









Understanding supervisory practice and development in the pre-HDR space: an ethogenic approach

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ABSTRACT

This article addresses the lack of support for new supervisors in the pre-Higher Degree Research space, including undergraduate honours and postgraduate capstone projects. The research provides an inter-faculty perspective on the needs of pre-HDR students and supervisors, informing an online professional learning resource to address the problem. Concepts from ethogenic social psychology were used to theorise supervision as a complex practice involving two analytically distinct domains of human behaviour: the expressive and practical domains. Semi-structured focus group interviews with alumni and supervisors from Education, Arts-Humanities, and Health Sciences provided data for a needs analysis and to stimulate deliberation amongst the research team, which included course coordinators and supervisors across the different faculties and a representative from the university's teaching and learning centre. The findings illustrate expressive and practical aspects of supervision and elaborate salient themes for the development of pre-HDR supervisory practice through inquiry. The article advances theory by supporting a view of supervision as a process of supervisor, student, and supervisory practice co-development. The results will be of interest to supervisors, honours and masters course coordinators and providers of professional development for academics.

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Introduction

Supervisor development in the pre-Higher Degree Research space is a pressing issue (Al-Doubi et al., 2019). Unlike HDR supervisors, supervisors of pre-HDR students (honours

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and masters capstones) are not required to be accredited, provided with formal access to supervisor training, or to have completed their own qualifications in Higher Degree Research. The role of the pre-HDR supervisor in Australia falls outside of the Higher Education Standards Framework (TEQSA, 2021) and pre-HDR supervision has generally been overlooked in higher education research (MacFadyen et al., 2019). Yet, research supervision is well known as being the most advanced level of teaching in higher education (Polkinghorne et al., 2023). Capable supervisors impact positively on the development of student research skills, highlighting the importance of investment by universities in supervision (Drennan & Clarke, 2009, p. 496). This article reports upon a project conducted at one Australian university designed to address the problem of lack of support for supervisors of pre-HDR students.

The research took place in a large university in Australia with campuses in four states/territories. The project was part of a teaching development grant awarded internally conducted in two phases: a research phase, and a development phase. The aim of the project was to expand university teachers' capability in scholarly teaching and learning to provide excellence in the supervision of students undertaking research projects across the faculties of the university. The objective was to develop an online professional learning micro-credential, *Supervision in Project-based and Coursework Research (pre-HDR)*. The team comprised of coordinators of honours and taught research courses, pre-HDR supervisors, and a learning and teaching academic (also the authors). Spanning the two largest faculties in the university and five schools (Education, Arts, Nursing, Allied Health, and Behavioural Sciences), the research offered a broad perspective on the problem.

The problem is widespread and multifaceted. Predictors of positive outcomes of pre-HDR supervision include good infrastructural support, and flexible supervisory approaches (Agricola et al., 2021; MacFadyen et al., 2019) that provide for student agency (MacKinnon, 2004). However, widespread challenges pervade and differentiate it from doctoral level supervision. Supervision in the pre-HDR space is a relatively high-cost activity due to the varying skill level and research capacity of the students (Barwick & Horstmanshof, 2023; Feather et al., 2014; Garcia, 2020), and there is often a lack of systemic support (Chikte & Chabilall, 2016). Despite guidelines that have emerged from research in the field characterising good supervision (Agricola et al., 2021; MacFadyen et al., 2019; MacKinnon, 2004), the development of supervisory practice in the pre-HDR space has been overlooked in practice and is under-theorised in the literature. Universities have been advised to pay more attention when assigning novice supervisors and urged to create platforms for discussion between novice and experienced supervisors (Al-Doubi et al., 2019, p. 116). However, even experienced supervisors of pre-HDR students can express doubts about their own expertise (MacFadyen et al., 2019). Providing online forums for supervisor development has been suggested as an innovative way to address the lack of access to development for pre-HDR supervisors (Donnelly & Politis, 2021).

