Personality and Social Psychology, 117*(1), 166–185. <https://doi.org/10.1037/pspp0000230>
- Pepper, C., & Wildy, H. (2009). Using narratives as a research strategy. *Qualitative Research Journal, 9*(2), 18–27. <https://link-gale-com.ezproxy1.acu.edu.au/apps/doc/A218450362/AONE?u=acuni&sid=AONE&xid=266c75b1>
- Peterson, E. R., Rubie-Davies, C., Osborne, D., & Sibley, C. (2016). Teachers' explicit expectations and implicit prejudiced attitudes to educational achievement: Relations with student achievement and the ethnic achievement gap. *Learning and Instruction, 42*, 123–140. <https://doi.org/10.1016/j.learninstruc.2016.01.010>
- Peterson, J., Duncan, N., & Canady, K. (2009). A longitudinal study of negative life events, stress, and school experiences of gifted youth. *Gifted Child Quarterly, 53*(1), 34–49. <https://doi.org/10.1177/0016986208326553>
- Pettigrew, T. F., Tropp, L. R., Wagner, U., & Christ, O. (2011). Recent advances in intergroup contact theory. *International Journal of Intercultural Relations, 35*(3), 271–280. <https://doi.org/10.1016/j.ijintrel.2011.03.001>
- Pfeifer, J. H., Masten, C. L., Borofsky, L. A., Dapretto, M., Fuligni, A. J., & Lieberman, M. D. (2009). Neural correlates of direct and reflected self-appraisals in adolescents and adults: When social perspective-taking informs self-perception. *Child Development, 80*(4), 1016–1038. <https://doi.org/10.1111/j.1467-8624.2009.01314.x>
- Phan, H. P., Ngu, B. H., Wang, H. W., Shih, J. H., Shi, S. Y., & Lin, R. Y. (2019). Achieving optimal best practice: An inquiry into its nature and characteristics. *PLoS one, 14*(4). <https://doi.org/10.1371/journal.pone.0215732>

- Phan, H. P., Ngu, B. H., & Yeung, A. S. (2017). Achieving optimal best: Instructional efficiency and the use of cognitive load theory in mathematical problem solving. *Educational Psychology Review*, 29(4), 667–692. <https://doi.org/10.1007/s10648-016-9373-3>
- Plucker, J. A., Burroughs, N., & Song, R. (2010). *Mind the (other) gap! The growing excellence gap in K-12 education*. Center for Evaluation and Education Policy, Indiana University. <https://eric.ed.gov/?id=ED531840>
- Phinney, J. S., Romero, I., Nava, M., & Huang, D. (2001). The role of language, parents, and peers in ethnic identity among adolescents in immigrant families. *Journal of Youth and Adolescence*, 30(2), 135–153. <https://doi.org/10.1023/A:1010389607319>
- Poon, K. (2018). Hot and cool executive functions in adolescence: Development and contributions to important developmental outcomes. *Frontiers in Psychology*, 8, 2311. <https://doi.org/10.3389/fpsyg.2017.02311>
- Poorthuis, A. M., Juvonen, J., Thomaes, S., Denissen, J. J., Orobio de Castro, B., & Van Aken, M. A. (2015). Do grades shape students' school engagement? The psychological consequences of report card grades at the beginning of secondary school. *Journal of Educational Psychology*, 107(3), 842–854. <http://dx.doi.org.ezproxy1.acu.edu.au/10.1037/edu0000002>
- Poorthuis, A. M., van Aken, M. A. G. A., Thomaes, S. J., Slagt, M., & Denissen, J. J. A. (2019). Narcissism and popularity among peers: A cross-transition longitudinal study. *Self and Identity*, 1–15. <https://doi.org/10.1080/15298868.2019.1609575>
- Pope, J. (2015). *Supporting Indigenous young people to succeed in school, work and life. Findings of the IMPACT evaluation 2014*. Foundation for Young Australians. <http://www.fya.org.au/wp-content/uploads/2015/08/FYA-IMPACT-evaluation-report-3Aug.pdf>

- Pozzi, M., Becciu, M., Colasanti, A. R. (2019). Two-faced Janus: The role of peers in adolescence. In A. Pingitore, F. Mastorci, & C. Vassalle C. (Eds.), *Adolescent health and wellbeing*. Springer. [https://doi.org/10.1007/978-3-030-25816-0\\_12](https://doi.org/10.1007/978-3-030-25816-0_12)
- Preckel, F., Götz, T. and Frenzel, A. (2010), Ability grouping of gifted students: Effects on academic self-concept and boredom. *British Journal of Educational Psychology*, 80, 451–472. <https://doi.org/10.1348/000709909X480716>
- Preckel, F., Niepel, C., Schneider, M., & Brunner, M. (2013). Self-concept in adolescence: A longitudinal study on reciprocal effects of self-perceptions in academic and social domains. *Journal of Adolescence*, 36(6), 1165–1175. <https://doi.org/10.1016/j.adolescence.2013.09.001>
- Preckel, F., Schmidt, I., Stumpf, E., Motschenbacher, M., Vogl, K., Scherrer, V., & Schneider, W. (2019). High-ability grouping: Benefits for gifted students' achievement development without costs in academic self-concept. *Child Development*, 90(4), 1185–1201. <https://doi.org/10.1111/cdev.12996>
- Prehn, J., Peacock, H., & Guerzoni, M. A. (2020). Academic self-concepts of Aboriginal and/or Torres Strait Islander children from the Longitudinal Study of Indigenous Children. *The Australian Journal of Indigenous Education*, 1–10. <https://doi.org/10.1017/jie.2019.26>
- Preston, J. P., & Claypool, T. R. (2013). Motivators of educational success: Perceptions of Grade 12 Aboriginal students. *Canadian Journal of Education*, 36(4), 257–279. <https://www.jstor.org/stable/10.2307/canajeducrevucan.36.4.257>
- Price, A., Jackson-Barrett, E., Gower, G., & Herrington, J. (2019). Understanding the complex work of Aboriginal education workers in schools. *The Australian Journal of Indigenous Education*, 48(1), 93–105. <https://doi.org/10.1017/jie.2017.34>

- Pugh Jr, P. M., & Tschannen-Moran, M. (2016). Influence of a school district's advancement via individual determination (AVID) program on self-efficacy and other indicators of student achievement. *NASSP Bulletin*, *100*(3), 141–158. <https://doi.org/10.1177%2F0192636516679261>
- Purdie, N., & McCrindle, A. (2004). Measurement of self-concept among Indigenous and non-Indigenous Australian students. *Australian Journal of Psychology*, *56*(1), 50–62. <https://doi.org/10.1080/00049530410001688128>
- Purdie, N., Tripcony, P., Boulton-Lewis, G., Fanshawe, J., & Gunstone, A. (2000). *Positive self-identity for Indigenous students and its relationship to school outcomes*. Canberra: Department of Education, Training and Youth Affairs.
- Putnick, D. L., Hahn, C. S., Hendricks, C., & Bornstein, M. H. (2020). Developmental stability of scholastic, social, athletic, and physical appearance self-concepts from preschool to early adulthood. *Journal of Child Psychology and Psychiatry*, *61*(1), 95–103. <https://doi.org/10.1111/jcpp.13107>
- Rangvid, B. S. (2010). School choice, universal vouchers and native flight out of local public schools. *European Sociological Review*, *26*(3), 319–335. <https://doi.org/10.1093/esr/jcp024>
- Rathmann, K., Bilz, L., Hurrelmann, K., Kiess, W., & Richter, M. (2018). Is being a “small fish in a big pond” bad for students psychosomatic health? A multilevel study on the role of class-level school performance. *BMC Public Health*, *18*(1), 1098. <https://doi.org/10.1186/s12889-018-5977-5>
- Reardon, S. F. (2013). The widening income achievement gap. *Educational Leadership*, *70*(8), 10–16. <http://ascd.org/publications/educational-leadership>
- Reichelt, M., Collischon, M., & Eberl, A. (2019). School tracking and its role in social reproduction: Reinforcing educational inheritance and the direct effects of social

origin. *The British Journal of Sociology*, 70(4), 1323–1348.

