THE EFFECT OF PARTICIPATION IN SCHOOL-FACILITATED COMMUNITY SERVICE PROGRAMMES ON STUDENTS' SELF-ESTEEM, SENSE OF COMMUNITY ENGAGEMENT AND ATTITUDES TO CHRISTIANITY.

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Statement of Sources

This thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.

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Abstract

Increasingly, student orientated service outreach programmes (community service) are being incorporated into the broad curriculum of Australian High Schools. The assumption made is that such programmes have tangible benefits for students, the community and the schools themselves. Schools that operate out of a Christian paradigm have the added incentive of seeking to assist students give personal expression to religious commitment through the service of others.

This study tests the assumption that participation in community service or service outreach activities has positive benefits for the students involved. It explores the effect that student involvement in school-facilitated community service programmes has on three personal domains; self-esteem, sense of engagement with community, and attitude to Christianity.

This is a quantitative study utilising a questionnaire instrument to collect data from participants. The questionnaire is a compilation of three pre-existing and previously validated instruments, each of which focus on one of the three research areas. Combined, they provide 74 items which are answered using a Likert scale with response choices ranging along a six point continuum from 'strongly disagree' to 'strongly agree'.

The sample consists of a total of 225 participants drawn from students across years 10 to 12 from five Catholic High Schools in the Brisbane metropolitan area. All of these schools have single sex enrolment. Male and female participants are equally represented in the sample. In total, 80% of the sample participated in their school's community service/service outreach programme. Information related to students' community service involvement, the type of service undertaken, the duration of such service, and prior community service experience, was also collected from participants.

No treatment is being introduced or manipulated in this study; rather, the research examines 'between-participant' and 'within-sample' differences associated with students' participation (or non-participation) in existing community service/service outreach programmes in their schools. As such, the research is *ex post factor* in nature.

Initial confirmatory factor analysis is undertaken to validate the integrity of the combined instrument. This is followed by a Cronbach's alpha reliability study of the 12 component scales of the combined instrument; the results of which prove to be consistent with those previously reported.

In subsequent analysis of the data, significant correlations are identified between six pairs of dependent variables. With statistical significance set at the 95% level, MANOVA is then utilised to determine the effect of a number of factors on scale scores. In addition to the primary focus on the effect that participation/non-participation in school community service programmes has on student self-esteem, engagement with community and attitude to Christianity, other influencing conditions explored include; type of community service, duration of community service, prior community service involvement, and gender.

The principal finding of this research is that a statistically significant relationship is evident only between students' participation in school-facilitated community service programmes and their attitude to social justice. Attitude to social justice is a constitutive element of the larger construct, 'sense of engagement with community'. Analysis of the data reveals no significant association between community service participation and either self-esteem nor attitude to Christianity. The paper concludes with a discussion of the findings in the light of the earlier review of relevant literature.

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1 The Research Defined

1.1 Overview

This initial chapter situates the research project within both public and educational forums. After reviewing some of the key elements of the public debate about the place of community service in the lives of young people and the potential role schools could play, the significance and prevalence of volunteerism within the Australian community are explored.

As this research looks at community service from the particular perspective of the Catholic school, the nature of contemporary Catholic schools is examined. Of special interest is the religious character of the Catholic school and the imperative for schools, in light of Catholic Social Teaching, to embody the Gospel mandate to serve in their structures and programmes.

To exemplify the contemporary support for the implementation of service programmes, the chapter concludes with a presentation of how one such programme complements the broad curriculum of a particular Catholic secondary school.

1.2 Community Service – a matter of public debate

Compulsory community service for young Australians of high school age was the subject of some public debate over the Christmas-New Year period of 2005-2006. The Federal President of the *Young Labor*, in calling for such a public policy, asserted that compulsory community service would address a trend of declining engagement of young people in their communities and would be a way for young people, who have received so much through their education, to give back to their

communities (ABC Online, 2006; Pearlman, 2006). Community service, it was claimed, would contribute to a well rounded education. As envisioned by its promoters, high school students could volunteer their time and talents through a variety of avenues including church groups, aged care services, community groups, charities and cadet style military service.