The supervisor has been positioned as the responsible agent in the literature. The role of the supervisor has been characterised as balancing three functions: facilitating, nurturing and maintaining standards (MacFadyen et al., 2019). Facilitating encourages student growth through challenge or stimulation. Nurturing involves the provision of support and reassurance within a safe space in which this growth can occur. Maintaining

standards ensures that academic and professional rigour are preserved. However, the significance placed upon a supervisory function has been shown to be culturally dependent (Hu et al., 2016). Further, supervisors and students can interpret the function of supervision differently. Students may view their dissertation as just another assessment while their supervisor views it as a quest for new knowledge (Malcolm, 2012). Yet, the student's *contribution* (Stetsenko, 2016) to supervisory practice has been mostly overlooked; an aspect of theorisation that is addressed in this article.

This article considers supervision as a practice involving contributions from supervisors, students, and critical others. The question addressed is, how could reframing pre-HDR supervision as a discursive practice contribute knowledge regarding pre-HDR supervision and its development? After a brief explanation of ethogenic social psychology, the research design and analytic approach are provided. Representative accounts from participants' data illustrate the findings. Highlighted is the way that students, supervisors, and supervisory practice could be understood as co-developing. In the discussion, the findings, the literature, and implications for future research are drawn together. The article concludes by reflecting upon the utility of the approach and a continuing research programme.

An ethogenic approach

This research draws upon ethogenic social psychology (Harré, 1979, 2012), which has its roots in the cultural psychology of Vygotsky (1978). The theoretical framework was chosen because it supported a view of supervision as contextualised, relational practice. In other words, good supervision was not seen as something that occurred in people's minds but between people as culturally mediated interaction (Vygotsky, 1978), including interaction between a supervisor and student, interaction between supervisors and critical others, such as course coordinators, mentors, and examiners, and interaction within communities of practice, such as those concerned with supervisory practice development.

In ethogenic theory, persons in conversation are the smallest unit of analysis (Harré, 1984). Persons (competent social actors) are capable of accounting for their actions. Coordinated interaction between persons requires shared cognitive resources, such as language. Also in accounts, participants draw upon these cognitive resources to ground reasoned participation (Harré, 1979, p. 182). Methodologically, then, accounts of situated interaction can provide data from which an analyst can derive cognitive resources and abstract a hypothetical grounding for ideal competence from the analysis of the cognitive resources utilised in discourse (Harré, 1979, p. 182). In this article, principles for pre-HDR supervisory practice were derived from participants' accounts of pre-HDR supervision.

Two analytically distinct aspects of human behaviour are recognised in ethogenic social psychology. These aspects are distinguished as practical and expressive (Harré, 1979, p. 19). Theorisation of the expressive aspect is the domain of positioning theory (Harré & van Langenhove, 1999), and theorisation of the practical aspect is the domain of Marx' dialectical materialism (Harré, 1979). Positioning theory examines the relative esteem of persons. Dialectical materialism examines the collective action that supports cultural worlds and human life. Relevant to supervisory practice, the

expressive domain sensitises the analyst to the relative positioning of a student and their supervisor, their positioning in relation to academia, and their self-positioning. The practical domain sensitises the analyst to collectively desired outcomes of a practice: the thesis; an interim milestone. In this article, we consider the utility of this analytic distinction whilst recognising their interpenetration in the reality of continuing life (Martin et al., 2024).

The research design

Aligned with the theoretical framing using ethogenic social psychology, the research was designed as a discursive psychological (qualitative) inquiry (Harré & Sterns, 1995). Students' and supervisors' discourse related to pre-HDR supervision was sought as data.

Focus groups

Focus groups were chosen as the method of data generation because focus groups can generate large quantities of material from relatively large numbers of people in a relatively short time. Within the 12-month timeframe of the teaching development grant, efficiency was an important consideration. A focus group can also 'inhibit the authority of the researcher' to 'allow participants to take over and own the interview space' (Kamberelis & Dimitriadis, 2005, p. 903). It was decided that a focus group could reduce inhibition and better elicit participants' retrospective accounts of supervision than a 1–1 interview due to the presence of similarly positioned others outnumbering the researcher and the potential of others' accounts prompting recall and reflection. The focus group interviews were semi-structured using four open-ended questions:

- (1) In your opinion, what does a student gain from a supervisor relationship?
- (2) From your perspective, what does ideal supervision look like at different stages of a research project?
- (3) What do you think all new supervisors need to know?
- (4) How do you believe supervisors learn their role?