<https://doi.org/10.1111/1468-4446.12655>

Renzulli, J. S., Baum, S. M., Thomas, H., & McCluskey, K. W. (1999). Reversing underachievement through enrichment. *Reclaiming Children and Youth*, 7(4), 217–223.

[https://www.researchgate.net/publication/312088499\\_Reversing\\_underachievement\\_through\\_enrichment](https://www.researchgate.net/publication/312088499_Reversing_underachievement_through_enrichment)

Richer, S. (1976). Reference-group theory and ability grouping: A convergence of sociological theory and educational research. *Sociology of Education*, 49(1), 65–71.

<https://doi.org/10.2307/2112394>

Rickinson, M., Kunstler, B., & Salisbury, M. (2018). *Insights for Early Action Research Project literature review*. Department of Education and Training, Victoria.

<https://www.bastow.vic.edu.au/sites/default/files/2019-05/IfEA%20Literature%20Review%20Final%2017%20Sept%202018.pdf>

Ridder, H. G., Hoon, C., & McCandless Baluch, A. (2014). Entering a dialogue: Positioning case study findings towards theory. *British Journal of Management*, 25(2), 373–387. <https://doi.org/10.1111/1467-8551.12000>

Riglin, L., Frederickson, N., Shelton, K. H., & Rice, F. (2013). A longitudinal study of psychological functioning and academic attainment at the transition to secondary school. *Journal of Adolescence*, 36(3), 507–517.

<https://doi.org/10.1016/j.adolescence.2013.03.002>

Riley, T., & Pidgeon, M. (2019). Australian teachers voice their perceptions of the influences of stereotypes, mindsets and school structure on teachers' expectations of Indigenous students. *Teaching Education*, 30(2), 123–144.

<https://doi.org/10.1080/10476210.2018.1453796>

- Riley, T., & Ungerleider, C. (2012). Self-fulfilling prophecy: How teachers' attributions, expectations, and stereotypes influence the learning opportunities afforded Aboriginal students. *Revue Canadienne de l'Éducation* [Canadian Journal of Education], 35(2), 303–333. <https://journals.sfu.ca/cje/index.php/cje-rce/article/view/406>
- Rivas-Drake, D., Seaton, E. K., Markstrom, C., Quintana, S., Syed, M., Lee, R. M., Schwartz, S. J., Umaña-Taylor, A. J., French, S., & Yip, T. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development*, 85(1), 40–57. <https://doi.org/10.1111/cdev.12200>
- Rjosk, C., Richter, D., Lüdtke, O., & Eccles, J. S. (2017). Ethnic composition and heterogeneity in the classroom: Their measurement and relationship with student outcomes. *Journal of Educational Psychology*, 109(8), 1188–1204. <https://doi.org/10.1037/edu0000185>
- Robbers, E., Donche, V., De Maeyer, S., & Van Petegem, P. (2018). A longitudinal study of learning conceptions on the transition between primary and secondary education. *Research Papers in Education*, 33(3), 375–392. <https://doi.org/10.1080/02671522.2017.1329337>
- Roberts, R. M., & Ali, F. (2013). An exploration of strength of ethnic identity, acculturation and experiences of bullying and victimisation in Australian school children. *Children Australia*, 38(1), 6–14. <https://doi.org/10.1017/cha.2012.44>
- Rodkin, P. C., & Ryan, A. M. (2012). *Child and adolescent peer relations in educational context*. In K. R. Harris, S. Graham, T. Urdan, S. Graham, J. M. Royer, & M. Zeidner (Eds.), *APA handbooks in psychology. APA educational psychology handbook, vol. 2. Individual differences and cultural and contextual factors* (pp. 363–389). American Psychological Association. <https://doi.org/10.1037/13274-015>

- Rogers, C. R. (1947). Some observations on the organization of personality. *American Psychologist*, 2(9), 358–368. <https://doi.org/10.1037/h0060883>
- Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. (2017). Affective teacher–student relationships and students’ engagement and achievement: A meta-analytic update and test of the mediating role of engagement. *School Psychology Review*, 46(3), 239–261. <https://doi.org/10.17105/SPR-2017-0035.V46-3>
- Rose, D. (2004). Sequencing and pacing of the hidden curriculum: How Indigenous learners are left out of the chain. In J. Muller, A. Morais, & B. Davies (Eds.), *Reading Bernstein, researching Bernstein* (pp. 109–125). Routledge.
- Rozer, J. J., & van de Werfhorst, H. G. (2019). Achievement inequalities and the impact of educational institutions. *ISOTIS report (D 1.4 a)*. University of Amsterdam. <http://www.rozer.nl/wp-content/uploads/2020/01/ISOTIS-report-D1.4.pdf>
- Rubie-Davis, C. (2015). *Becoming a high expectation teacher: Raising the bar*. Routledge.
- Rubin, H., & Rubin, I. (2012). Research philosophy and qualitative interviews. In H. J. Rubin & I. S. Rubin (Eds.), *Qualitative interviewing: The art of hearing data* (pp. 13–24). Sage Publications.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press.

- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 101860.  
<https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sahdra, B. K., Ciarrochi, J., Parker, P. D., Craven, R., Brockman, R., Devine, E. K., Congrave, J., & Chang, D. F. (2019). Discrimination as a frame-of-reference effect in overlapping friendship communities of ethnically diverse youth. *Cultural Diversity and Ethnic Minority Psychology*, 26(1), 71–81.  
<https://doi.org/10.1037/cdp0000247>
- Sahlberg, P. (2020). Will the pandemic change schools?. *Journal of Professional Capital and Community*, 5(3/4), 359–365. <https://doi.org/10.1108/JPCC-05-2020-0026>
- Sailors, J. J., & Heyman, J. E. (2019). Similarity, multiple estimations, and the anchoring effect. *The Journal of General Psychology*, 146(2), 200–215.  
<https://doi.org/10.1080/00221309.2018.1551775>
- Salchegger, S. (2016). Selective school systems and academic self-concept: How explicit and implicit school-level tracking relate to the big-fish-little-pond effect across cultures. *Journal of Educational Psychology*, 108(3), 405–423.  
<https://doi.org/10.1037/edu0000063>
- Salili, F., Chiu, C., & Lai, S. (2001) The influence of culture and context on students' motivational orientation and performance. In F. Salili, C.Y. Chiu, Y.Y. Hong (Eds.), *Student motivation* (pp. 221–247). Springer. [https://doi.org/10.1007/978-1-4615-1273-8\\_11](https://doi.org/10.1007/978-1-4615-1273-8_11)
- Sanders-Phillips, K. (2009). Racial discrimination: A continuum of violence exposure for children of color. *Clinical Child and Family Psychology Review*, 12(2), 174–195.  
<https://doi.org/10.1007/s10567-009-0053-4>

- Sarra, C., Spillman, D., Jackson, C., Davis, J., & Bray, J. (2018). High-expectations relationships: A foundation for enacting high expectations in all Australian schools. *The Australian Journal of Indigenous Education*, 49(1), 32–45.  
<https://doi.org/10.1017/jie.2018.10>
- Scales, P. C., Pekel, K., Sethi, J., Chamberlain, R., & Van Boekel, M. (2020). Academic year changes in student–teacher developmental relationships and their linkage to middle and high school students’ motivation: A mixed methods study. *The Journal of Early Adolescence*, 40(4), 499–536. <https://doi.org/10.1177/0272431619858414>
- Scharenberg, K. (2016). The interplay of social and ethnic classroom composition, tracking, and gender on students’ school satisfaction. *Journal of Cognitive Education and Psychology*, 15(2), 320–346. <https://doi.org/10.1891/1945-8959.15.2.320>
- Schmidt, J. A., Shumow, L., & Kackar-Cam, H. Z. (2017). Does mindset intervention predict students’ daily experience in classrooms? A comparison of seventh and ninth graders’ trajectories. *Journal of Youth and Adolescence*, 46(3), 582–602.  
<https://link.springer.com/article/10.1007%2Fs10964-016-0489-z>
- Schneeweis, N. (2015). Immigrant concentration in schools: Consequences for native and migrant students. *Labour Economics*, 35, 63–76.  
<https://doi.org/10.1016/j.labeco.2015.03.004>
- Schofield, J. W. (2010). International evidence on ability grouping with curriculum differentiation and the achievement gap in secondary schools. *Teachers College Record*, 112(5), 1492–1528.  
[https://www.researchgate.net/publication/268269754\\_International\\_Evidence\\_on\\_Ability\\_Grouping\\_With\\_Curriculum\\_Differentiation\\_and\\_the\\_Achievement\\_Gap\\_in\\_Secondary\\_Schools](https://www.researchgate.net/publication/268269754_International_Evidence_on_Ability_Grouping_With_Curriculum_Differentiation_and_the_Achievement_Gap_in_Secondary_Schools)

- Schulz, W., Schunck, R., Diewald, M., & Johnson, W. (2017). Pathways of intergenerational transmission of advantages during adolescence: Social background, cognitive ability, and educational attainment. *Journal of Youth and Adolescence*, 46(10), 2194–2214. <http://dx.doi.org/10.1007/s10964-017-0718-0>
- Schunk, D. H., & DiBenedetto, M. K. (2016). Self-efficacy theory in education. In K. R. Wentzel & D. B. Miele (Eds.), *Handbook of motivation at school* (pp. 34–54). Routledge.
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- Schutz, G., Ursprung, H., & Wößmann, L. (2008). Education policy and equality of opportunity. *Kyklos*, 61(2), 279–308. <https://doi.org/10.1111/j.1467-6435.2008.00402.x>
- Schwartz, A. E., Stiefel, L., & Cordes, S. A. (2017). Moving matters: The causal effect of moving schools on student performance. *Education Finance and Policy*, 12(4), 419–446. [https://www.mitpressjournals.org/doi/full/10.1162/EDFP\\_a\\_00198](https://www.mitpressjournals.org/doi/full/10.1162/EDFP_a_00198)
- Schwartz, D., Cheng, K., Salehi, S., Wieman, C., Graham, S., Lin-Siegler, X., & Cohen, G. L. (2016). The half empty question for socio–cognitive interventions. *Journal of Educational Psychology*, 108(3), 397–404. <https://doi.org/10.1037/edu0000122>
- Schwarz, N., & Bless, H. (1992). Constructing reality and its alternatives: An inclusion/exclusion model of assimilation and contrast effects in social judgment. In L. L. Martin & A. Tesser (Eds.), *The construction of social judgments* (pp. 217–245). Lawrence Erlbaum Associates, Inc.
- Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers College Press.

- Seligman, M. (2018). PERMA and the building blocks of well-being. *The Journal of Positive Psychology, 13*(4), 333–335.  
<https://doi.org/10.1080/17439760.2018.1437466>
- Senko, C., & Dawson, B. (2017). Performance-approach goal effects depend on how they are defined: Meta-analytic evidence from multiple educational outcomes. *Journal of Educational Psychology, 109*(4), 574–598. <https://doi.org/10.1037/edu0000160>
- Senko, C., & Harackiewicz, J. M. (2002). Performance goals: The moderating roles of context and achievement orientation. *Journal of Experimental Social Psychology, 38*(6), 603–610. [https://doi.org/10.1016/S0022-1031\(02\)00503-6](https://doi.org/10.1016/S0022-1031(02)00503-6)
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Shavelson, R. J., & Marsh, H. W. (1986). On the structure of self-concept. *Self-related cognitions in anxiety and motivation*. In R. Schwarzer (Ed.), *Self-related cognitions in anxiety and motivation* (pp. 305–330). Lawrence Erlbaum Associates, Inc.
- Shepherd, C. C., Li, J., Cooper, M. N., Hopkins, K. D., & Farrant, B. M. (2017). The impact of racial discrimination on the health of Australian Indigenous children aged 5–10 years: Analysis of national longitudinal data. *International Journal for Equity in Health, 16*(1), 116. <https://doi.org/10.1186/s12939-017-0612-0>
- Sideridis, G. D. (2008). The regulation of affect, anxiety, and stressful arousal from adopting mastery-avoidance goal orientations. *Stress and Health: Journal of the International Society for the Investigation of Stress, 24*(1), 55–69.  
<https://doi.org/10.1002/smi.1160>
- Siegle, D., Gubbins, E. J., O'Rourke, P., Langley, S. D., Mun, R. U., Luria, S. R., Little, C. A., McCoach, D. B., Knupp, T., Callahan, C. M., & Plucker, J. A. (2016). Barriers to underserved students' participation in gifted programs and possible solutions.

*Journal for the Education of the Gifted*, 39(2), 103–131.

<https://doi.org/10.1177/0162353216640930>

Sierksma, J., & Shutts, K. (2020). When helping hurts: Children think groups that receive help are less smart. *Child Development*, 91, 715–723.