It is not surprising that a proposal such as this would have its detractors. Of particular concern to some was its compulsory nature. While acknowledging the vital importance of encouraging young people to become involved with their communities, the President of the *National Union of Students* responded that compelling young people to be involved would induce a backlash of resentment (ABC Online, 2006). Others voiced opposition to the proposal on the basis that forced, unpaid work by high school students would take the place of desperately needed, publicly funded jobs paying just wages for young people (Kenny, 2006).

Political initiatives are regularly postulated that are designed to enhance young people's engagement with their communities through volunteerism (Liberal Party of Australia, 2004; Victorian ALP, 2002). In the wake of the current debate, the main stream *Australian Labor Party* called for the establishment of a US styled Peace Corps where young Australians could voluntarily participate in domestic and international community projects. In this proposal, volunteerism would be linked to higher education scholarships and fee discounts as a reward (Sydney Morning Herald, 2006; The Age, 2006). It seems young people and volunteerism are clearly part of the national political agenda.

1.3   Volunteerism in Australia

Irrespective of the politics of the issue, volunteerism continues to have a strong impact on the life of the Australian community. A vast array of community services are provided either solely or in large part through the efforts and contribution of volunteers. Sporting groups, environmental organisations, youth services, social welfare agencies, political parties and organisations, cultural groups, education and health care providers all depend on the generous and committed support of volunteers.

The *Australian Bureau of Statistics* (ABS) conducts and publishes research on volunteerism in Australia. In their summary of findings on voluntary work in Australia (Australian Bureau of Statistics, 2001), they noted the important contribution volunteering makes to national life and its enhancement of social capital. The ABS (2001) stated that 32% of adult citizens reported being engaged in some sort of volunteer work in the 12 months prior to data collection, collectively contributing over 700 million hours of voluntary labour.

A report published in 2005 by the Australian Government Department of Families, Community Services and Indigenous Affairs presents a similar picture of volunteerism. *Giving Australia: Research on Philanthropy in Australia – Australians Giving and Volunteering in 2004* (2005) reports that during the study period 41% of Australian adults volunteered an average of 132 hours, the median time being 44 hours per year. The report notes the 19% increase on the 2001 ABS figures and the continuation of the general trend of increase in the percentage of

adults volunteering and the gross hours volunteered as previously evidenced in the ABS figures from 1995 and 2000.

While the ABS (2001) findings do not report specifically on young people under the age of 18, it is reasonable to expect that the degree of involvement of the 18-42 age bracket demographic group can lead to some valid assumptions about the attitude, and perhaps to a lesser degree the practice, of 15 to 18 year olds regarding volunteerism. The ABS (2001) noted that since its last statistical sampling period in 1995, the 18-24 age bracket saw an increase in the rate of volunteerism from 17% to 27% of the demographic. The median weekly hours of voluntary work for this age group was slightly over one hour per week, averaging close to 55 hours per year. A significant increase is shown in the 2005 report (Australian Government Department of Families Community Services and Indigenous Affairs) with 36% of the 18-24 age group volunteering a yearly mean of 132 hours.

Close to half of all volunteers specifically acknowledge the benefits they provide to their community as a key reason for their involvement. At the same time, they report the sense of personal satisfaction they receive from their work as a motivation for their participation. The ABS specifically remarks, that for the 18-24 group, the opportunity to learn new skills and gain work experience are key factors (13% and 17% respectively) in their choice to be involved in volunteer work.

The *Giving Australia* report (Australian Government Department of Families Community Services and Indigenous Affairs, 2005) makes some interesting observations about volunteering and religious practice. After excluding volunteering for religious purposes, the report notes that while those without a religion are just as

likely to volunteer as are frequent religious worshipers, the latter group volunteer for more hours; with the mean hours volunteered being 109 hours for those without a religion compared to 151 hours for those with a religion.