The interviewees were chosen as the researchers deemed least likely to inhibit participants' discourse. For example, Alison, a learning-teaching specialist, who did not belong to either of the participating faculties conducted the supervisor focus group interviews. In this way, the participating academics would not face faculty colleagues or employers. As an indication of participants' freedom to speak, the staff participating in our focus groups were critical of aspects of supervisory arrangements. The student focus groups were conducted by the members of the research team who did not coordinate honours or masters programmes and who had not lectured or supervised students from the alumni invited to participate. As an indicator of freedom in our student focus groups, critical and varied perspectives were offered. The focus groups generated rich data suitable for discursive psychological analysis.

Permission to conduct the research was granted by Australian Catholic University's Human Research Ethics Committee, approval number 2022-2878E. Staff and alumni of honours and masters programmes from the previous year, 2022, within the five

participating schools were invited via email to participate voluntarily in the study. The participants indicated their consent through an online form and by attending the scheduled online meeting. They were advised that they could withdraw from the study at any time and leave the meeting whenever they wished to. There were no withdrawals, and all participated fully in the 60-minute focus group interviews. We conducted 6 focus groups in total, 2 with supervisors and 4 with students (alumni). There were 5–6 participants in each focus group representing each of the five schools. The participants responded to the semi structured interview prompts freely and in interaction with their peers.

Data analysis

The focus group interviews were conducted online, video-recorded and transcribed. Transcripts of each interview were generated using the transcription feature of the online platform, corrected against the audio recording if necessary, and deidentified by assigning pseudonyms to participants. The transcripts, stored securely using the university's online repository, were accessible only to research team members. Each transcript was analysed by at least two researchers. Two readings were made of the data. The first reading was inductive. Content identified by the researcher as salient to the problem was coded by highlighting the text and adding a comment to the digital document to justify the coding. In the second reading, using the approach developed by Jenny (Martin et al., 2024), expressive and instrumental aspects of supervision evidenced in the data were coded deductively. Similarly, comments were added to justify coding. The research team met monthly throughout the project and, during the data analysis phase discussed the coded data in relation to the literature and their own experiences of supervisory practice within the institutional context to identify themes exemplified or absent. This iterative process yielded themes, which became the basis of six professional learning modules designed to engage supervisors in inquiry towards supervisory practice development. The findings in the next section have been presented using the six module titles that were developed from the analysis.

Findings and discussion

The research was conducted to inform the development of an online, asynchronous resource and micro-credential for supervisors. Professional learning modules were developed using six themes, each promoting inquiry into supervisory practice. These themes correspond with the sub-headings below. Presented as if it were addressing a pre-HDR supervisor, this section addresses the reader as if they were a co-inquirer. Selected representative quotes are verbatim.

Inductive coding, including the iterative process of coding and deliberation described above, yielded initial themes. The deductive coding highlighted students' and supervisors' positioning in supervisory interactions, the focus of supervisory interactions, relative rights and responsibilities in institutional contexts, and the academic career development of both students and supervisors. A synthesis of the inductive analysis, the deductive analysis, and the literature resulted in six themed programmes of inquiry, which are elaborated next.

Module 1: supervisor and academic identity

The supervisory relationship is a site for academic identity development for students and for supervisors. Our participating supervisors acknowledged the supervisory relationship as an opportunity to model academic work and this was generally appreciated by the alumni who participated in our study, as exemplified in the quote from Dany, a recent master's graduate:

I guess it's developing that sort of colleague relationship with the student. Through my undergrad it's more like a teacher-student relationship, which makes sense, but then all the way through my masters it felt like more of a collaboration and I felt that it was a bit easier to develop ideas, and also understand where they were coming from as well because you kind of work together to get to the outcome. My supervisors are very collaborative in nature and I think that's kind of what's worked best for them in their own careers as well. They collaborate with a lot of other people. So I think that's what they've carried across with me. And then hopefully I can continue to do in the future- collaborate with them and other people as well. (Dany – participating alumnus).