<https://doi.org/10.1111/cdev.13351>

Silva, K., Chein, J., & Steinberg, L. (2016). Adolescents in peer groups make more prudent decisions when a slightly older adult is present. *Psychological Science*, 27(3), 322–330. <https://doi.org/10.1177/0956797615620379>

Silverthorn, N., Dubois, D. L., & Crombie, G. (2005). Self-perceptions of ability and achievement across the high school transition: investigation of a state–trait model. *The Journal of Experimental Education* 73(3), 191–218.

<https://doi.org/10.3200/JEXE.73.3.191-218>

Simmons, R. G. (2017). *Moving into adolescence: The impact of pubertal change and school context*. Routledge.

Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of Educational Research*, 60(3), 471–499.

<https://doi.org/10.3102/00346543060003471>

Sloan, P. J. (2018). NYC selective specialized public high Schools and honors college STEM degrees: A previously unexplored relationship. *Journal of Advanced Academics*, 29(4), 304–320. <https://doi.org/10.1177/1932202X18778816>

Smith, J. S. (2006). Examining the long-term impact of achievement loss during the transition to high school. *Journal of Secondary Gifted Education*, 17(4), 211–221.

<https://psycnet.apa.org/record/2007-02852-004>

- Smith, P. A., & Hoy, W. K. (2007). Academic optimism and student achievement in urban elementary schools. *Journal of Educational Administration, 45*(5), 556–568. <https://doi.org/10.1108/09578230710778196>
- Smith, S., Van Tubergen, F., Maas, I., & McFarland, D. A. (2016). Ethnic composition and friendship segregation: Differential effects for adolescent natives and immigrants. *American Journal of Sociology, 121*(4), 1223–1272. <https://doi.org/10.1086/684032>
- Social Ventures Australia (SVA). (2019a). *Children and young people disengaged from education* (SVA Perspectives: Education). [https://www.socialventures.com.au/assets/SVA-Perspective-Paper\\_Education\\_disengaged\\_cohort\\_lowres.pdf](https://www.socialventures.com.au/assets/SVA-Perspective-Paper_Education_disengaged_cohort_lowres.pdf)
- Social Ventures Australia (SVA). (2019b). *Aboriginal and Torres Strait Islander children* (SVA Perspectives: Education). [https://www.socialventures.com.au/assets/SVA-perspective-paper-education\\_Aboriginal-and-Torres-Strait-Islander-children\\_web\\_lowres.pdf](https://www.socialventures.com.au/assets/SVA-perspective-paper-education_Aboriginal-and-Torres-Strait-Islander-children_web_lowres.pdf)
- Song, J., Bong, M., Lee, K., & Kim, S. I. (2015). Longitudinal investigation into the role of perceived social support in adolescents' academic motivation and achievement. *Journal of Educational Psychology, 107*(3), 821.
- Song, J., Kim, S. I., & Bong, M. (2020). Controllability attribution as a mediator in the effect of mindset on achievement goal adoption following failure. *Frontiers in Psychology, 10*, 2943. <https://doi.org/10.3389/fpsyg.2019.02943>
- Spina, N. (2019). “Once upon a time”: Examining ability grouping and differentiation practices in cultures of evidence-based decision-making. *Cambridge Journal of Education, 49*(3), 329–348. <https://doi.org/10.1080/0305764X.2018.1533525>
- Stabler, F., Dumont, H., Becker, M., & Baumert, J. (2017). What happens to the fish's achievement in a little pond? A simultaneous analysis of class-average achievement

- effects on achievement and academic self-concept. *Journal of Educational Psychology*, 109(2), 191–207. <https://doi.org/10.1037/edu0000135>
- Stake, R. E. (2005). *Qualitative case studies*. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 443–466). Sage Publications.
- St. Denis, V. (2011). Silencing Aboriginal curricular content and perspectives through multiculturalism: “There are other children here”, *Review of Education, Pedagogy, and Cultural Studies*, 33(4), 306–317.  
<http://dx.doi.org/10.1080/10714413.2011.597638>
- Steering Committee for the Review of Government Service Provision. (2015). *Report on government services 2015. Indigenous compendium*. Productivity Commission.  
<https://www.pc.gov.au/research/ongoing/report-on-government-services/indigenous-compendium-2015/indigenous-compendium-2015.pdf>
- Stevens, P. A., & Vermeersch, H. (2010). Streaming in Flemish secondary schools: Exploring teachers’ perceptions of and adaptations to students in different streams. *Oxford Review of Education*, 36(3), 267–284.  
<https://doi.org/10.1080/03054981003629862>
- Stokes, A., & Feig, A. (2012). Considering qualitative inquiry, sociocultural theories, and complexity in the study of field-based learning. *Earth and mind. II: A synthesis of research on thinking and learning in the geosciences. Geological Society of America Special Paper*, 486, 177–179. The Geological Society of America.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2019). Environmental factors and personal characteristics interact to yield high performance in domains. *Frontiers in Psychology*, 10, 2804. <https://doi.org/10.3389/fpsyg.2019.02804>

- Surber, C., & Manis, M. (1984). Inferences of ability and effort: Evidence for two different processes. *Journal of Personality and Social Psychology*, 46(2), 249–268.  
<https://psycnet.apa.org/doi/10.1037/0022-3514.46.2.249>
- Swan, P., & Raphael, B. (1995). Ways forward. *National Consultancy Report on Aboriginal and Torres Strait Islander Mental Health*. Australian Government Printing Service.  
[http://library.bsl.org.au/jspui/bitstream/123456789/353/1/Ways%20forward\\_vol.1%20&%202%20\\_1995.pdf](http://library.bsl.org.au/jspui/bitstream/123456789/353/1/Ways%20forward_vol.1%20&%202%20_1995.pdf)
- Symonds, J., Schoon, I., Eccles, J., & Salmela-Aro, K. (2019). The development of motivation and amotivation to study and work across age-graded transitions in adolescence and young adulthood. *Journal of Youth and Adolescence*, 48(6), 1131–1145. <https://doi.org/10.1007/s10964-019-01003-4>
- Szumski, G., & Karwowski, M. (2015). Emotional and social integration and the big-fish-little-pond effect among students with and without disabilities. *Learning and Individual Differences*, 43, 63–74. <https://doi.org/10.1016/j.lindif.2015.08.037>
- Szumski, G., & Karwowski, M. (2019). Exploring the Pygmalion effect: The role of teacher expectations, academic self-concept, and class context in students' math achievement. *Contemporary Educational Psychology*, 59, 101787.  
<https://doi.org/10.1016/j.cedpsych.2019.101787>
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of social conflict. *The Social Psychology of Intergroup Relations*, 2, 33–47.
- Tan, C. Y. (2017). Do parental attitudes toward and expectations for their children's education and future jobs matter for their children's school achievement? *British Educational Research Journal*, 43(6), 1111–1130.  
<https://doi.org/10.1002/berj.3303>