The quote highlights the student's repositioning in relation to a member of staff, meaning that their relative responsibilities and duties changed. Development in the expressive domain can be marked by repositioning (Martin et al., 2024). In the account, repositioning facilitated practical aspects of the supervisory practice, shown when Dany explained how ideas flowed more freely; knowledge creation being part of the practical domain in this context. As illustrated in this example, we view supervisory practice as developing concurrently as the social identities of both student and supervisor in relation to each other and encourage supervisors to engage in supervisory practice consciously and agentially.

In our research, participating supervisors explained the benefits of linking supervision with their own academic development. Supervision can be time-consuming, so it makes sense to consider how to manage supervision time, how to be efficient in the practice of supervision, and the place of supervision within their own work-related goals, general work satisfaction, institutional goals, and academic recognition. In the literature, supervision in the pre-HDR space is portrayed as valuable but also a relatively high-cost activity in terms of workload. While recommendations in Feather et al.'s (2014) study to mitigate excessive supervision time were along the lines of rigorous assessment of potential candidates, our research indicated that setting expectations with students early on could help to balance the work demand with the rewards of the job. Our participating supervisors were aspirational regarding publishing with their pre-HDR students, especially when the students' topics aligned with the supervisor's research programme. Publishing with a pre-HDR student was not achieved as the norm but it could be a fruitful line of endeavour if the supervisor's academic identity aligned with a research pathway.

Supervisory relationships can contribute to academic identity development for supervisors and for students in other ways. Our participating students explained how staff members became academic role models for them and how the changed relationship benefitted their academic development. They came to see themselves differently, as not just a student but as contributing partner in research. As well as developing their own supervisory expertise, some supervisors explained how their pre-HDR students could enrich

their understanding of stake-holder perspectives because their master's students were expert practitioners.

Yet, as Charlie explained below, new pre-HDR supervisors need support:

I think we're thrown in the deep end. Umm, I didn't receive any training or any support or anything when I became an honours supervisor. It was just sort of included in my workload that I would be doing it with someone else. So, fortunately, I was buddied with two very different style supervisors and I learned from them both. Very different styles and I think the challenge is, you know, the most experienced supervisor, I think, does set the scene. They naturally want to kind of push their ideal way, and the student will be this unique person in their own right. And, you know, I've had somewhat, I'd call, very uptight students and very chill, laid-back students and they're both outstanding humans and individuals. But the supervision process was extremely different and what they wanted from us was extremely different as well. So, I do think it is that really flexible relationship of, 'What is it that you want and need from me?' and then, 'How reasonable is it what you're wanting?' How many editions am I gonna read before you take, sort of, wings and fly? (Charlie – participating supervisor)

Charlie's focus here exemplifies the practical domain, especially when referring to taking wings (as a writer; communicating original thought). Yet an expressive aspect, the uniqueness of the person, has been conveyed as contributing to how supervisory practice may develop. Sensitivity to the expressive domain, then, contributes to a nuanced view of supervision and renders one-size-fits-all accounts meaningless.

Module 2: understanding your context of practice for pre-HDR supervision

The phrase *context of practice* has been used broadly to encompass structures around supervision: instructional divisions of labour; course rules; policies; and institutional cultures. Participants used the phrase 'nuts-and-bolts' when referring to administrative duties, exemplified below by Ned, an experienced honours supervisor of 15 years:

When I first started supervising, I was like, 'Can someone please tell me, what milestones do I need to know? When do they need-'. In the HDR training I did, they didn't teach you any of that. They were just trying to teach you human relations. And I was like, 'I don't need human relations. I need to know - as a supervisor - what do I need to do?' And that does apply to honours as well. And, from memory, we didn't have anything like that when I started supervising honours either. Again, it came from just asking colleagues, like, 'When's the thesis due?' And they're like, 'Oh, yeah, third week'. Like, literally, there was nothing to just tell you this! They did at some stage develop an honours handbook in my school. And so, we then did have that stuff written down. I don't think we have that anymore, honestly. So, I think there is this other side to being a supervisor that isn't taught either, which is literally just the **nuts-and-bolts** of what needs to get done by when, like literally! (Ned – participating supervisor)

Ned's account centred on practical aspects, the materiality of the nuts-and-bolts metaphor evoking institutional structures.

Our research highlighted the varying contexts of pre-HDR research supervision across the university's schools and faculties. These contexts varied in relation to models of supervision, duration of the supervisory relationship, supervisor's administrative responsibilities, and degrees of student freedom, such as in choosing their topic. Most of our participants reported supervision as conducted on a 1-1 basis, although group supervision also featured in our data. The literature indicated benefits from group supervision

(Baker et al., 2014; Kangasniemi et al., 2011). Similarly, group supervision featured in our data as benefitting students, new supervisors, and to mitigate excessive workloads. There were two group supervision models represented in our data: 1. New and experienced supervisors working together with groups of 6–10 master’s capstone students; and, 2. Supervisory teams of 2–3 colleagues assigned to one honours student. Expressive aspects of group supervision were exemplified in the account below: supervisors negotiating their relative responsibilities:

I do really appreciate the conversations, the informal chats with whoever I’m buddied with in terms of, ‘How do we think they’re going, what are we hoping from this meeting?’, and what role do you wanna play versus what role do I wanna play. It would be nice to have a bit more clarity sometimes, I think. We both used to read the same version of something. Whereas now that I’ve done this a couple of years, we’ll go, ‘Do you want to read this version, provide that feedback? Then I’ll have a look at it second time round, or whatever’. It’s just so that we’re not just losing extraordinary amounts of time, way beyond the workload for supervising an honours student. (Charlie – participating supervisor)

The administrative responsibilities of a pre-HDR supervisor varied in relation to coursework requirements and timelines. The supervisor should be familiar with who amongst their colleagues delivers content related to the thesis they are supervising, if applicable, the online material provided to students, assessment rubrics, referencing conventions, and ethics requirements. If the supervisory context is not connected to a taught subject but part of an honours programme, the supervisor must be aware of milestones and assessment procedures, which in some cases require supervisors to appoint external examiners. Roberts’ (2015) *Guide for new supervisors of honours and coursework dissertation students* provides an excellent starting point. However, this guide was written prior to the Covid19 pandemic when online contexts for meeting with students were less of a feature of supervisory practice.

Module 3: understanding the technical and relational needs of your pre-HDR student.

Informing our research was Harré’s (1979) contention that an analytic distinction between practical (technical) and expressive (relational) aspects of social action is required in any attempt to understand human behaviour. Scholars have distinguished between the educational and the psychological requirements of good supervision (Anderson et al., 2006; Cook, 1980, pp. 173–174; Renske et al., 2013) despite the ontological differences between this earlier work and ours. An ethogenic approach differs from cognitive psychological approaches in that it is concerned with investigating how normative action is understood and how social worlds are realised rather than with internal cognitive structures.

Not only have technical requirements and institutional structures been found to be influential regarding supervisory practice (Brew, 2013), pre-HDR students’ needs could not be characterised simply. We found counter examples within the participating students’ accounts of their needs that were also evident in the supervisors’ data. Some students required strong guidance whereas others preferred greater autonomy. Such varying needs implies a need for agility in how a supervisor might position themselves in interaction with their student, an important expressive aspect of supervisory practice.

Our findings and those of others (Brydon & Flynn, 2014) emphasize the importance of *diagnostic teaching*: perceiving relevant diagnostic information about a student's learning process, interpreting these aspects, deciding how to respond to this diagnostic conclusion, and acting based on the diagnostic decision (Agricola et al., 2021, p. 877).