- Tarbetsky, A. L., Collie, R. J., & Martin, A. J., (2016). The role of implicit theories of intelligence and ability in predicting achievement for Indigenous (Aboriginal) Australian students. *Contemporary Educational Psychology, 47*, 61–71.  
<https://doi.org/10.1016/j.cedpsych.2016.01.002>
- Taylor, B., Francis, B., Archer, L., Hodgen, J., Pepper, D., Tereshchenko, A., & Travers, M. C. (2017). Factors deterring schools from mixed attainment teaching practice. *Pedagogy, Culture and Society, 25*(3), 327–345.  
<https://doi.org/10.1080/14681366.2016.1256908>
- Thomas, V., & Azmitia, M. (2014). Does class matter? The centrality and meaning of social class identity in emerging adulthood. *Identity, 14*(3), 195–213.  
<https://doi.org/10.1080/15283488.2014.921171>
- Thurston, D., Penner, A. M., & Penner, E. K. (2016). “Membership has its privileges”: Status incentives and categorical inequality in education. *Sociological Science, 3*, 264–295. [https://www.sociologicalscience.com/download/vol-3/may/supplemental-materials/SocSci\\_v3\\_264to295\\_supp.pdf](https://www.sociologicalscience.com/download/vol-3/may/supplemental-materials/SocSci_v3_264to295_supp.pdf)
- Tian, L., Chen, H., & Huebner, E. S. (2014). The longitudinal relationships between basic psychological needs satisfaction at school and school-related subjective well-being in adolescents. *Social Indicators Research, 119*(1), 353–372.  
<https://doi.org/10.1007/s11205-013-0495-4>
- Titzmann, P. F., & Silbereisen, R. K. (2009). Friendship homophily among ethnic German immigrants: A longitudinal comparison between recent and more experienced immigrant adolescents. *Journal of Family Psychology, 23*(3), 301.  
<https://psycnet.apa.org/doi/10.1037/a0015493>

- Toh, Y. (2010). 2x2 achievement goals in learning and coping among high school students. In *Annual meeting of AARE, paper 2548. Australian Association for Research in Education, Australia*. <https://www.aare.edu.au/data/publications/2010/2548Toh.pdf>
- Townsend, C., McIntyre, M., Wright, C., Lakhani, A., White, P., & Cullen, J. (2019). Exploring the experiences and needs of homeless Aboriginal and Torres Strait Islander peoples with neurocognitive disability. *Brain Impairment*, 20(2), 180–196. <https://doi.org/10.1017/BrImp.2019.21>
- Tramonte, L., & Willms, J. D. (2010). Cultural capital and its effects on education outcomes. *Economics of Education Review*, 29(2), 200–213. <https://doi.org/10.1016/j.econedurev.2009.06.003>
- Travers, C. J., Morisano, D., & Locke, E. A. (2015). Self-reflection, growth goals, and academic outcomes: A qualitative study. *British Journal of Educational Psychology*, 85(2), 224–241. <https://doi.org/10.1111/bjep.12059>
- Trudgett, M., & Franklin, C. (2011). Not in my backyard: The impact of culture shock on Indigenous Australians in higher education. In C. M. Klinger & N. Murray (Eds.), *Proceedings of the 1st International Australasian Conference on Enabling Access to Higher Education 2011: 5–7 December 2011, Adelaide, Australia* (pp. 33–40). Causal Productions.
- Tschannen-Moran, M., Parish, J., & Dipaola, M. (2006). School climate: The interplay between interpersonal relationships and student achievement. *Journal of School Leadership*, 16(4), 386–415. <https://doi.org/10.1177/105268460601600402>
- Tuominen, H., Niemivirta, M., Lonka, K., & Salmela-Aro, K. (2020). Motivation across a transition: Changes in achievement goal orientations and academic well-being from elementary to secondary school. *Learning and Individual Differences*, 79, <https://doi.org/10.1016/j.lindif.2020.101854>

- United Nations. (2020). *United Nations World Social Report, 2020: Inequality in a rapidly changing world*. Department of Economic and Social Affairs.  
<https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report2020-FullReport.pdf>
- United Nations Educational Scientific and Cultural Organisation (UNESCO). (2015). *Rethinking education: Toward a common good?* UNESCO Publishing.  
<https://unesdoc.unesco.org/ark:/48223/pf0000232555>
- Urdan, T. (2004). Predictors of academic self-handicapping and achievement: Examining achievement goals, classroom goal structures, and culture. *Journal of Educational Psychology, 96*(2), 251–264. <https://doi.org/10.1037/0022-0663.96.2.251>
- Usborne, E., & Taylor, D. M. (2010). The role of cultural identity clarity for self-concept clarity, self-esteem, and subjective well-being. *Personality and Social Psychology Bulletin, 36*(7), 883–897. <https://doi.org/10.1177/0146167210372215>
- Van Houtte, M. (2016). Lower-track students' sense of academic futility: Selection or effect? *Journal of Sociology, 52*(4), 874–889.  
<https://doi.org/10.1177/1440783315600802>
- Van Houtte, M. (2017). Gender differences in context: The impact of track position on study involvement in Flemish secondary education. *Sociology of Education, 90*(4), 275–295. <https://doi.org/10.1177/0038040717731604>
- Vannatta, K., Gartstein, M. A., Zeller, M., & Noll, R. B. (2009). Peer acceptance and social behavior during childhood and adolescence: How important are appearance, athleticism, and academic competence? *International Journal of Behavioral Development, 33*(4), 303–311. <https://doi.org/10.1177/0165025408101275>

- Van Ophuysen, S. (2009). Moving to secondary school: On the role of affective expectations in a tracking school system. *European Educational Research Journal*, 8(3), 434–446. <https://doi.org/10.2304%2Feerj.2009.8.3.434>
- Van Rens, M., Haelermans, C., Groot, W., & van den Brink, H. M. (2018). Facilitating a successful transition to secondary school: (How) does it work? A systematic literature review. *Adolescent Research Review*, 3(1), 43–56. <https://doi.org/10.1007/s40894-017-0063-2>
- Van Rens, M., Haelermans, C., Groot, W., & van den Brink, H. M. (2019). Girls' and boys' perceptions of the transition from primary to secondary school. *Child Indicators Research*, 12(4), 1481–1506. <https://doi.org/10.1007/s12187-018-9591-y>
- Vasta, E., & Castles, S. (Eds.). (1996). *The teeth are smiling: The persistence of racism in multicultural Australia*. Allen & Unwin.
- Vaz, S., Parsons, R., Falkmer, T., Passmore, A. E., & Falkmer, M. (2014). The impact of personal background and school contextual factors on academic competence and mental health functioning across the primary-secondary school transition. *PloS one*, 9(3), 1–13. <https://doi.org/10.1371/journal.pone.0089874>
- Vervaeet, R., Van Houtte, M., & Stevens, P. A. (2018). Multicultural teaching in Flemish secondary schools: The role of ethnic school composition, track, and teachers' ethnic prejudice. *Education and Urban Society*, 50(3), 274–299. <https://doi.org/10.1177%2F0013124517704290>
- Vialle, W. (2013). The “Tiger Mother” factor: Curriculum, schooling and mentoring of Asian students in an Australian context. In S. N. Phillipson, H. Stoeger, & A. Ziegler (Eds.), *Exceptionality in East Asia* (pp. 147–166). Routledge. <https://ro.uow.edu.au/sspapers/525/>