Our research also highlighted the needs of the supervisor, and we stress that diagnostic teaching should be understood as essentially dialogic. This was highlighted in our data, for example, when supervisors recounted the importance of on-time drafts to support diagnostic teaching, such as in Charlie's data below:

I think ideal supervision in the first, the early stage - you can lose extraordinary amounts of time - is - the students don't really know what they're doing. They don't really know what to ask. They don't want to ask anything because they don't want to look stupid. And I think you, you lose a lot of time. There are some - I think it helps if we kind of clarify, 'What do you want the supervision to- what do you want? We can slow it down. It's okay for you to cancel one meeting. It's okay for you to ask more of me'. I mean, I find that there's that push-pull. You're saying, 'I wanna see it. I wanna see a draft'. And then it's sort of presented to you 48 hours before it's due, or whatever. (Charlie - participating supervisor)

Characterising research supervision as *diagnostic teaching* develops prior characterisations of pre-HDR supervision further, e.g., the supervisor as a *guide* (Al-Doubi et al., 2019). In their research, Agricola et al. (2021) characterised supervision according to purpose or *function* and a supervisors' eschewing *actions*, reporting six main functions: diagnosing for empowerment, encouragement, involvement, social needs, understanding, and instructional management. Instructional management included checking student understanding, gathering information, initiating a new topic, and planning next steps (see also Goh & Ku, 2011; Harrison & Whalley, 2008). Social needs included diagnosing for emotion, expectation, and motivation. Supervisors' eschewing actions were categorised thematically: asking questions, eliciting input, explaining, giving feedback, and instructing (Agricola et al., 2021, p. 887). A contribution of our analytical separation of expressive and practical aspects is to expand the purpose of supervisory actions beyond ultimate thesis production to a person-creating function. Evidenced in our data were processes of repositioning. As in Dany's quote, students under supervision can become repositioned as supervisory practice develops, for example, from student to academic colleague. Repositioning is an indicator of social identity development (Martin et al., 2024).

The importance of diagnostic teaching on a student-by-student basis cannot be stressed enough: approaches that have led to positive outcomes for some students, were negative for others. Importantly, the needs of a student must be diagnosed before intervention (Agricola et al., 2021, p. 893). Yet the impact of diagnostic teaching on the supervisory relationship cannot be easily observed (Agricola et al., 2021, p. 878) suggesting the need for careful methodological design. As shown in our study, discursive psychological methods can provide fruitful data for such analyses.

Module 4: feedback and practice evaluation

This Module addresses feedback (to students) and practice evaluation (by supervisors). In our study, practice evaluation was defined as intentionally embedding methods for

eliciting students' perspectives to support practice improvement. Although practice evaluation was absent in our data and in the literature, our participants explicitly indicated that good supervision provided safe dialogic spaces, which would be appropriate when giving feedback to students and conducive to practice evaluation using discursive methods.

In our inductive analysis, supervisory interaction as a 'safe space' was identified across alumni and supervisor focus groups, especially when asked for their views on ideal supervision. In our analysis, we sought maximum variation on a theme. The quote below from a recent graduate exemplifies data coded under this theme but a negative example and an outlier in our data:

At the start, I remember like writing down big words in our meetings that sounded great, to go and research later, because I didn't know what they meant, and leaving the meeting being like, 'Oh my God, what am I doing?' I probably should have just asked in the space but I didn't really have the confidence to do that.

I sometimes wonder how my experience might have been different if I did it after working for a few years and developing that understanding of how actually things work in the real world in terms of applying research to practice. I suppose now I'm adulting a little bit more and getting out into the field, I know no one is expected to know everything. I've got that now! But that was something that I did struggle with through the honours. (Emile – participating alumnus)

Good supervision has been characterised by trusting relationships, where students and supervisors share research interests and supervisors provide advice without undermining students' ownership of projects, resulting in evolving supportive relationships that foster student growth (Roberts & Seaman, 2018). Yet there are threats to good supervision, and these include differing expectations, lack of support, lack of interest and ownership, relationships that don't evolve, personality conflicts, overworking, and pressure to publish (Roberts & Seaman, 2018). Our research supported these claims, but it also highlighted the diversity of students conducting research in the pre-HDR space and supervisor diversity. We could not recommend a static view of supervision or a one-size-fits-all approach and emphasise the need for feedback and practice evaluation.