- Vinson, T. (2002). *Inquiry into the provision of public education in NSW: Second report*. Pluto Press.
- Vogl, K., & Preckel, F. (2014). Full-time ability grouping of gifted students: Impacts on social self-concept and school-related attitudes. *Gifted Child Quarterly*, 58(1), 51–68. <https://doi.org/10.1177/0016986213513795>
- Walker, I., & Smith, H. J. (Eds.). (2002). *Relative deprivation: Specification, development, and integration*. Cambridge University Press.
- Walker, R., Robinson, M., Adermann, J., & Campbell, M. (2014). Working with behavioural and emotional problems in young people. In P. Dudgeon, H. Milroy, & R. Walker (Eds.), *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice* (pp. 383–398). Australian Government Department of the Prime Minister and Cabinet.
- Walter, M., Martin, K. L., & Bodkin-Andrews, G. (2017). Introduction. In M. Walter, K. L. Martin, & G. Bodkin-Andrews (Eds.), *Indigenous children growing up strong: A longitudinal study of Aboriginal and Torres Strait Islander families* (pp. 1–13). Palgrave Macmillan. [https://doi.org/10.1057/978-1-137-53435-4\\_1](https://doi.org/10.1057/978-1-137-53435-4_1)
- Waters, S. K., Lester, L., & Cross, D. (2014). Transition to secondary school: Expectation versus experience. *Australian Journal of Education*, 58(2), 153–166. <https://doi.org/10.1177/0004944114523371>
- Waters, S. K., Lester, L., Wenden, E., & Cross, D. (2012). A theoretically grounded exploration of the social and emotional outcomes of transition to secondary school. *Australian Journal of Guidance and Counselling*, 22(2), 190–205. <https://doi.org/10.1017/jgc.2012.26>

- Weiner, B. (2010). The development of an attribution-based theory of motivation: A history of ideas. *Educational Psychologist, 45*(1), 28–36.  
<https://doi.org/10.1080/00461520903433596>
- Wen, N. J., Clegg, J. M., & Legare, C. H. (2019). Smart conformists: Children and adolescents associate conformity with intelligence across cultures. *Child Development, 90*, 746–758. <https://doi.org/10.1111/cdev.12935>
- West Australian Aboriginal Child Health Survey (WAACHS). (2005a). *Factors associated with the emotional and behavioural health of Aboriginal children and young people* (vol. 2). In J. A. De Maio, S. R. Zubrick, S. R. Silburn, D. M. Lawrence, F. G. Mitrou, R. B. Dalby, E. M. Blair, J. Griffin, H. Milroy, & A. Cox (Eds.), *The Western Australian Aboriginal Child Health Survey: Measuring the social and emotional wellbeing of Aboriginal children and intergenerational effects of forced separation* (pp. 101–148). University of Technology and Telethon Institute for Child Health Research.  
[https://www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/waachs-vol2/western\\_australian\\_aboriginal\\_child\\_health\\_survey\\_ch3.pdf](https://www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/waachs-vol2/western_australian_aboriginal_child_health_survey_ch3.pdf)
- West Australian Aboriginal Child Health Survey (WAACHS). (2005b). Life stress events (vol. 4). In J. A. De Maio, S. R. Zubrick, S. R. Silburn, D. M. Lawrence, F. G. Mitrou, R. B. Dalby, E. M. Blair, J. Griffin, H. Milroy, & A. Cox (Eds.), *The Western Australian Aboriginal Child Health Survey: Measuring the social and emotional wellbeing of Aboriginal children and intergenerational effects of forced separation* (pp. 335–418). University of Technology and Telethon Institute for Child Health Research.  
[https://www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/waachs-vol4/western\\_australian\\_aboriginal\\_child\\_health\\_survey\\_v4ch5.pdf](https://www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/waachs-vol4/western_australian_aboriginal_child_health_survey_v4ch5.pdf)

- West, P., Sweeting, H., & Young, R. (2010). Transition matters: Pupils' experiences of the primary–secondary school transition in the West of Scotland and consequences for well-being and attainment. *Research Papers in Education*, 25(1), 21–50.  
<https://doi.org/10.1080/02671520802308677>
- White, J. (2020). *Supporting children's mental health and wellbeing at transition from primary to secondary school: Evidence review*. Health Scotland.  
<http://www.healthscotland.scot/media/2964/supporting-childrens-mental-health-and-wellbeing-at-transition-from-primary-to-secondary-school.pdf>
- White, S. L., Graham, L. J., & Blaas, S. (2018). Why do we know so little about the factors associated with gifted underachievement? A systematic literature review. *Educational Research Review*, 24, 55–66. <https://doi-org.ezproxy2.acu.edu.au/10.1016/j.edurev.2018.03.001>
- Whitley, J. (2014). Supporting educational success for Aboriginal students: Identifying key influences. *Revue des Sciences de l'Éducation de McGill* [McGill Journal of Education], 49(1), 155–181. <https://doi.org/10.7202/1025776ar>
- Whitley, J., Rawana, E., & Brownlee, K. (2014). A comparison of Aboriginal and non-Aboriginal students on the inter-related dimensions of self-concept, strengths and achievement. *Brock Education: A Journal of Educational Research and Practice*, 23(2), 24–46.  
<https://journals.library.brocku.ca/brocked/index.php/home/article/view/316>
- Wieman, C., & Gilbert, S. (2015). Taking a scientific approach to science education, Part I—research. *Microbe*, 10(4), 152–156.  
[http://www.cwsei.ubc.ca/SEI\\_research/files/Wieman-Gilbert\\_ScienceEd-pt1\\_Microbe\\_2015.pdf](http://www.cwsei.ubc.ca/SEI_research/files/Wieman-Gilbert_ScienceEd-pt1_Microbe_2015.pdf)

Wigfield, A. (1997). Reading motivation: A domain-specific approach to motivation.

*Educational Psychologist*, 32(2), 59–68.

[https://doi.org/10.1207/s15326985ep3202\\_1](https://doi.org/10.1207/s15326985ep3202_1)

Wigfield, A., Eccles, J. S., Mac Iver, D., Reuman, D. A., & Midgley, C. (1991).

Transitions during early adolescence: Changes in children's domain-specific self-perceptions and general self-esteem across the transition to junior high school.

*Developmental Psychology*, 27(4), 552–565.

<https://psycnet.apa.org/doi/10.1037/0012-1649.27.4.552>

Wigfield, A., & Koenka, A. C. (2020). Where do we go from here in academic motivation theory and research? Some reflections and recommendations for future work.

*Contemporary Educational Psychology*.

<https://doi.org/10.1016/j.cedpsych.2020.101872>

Wijsman, L. A., Warrens, M. J., Saab, N., Van Driel, J. H., & Westenberg, P. M. (2016).

Declining trends in student performance in lower secondary education. *European Journal of Psychology of Education*, 31(4), 595–612.

<https://doi.org/10.1007/s10212-015-0277-2>

Williams, M. (2018). Ngaa-bi-nya Aboriginal and Torres Strait Islander program

evaluation framework. *Evaluation Journal of Australasia*, 18(1), 6–20.