Although our participating supervisors did not report systematic practice evaluation, they agreed on the need for check points involving a two-way conversation with students regarding expectations within the supervisory relationship, and how to renegotiate or better fulfil expectations. Our participants also agreed that practice would vary depending upon the needs of the student but only up to a certain point. A supervisor could not be positioned as solely responsible for supervisory practice. More research is needed on how supervisory practice could meaningfully incorporate student feedback and ongoing practice evaluation to support the expansion of the supervisory functions: facilitating, nurturing, and maintaining standards (MacFadyen et al., 2019).

Module 5: pre-HDR student agency

To our knowledge, there were no studies of student agency in the pre-HDR space. Yet provision for student agency has been identified as an aspect of best practice (e.g., MacKinnon, 2004). The ontological stance taken in our research sensitised us to the relational

aspects of supervisory practice. In participants' accounts, grammar such as pronouns, sentence modality and tense, were used to code *agentic positioning* (Arnold [now Martin], 2012) as relative responsibility for action assigned or claimed.

Our research highlighted students' shifting needs as their research projects progressed and complimentary shifts in power relations within supervisory interactions over time. In our participants' accounts of successful supervision, a student would incrementally take on more responsibility for their inquiry including setting the agenda for supervisory meetings. At the end of a project, students able to take responsibility for a unique and creative contribution was the ultimate marker of success. In this way, supervisory practice needed to account for the development of student agency. The trajectory of student agency development as a supervisory practice ideal is exemplified in the following quote:

Early on, I find we're giving more direction [to the student] and obviously that sort of weans off. And so early on, a lot of it is saying to the student, 'Go read this'. And a lot of it's also, 'I love what you wanna do, but that is a PhD. We need to narrow'

I find that the relationship- we're sort of building that trust early on, and I'm sort of directing them. And then it's less, 'go do this', and more, 'Oh my God, look what I found'.

The last few students I've supervised, their final chapter is always the best and I think that's inevitable because they've done- they've gotten a better hang of writing. They're more independent. They're more confident in their writing. Like the reviews from the examiners, are, 'Ohh, the final chapter is the highlight'. And it's- I guess the difference with a PhD or Masters [compared to honours] is there's a longer lead time before they have to write their chapters. With honours students, I've noticed that usually that last chapter is by far the sharpest, the strongest, the most original, the punchiest, which makes sense because that's when they're the most confident. (Ned – participating supervisor)

There seemed to only be tacit knowledge regarding when it was appropriate to take responsibility as a supervisor or to position the student as responsible. Many of our participants were conscious that subtle shifts would need to occur but could not explain how successful power shifts took place nor how expertise in supporting student agency could be developed. Similarly, Filippou (2020) discerned varying attitudes amongst supervisors regarding diagnosing and adjusting supervision and resisting and relying on students' initiative. Importantly, supervisors' responsiveness varied in intercultural supervision contexts (Hu et al., 2016).

Supporting student agency development in supervisory practice in the pre-HDR space was portrayed by our participants as a different kind of challenge when compared with PhD supervision. In the pre-HDR space, students often entered with much less of an understanding of academic work than a PhD candidate would. Our participants typified a PhD candidate as interested in research. Whereas honours students were typified as good undergraduates who might never have seen themselves taking the academic route until they were singled out by a lecturer or mentor or had accumulated high grades. Masters capstone students were typified as expert practitioners who did not identify as a researcher prior to enrolling in a research subject. From our participants' accounts, we understood that supervisors in the pre-HDR space would need to take more responsibility for directing and managing supervisory meetings early in the supervisory relationship than in the HDR space. The pace at which a student could be repositioned as more responsible could not be typified due to the diversity of students entering

pre-HDR supervisory relationships. Our participants reflected that ultimate success might be difficult to achieve in some cases. But we stress the lack of research in this space. How to support diverse pre-HDR students in developing epistemic agency needs further investigation.