<https://doi.org/10.1177%2F1035719X18760141>

Wilson, A. R., & Leaper, C. (2016). Bridging multidimensional models of ethnic–racial

and gender identity among ethnically diverse emerging adults. *Journal of Youth*

*and Adolescence*, 45(8), 1614–1637. <https://doi.org/10.1007/s10964-015-0323-z>

Woessmann, L. (2009). International evidence on school tracking: A review. *CESifo DICE*

*Report*, 7(1), 26–34. <https://www.ifo.de/DocDL/dicereport109-rr1.pdf>

- Wolff, F., Wigfield, A., Möller, J., Dicke, A.-L., & Eccles, J. S. (2019). Social, dimensional, and temporal comparisons by students and parents: An investigation of the 2I/E model at the transition from elementary to junior high school. *Journal of Educational Psychology*. Advance online publication. <https://doi.org/10.1037/edu0000440>
- Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality*, *71*(6), 1197–1232. <https://doi.org/10.1111/1467-6494.7106012>
- Wouters, S., De Fraine, B., Colpin, H., Van Damme, J., & Verschueren, K. (2012). The effect of track changes on the development of academic self-concept in high school: A dynamic test of the big-fish–little-pond effect. *Journal of Educational Psychology*, *104*(3), 793–805. <https://doi.org/10.1037/a0027732>
- Wright, M., & Kickett-Tucker, C. (2016). Djinanginy kaartdijin: Seeing and understanding our ways of working. In C. Kickett-Tucker, D. Bessarab, J. Coffin, & M. Wright (Eds.), *Mia Mia Aboriginal community development: Fostering cultural security* (pp. 152–168). Cambridge University Press.
- Xu, J. (2020). Homework goal orientation, interest, and achievement: Testing models of reciprocal effects. *European Journal of Psychology of Education*, 1–20. <https://doi.org/10.1007/s10212-020-00472-7>
- Yavaş, M., & Yücel, G. (2014). Impact of homophily on diffusion dynamics over social networks. *Social Science Computer Review*, *32*(3), 354–372. <https://doi.org/10.1177%2F0894439313512464>

- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, *20*(2), 134–152.  
<http://nsuworks.nova.edu/tqr/vol20/iss2/12>
- Yeager, D., Romero, C., Paunesku, D., Hulleman, C., Schneider, B., Hinojosa, C., Lee, H. Y., O'Brien, J., Flint, K., Roberts, A., Trott, J., Greene, D., Walton, G. M., & Dweck, C. S. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology*, *108*(3), 374–391.  
<https://doi.org/10.1037/edu0000098>
- Yeager, D. S., & Walton, G. M. (2011). Social–psychological interventions in education: They're not magic. *Review of Educational Research*, *81*(2), 267–301.  
<https://doi.org/10.3102/0034654311405999>
- Yeung, A. S., Craven, R. G., & Ali, J. (2013). Self-concepts and educational outcomes of Indigenous Australian students in urban and rural school settings. *School Psychology International*, *34*(4), 405–427.  
<https://doi.org/10.1177/0143034312446890>
- Yin, R. K. (2012). Case study methods. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbooks in psychology. APA handbook of research methods in psychology, vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 141–155). American Psychological Association. <https://doi.org/10.1037/13620-009>
- Yin, R. K. (2018). *Case study research and applications: Design and methods*. Sage Publications.

- Yip, T. (2018). Ethnic/racial identity: A double-edged sword? Associations with discrimination and psychological outcomes. *Current Directions in Psychological Science*, 27(3), 170–175. <https://doi.org/10.1177/0963721417739348>
- Yonezawa, S., & Jones, M. (2006). Students perspectives on tracking and detracking. *Theory into Practice*, 45(1), 15–23. [https://doi.org/10.1207/s15430421tip4501\\_3](https://doi.org/10.1207/s15430421tip4501_3)
- Yu, J., Cheah, C. S. L., Hart, C. H., Sun, S., & Olsen, J. A. (2015). Confirming the multidimensionality of psychologically controlling parenting among Chinese–American mothers: Love withdrawal, guilt induction, and shaming. *International Journal of Behavioral Development*, 39(3), 285–292. <https://doi.org/10.1177/0165025414562238>
- Yuan, Y. C., & Gay, G. (2006). Homophily of network ties and bonding and bridging social capital in computer-mediated distributed teams. *Journal of Computer-Mediated Communication*, 11(4), 1062–1084. <https://doi.org/10.1111/j.1083-6101.2006.00308.x>
- Zeigler-Hill, V., Li, H., Masri, J., Smith, A., Vonk, J., Madson, M. B., & Zhang, Q. (2013). Self-esteem instability and academic outcomes in American and Chinese college students. *Journal of Research in Personality*, 47(5), 455–463. <https://doi.org/10.1016/j.jrp.2013.03.010>
- Zhang, Y., & Wildemuth, B. M. (2017). Qualitative analysis of content. In B. M. Wildemuth (Ed.), *Applications of social research methods to questions in information and library science* (pp. 318–329). Libraries Unlimited.
- Zolfagharian, M., Walrave, B., Raven, R., & Romme, A. G. L. (2019). Studying transitions: Past, present, and future. *Research Policy*, 48(9), 103788. <https://doi.org/10.1016/j.respol.2019.04.012>

## **Appendices**

### Appendix A Interview Schedule/Guide

*Interview Questions asked across three time points with four different stakeholder participant groups participant experiences*

Themes	Year 6 – Term 4, 2015 Students – Time 1	Year 7 – Term 1, 2016 Students – Time 2	Year 7-Term 2, 2016 Students – Time 3	Term 4 - 2015 Parents	Focus group - Term 4 2015 AEOs/teachers	Interview - Term 4 2015 Principal
Experiences of transition	<p>What are you looking forward to about starting high school? What are some of the things that worry or concern you about going to high school</p> <p>Prompt: Are there any other things that you are looking forward to/concern you?</p> <p>Do you think that you will handle the transition to high school well? Why/why not?</p>	<p>What have you liked most about moving to high school? Can you tell me about any challenges you have had since starting high school? Was the move from primary to secondary school what you expected?</p> <p>Prompt: In what ways was your experience what you expected/not what you expected?</p>	<p>Now that you have been in year 7 for a little while, how would you describe your experience of moving from primary to high school?</p> <p>Prompts: What has been good? What has been difficult? What was hard to adjust to? Do you talk with others about the increasing demands and successes of high school? In what ways have the demands increased since starting high school? What have you learnt about yourself since starting high school?</p>	<p>How prepared do you think your child is for starting high school? What sort of things concern you about your child starting high school?</p> <p>Prompts: Making friends, new people, different teachers,</p>	<p>What do you see as the biggest struggles or challenges for students moving from primary to high school? Are there any difficulties that you see as unique to Aboriginal students?</p>	<p>What do you see as the biggest struggles or challenges for students moving from primary to high school? Are there any difficulties that you see as unique to Aboriginal students?</p>
Strengths/ limitation of education setting	<p>What do you like about your school? Is there anything that you do not like about your school?</p>	<p>What do you like about your new school? Is there anything that you do not like about your</p>	<p>Can you tell me about fitting in at high school?</p> <p>Prompt:</p>	<p>What do you see as the strengths and limitations of your child's school compared to other types of schools??</p>	<p>What do you see as the strengths and limitations of this school compared to other types of schools?</p>	<p>What do you see as the strengths and limitations of this school compared to other types of schools?</p>

	<p>How has your school helped you to get ready for high school? Are there things your school could have done better to prepare you for high school?</p>	<p>new school? What has your school done that has helped you to settle into year 7? Is there anything the school could have done better to help you settle into Year 7? How is learning in high school different from learning in primary school?</p>	<p>Can you think of a time this term when you felt you belonged here?  Have you found that there is more work to do in high school compared to primary school?  How has your attitude to learning changed since the last term?  Prompt: What might have caused this?</p>	<p>What could the school do to improve the way it supports students? How has your child's school helped to prepare them for moving to high school? How well have the lines of communication been opened and established between the school and home? Prompts: What has been helpful? What could have been done better? How well have they communicated your child's progress? Did you have to contact them? Have teachers called you to clarify or inform you of issues?</p>	<p>What could this school do to improve the way it supports students? How well do you think your schools prepare students to transfer to high school? How does this school help to prepare students for the move to high school? Is it any different from Aboriginal students? How well have the lines of communication been opened and established between the school and home? Prompts: Frequency, student progress, and mode of contact?</p>	<p>What could this school do to improve the way it supports students? How well do you think your schools prepare students to transfer to high school? How does this school help to prepare students for the move to high school? Is it any different for Aboriginal students? How well have the lines of communication been opened and established between the school and home? Prompts: How do you encourage teachers to communicate students' progress with parents? Frequency and mode of contact?</p>
<p>Influence of parents, teachers, and community members on educational outcomes/ that seed success</p>	<p>Who are the people who have helped you to do well at school? Prompts: In what way have they helped you? Has anyone else helped you to do well at school? Examples might include: - parents - teacher - community - friends</p>	<p>How have the following people helped you to do well since starting high school: your parents, your teachers, your community</p>	<p>How do you think the following people will help you to do well in high school? Prompts: - your parents - your teacher - your community - your friends - a mentor - AEO</p>	<p>How have the following people influenced your child's academic achievements up to this point? Prompts: -You and your family -Your child's teachers -Your community - Aboriginal support staff - Peers</p>	<p>In what ways have the following people influenced the academic achievements up to this point of Aboriginal students: Prompts: - Parents and family - Teachers - Community - Peers</p>	<p>In what ways have the following people influenced the academic achievements up to this point of Aboriginal students: Prompts: - Parents and family - Teachers - Community - Peers</p>

	<ul style="list-style-type: none"> <li>- a mentor</li> <li>- AEO</li> </ul>					
Partnership with Aboriginal community members				In what ways does the school engage with Aboriginal community members? How helpful or unhelpful, was it for your child?	In what ways does the school engage Aboriginal community members? Prompt: In what ways is this beneficial for Aboriginal students?	In what ways does the school engage Aboriginal community members? Prompt: In what ways is this beneficial for Aboriginal students?
Why some Aboriginal students do not engage in high-ability settings	<p>What school are you moving to next year? How did you decide on this school? Prompts: Who did you make this decision with? What appealed/deterred them from different settings? Any dilemmas?</p>	<p>Since starting high school, have you found the schoolwork too easy, too hard or just right for you? Why? What do you like/dislike about the classes you are studying at school? During this term, did you compare your results with other students in Year 7?</p>	<p>Are you happy with the school that you are attending now? Why/why not? What do you like/dislike about the classes you are studying at school? During this term, did you compare your results with other students in Year 7?</p>	<p>How have you and your child decided on what school they will attend next year? What happened to influence this decision? Prompt: Did you experience any dilemmas?</p>	<p>Why do you think some high-ability Aboriginal students do not engage in high-ability educational settings such as gifted and talented classes? Prompt:  <ul style="list-style-type: none"> <li>- Fitting in?</li> <li>- Loss of support?</li> <li>- Lack of expectations?</li> <li>- Relationships?</li> </ul> </p>	<p>Why do you think some high-ability Aboriginal students do not engage in high-ability educational settings such as gifted and talented classes? Prompt:  <ul style="list-style-type: none"> <li>- fitting in?</li> <li>- Loss of support?</li> <li>- Lack of expectations?</li> <li>- Relationships?</li> </ul> </p>

## Appendix B Ethics Approval



Human Research Ethics Committee  
**Committee Approval Form**

**Principal Investigator/Supervisor:** : Prof Rhonda Craven, Prof Herb Marsh, Prof Felicia Huppert, Dr Anthony Dillon, Dr Marjorie Seaton, Prof Juanita Sherwood, Prof Alex Yeung, Prof Janet Mooney, Natasha R. Magson  
**Co-Investigators:** Gerry McCloughan  
**Student Researcher:** :

**Ethics approval has been granted for the following project:**  
 Cultivating Capability: Explicating Critical Psychosocial Drivers of Educational Outcomes and Wellbeing for High-Ability Aboriginal  
**for the period:** 30/11/2017  
**Human Research Ethics Committee (HREC) Register Number:** 2014 340N

**Special Condition/s of Approval**

**Prior to commencement of your research**, the following permissions are required to be submitted to the ACU HREC:

-Further approval is required by DEC NSW SERAP

The data collection of your project has received ethical clearance but the decision and authority to commence may be dependent on factors beyond the remit of the ethics review process and approval is subject to ratification at the next available Committee meeting. The Chief Investigator is responsible for ensuring that outstanding permission letters are obtained, interview/survey questions, if relevant, and a copy forwarded to ACU HREC before any data collection can occur. Failure to provide outstanding documents to the ACU HREC before data collection commences is in breach of the National Statement on Ethical Conduct in Human Research and the Australian Code for the Responsible Conduct of Research. Further, this approval is only valid as long as approved procedures are followed.

Clinical Trials: You are required to register it in a publicly accessible trials registry prior to enrolment of the first participant (e.g. Australian New Zealand Clinical Trials Registry <http://www.anzctr.org.au/>) as a condition of ethics approval.

It is the Principal Investigators / Supervisors responsibility to ensure that:

1. All serious and unexpected adverse events should be reported to the HREC with 72 hours.
2. Any changes to the protocol must be reviewed by the HREC by submitting a Modification/Change to Protocol Form prior to the research commencing or continuing. <http://research.acu.edu.au/researcher-support/integrity-and-ethics/>
3. Progress reports are to be submitted on an annual basis. <http://research.acu.edu.au/researcher-support/integrity-and-ethics/>
4. All research participants are to be provided with a Participant Information Letter and consent form, unless otherwise agreed by the Committee.
5. Protocols can be extended for a maximum of five (5) years after which a new application must be submitted. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

Researchers must immediately report to HREC any matter that might affect the ethical acceptability of the protocol eg: changes to protocols or unforeseen circumstances or adverse effects on participants.

Signed: ..... Date: .... 20/05/2015.....  
(Research Services Officer, Australian Catholic University, Tel: 02 9739 2646)