Researchers have indicated that lack of supervisor expertise could limit a students' choice of topic or approach (Wiggins et al., 2016). Similarly, our participants indicated that a lack of methodological expertise amongst staff in some schools prevented students from choosing certain approaches and, in some cases, requiring that students aligned their projects closely to a supervisor's research interests. However, the picture was complicated. Benefits despite limitations in student choice were also portrayed in our focus group interviews by supervisors and students. The supervisors indicated that students who aligned their projects with a supervisor's programme were more likely to publish. The students indicated that aligning projects with a supervisors' programme provided opportunities to work closely with admired researchers in a kind of academic apprenticeship. More research is needed to better understand how limited choice could affect student agency development, how supervisors could develop expertise beyond their own programmes of research, or how to otherwise support students wishing to pursue novel approaches in the pre-HDR space (e.g., interdisciplinary supervisory teams and communities of practice).

Module 6: academic identity projects

In our study, the co-development of personhood and supervisory practice was theorised as an identity project (Harré, 1984). The identity projects model of development highlights the importance of providing opportunities for self-authoring, for example, forums for supervisors to talk about their own supervisory practice development with critical others. The important role of informal conversations within institutions for developing supervisor's capabilities in the pre-HDR space has been acknowledged (Donnelly & Politis, 2021). Providing more opportunities for reflection and collaboration between supervisors was seen as particularly important in intercultural supervision contexts (Filippou, 2020). Yet our research highlighted the lack of structured opportunities for mentoring and collegial support. More research needs to be done on how collegial relationships, including mentoring, conversations with critical others, and communities of practice, could support supervisor development.

Good supervision is an important factor for the development of pre-HDR student research skills and universities must invest in supervisor training (Drennan & Clarke, 2009, p. 496). Our research indicated inadequate training for new supervisors of pre-HDR students, that experienced supervisors learnt mostly by trial and error, and that having access to mentors, collaborating colleagues, or a professional learning community was seen as vitally important albeit aspirational for supporting new supervisors and for ongoing practice development. We caution that support for supervisory practice development that relies only upon experienced supervisors without inquiry informed by theory is problematic because even experienced supervisors may not consider themselves as experts (MacFadyen et al., 2019). The reported lack of recognition of their own expertise by supervisors could be partly due to a lack of shared language around supervision in the pre-HDR space. To this end, the conceptual model of supervision developed in

MacFadyen et al.'s (2019) study could provide supervisors with a clearer sense of their own expertise, and a springboard for inquiry.

Mentoring relationships and collegial discussion around supervision were rarely experienced by our participating supervisors and when they did occur, were often serendipitous and dependent upon established collegial relationships and a new supervisor's capacity to build a supportive community around them rather than on official structures, which were virtually non-existent. An exception was a group supervision model within a masters course, reported by one of our participants as providing strong support for her own development as a supervisor. In all, the literature and our own research point to the need for a community of practice surrounding new supervisors to support pre-HDR supervisory practice development.

Conclusion

This article provides a report of research and development framed using ethogenic social psychology to address an under-theorisation of pre-HDR supervision and develop an inter-faculty professional learning resource for supervisors. The theoretical framework enabled a nuanced view of supervision as interaction in culturally specific contexts and supported a view of professional learning as inquiry. Discursive psychological approaches (Martin, 2020) were shown to have much to offer in this space. Designed as an invitation to inquiry, the professional learning resource developed is unlike supervisor training programmes (e.g., Fossoy & Haara, 2016; Roberts, 2015). We did not seek consensus in characterising supervisory practice. Rather, we provided insight into current scholarship as a springboard to knowledge creation. The modules developed from the themes presented in this article were not designed as once-off professional learning opportunities, but as go-to resources to stimulate inquiry and community building. The content of the modules is not presented as static because supervision in the pre-HDR space is an under-researched area. Rather, we hope that supervisors who engage with the professional learning content (that has also been reported in this article) in turn contribute revisions to the modules as members of a community of practice using the findings of their own inquiries. Further, evaluations of the resource, including self-studies of engagement with this material, are encouraged as an important contribution to knowledge.

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