Schools, too, play a large role in facilitating young people's involvement in volunteering. As an essential part of the fabric of Australian society, and particularly as a key influence in the life experience of young people, schools have encouraged the personal development of their students by promoting their engagement in, and support of, community projects and activities on a voluntary basis. Many community groups approach schools to enlist the support of students in their activities. The types of activities are broad, ranging from *Clean Up Australia* campaigns and other environmental services, collecting for Charity organisations, to political advocacy groups such as *Amnesty International*. High school students are also regularly engaged in social action groups that respond to the needs of people who are homeless, refugees, experience a disability of some kind, or who are otherwise socially disadvantaged.

While acknowledging the significant contribution young volunteers make to their communities, this current research project seeks to investigate the effects that community service has on the young people themselves. The assumption is made that not only is volunteerism good for the wider community, but is also most beneficial to young people in the course of their personal development. Schools conducted by religious groups often make an added assumption; that young people's community service also impacts positively on their personal religious faith development. **The specific objective of this research is to assess the impact of students' community service on three particular personal domains; self esteem,**

engagement with community, and attitude to Christianity. The setting for this research is Catholic secondary schools; specifically schools in south-east Queensland.

1.4 Contemporary Catholic schools – Multidimensional learning communities

> *In the Catholic school's educational project there is no separation between time for learning and time for formation, between acquiring notions and growing in wisdom. The various school subjects do not present only knowledge to be attained, but also values to be acquired and truths to be discovered.*
>
> *(Congregation for Catholic Education, 1997, par 14)*

Australian Catholic schools, like their counterparts in the independent and state sectors, operate in a complex and demanding environment necessitating their embrace of a multifaceted curriculum. In the post-modern western milieu, a vast array of issues and forces impact upon schools' operations (Treston, 2005).

With the information era comes a rapidity of change that is experienced in the social order as well as in technological and scientific arenas. Rather than the increased wealth provided by these advances being of benefit to all, the rift between the rich and the poor has been growing markedly. Curriculum developers are challenged to respond swiftly and meaningfully to such change. Whereas once education was almost universally seen as part of the socialisation of children to become citizens able to function and participate in society, education is now increasingly seen as an instrument for supplying industry and the economy, thereby increasing economic competitiveness (Moos, 1999).

There has been a trend away from the once traditional liberal arts education which was widely viewed as a catalyst for the cultural transformation of society. In studying this transformation in Australia, Lingard, Hayes and Mills (2002) concluded that this liberal arts understanding of education was enhanced by the 1973 *Karmel Report* produced by the *Interim Committee for the Australian Schools Commission.* It proposed the devolution of power and authority from the central administrations of Australian school systems. Educational outcomes for students would be improved, the report argued, by enhanced professional direction by teachers and local school leadership coupled with greater input by parents and community.

However in the 1980's education, it is argued, was reframed as a commodity, with schools as service providers competing for market-share in a globalised economy (Beare, 2001; Lingard et al., 2002). Outcomes were benchmarked against measured criteria that were perceived to enhance the knowledge economy. Concomitant with this commodification of education was a shift to view students and parents as consumers who adopt a transaction approach in their relationships with teachers and schools (Bailey & de Plessis, 1998).

Government intervention and legislation have impacted increasingly upon school administration and operation (Hargreaves, 1999). In addition to curriculum areas, this is evident in duty of care and workplace health and safety matters. Government legislative programmes reflect the public's increased demand for accountability from publicly funded institutions (Rizvi, 1993).

Further, society has experienced increasing fragmentation which has most acutely impacted upon the family unit (Rumble, 1999). Consequently, society is

progressively more often drawing upon the resources of school communities, particularly their pastoral care programmes, to offer a sense of connectedness in the face of this social disintegration. (Boisture, 2003). This has been compounded by the expanding plurality of choices available to members of society. Rather than being an expression of enhanced freedoms, such a wide variety of options makes commitment to any one of those options less certain (Berger, 1979). Education in the age of uncertainty can be accompanied by increased levels of anxiety and doubt. This in turn has been exacerbated by the angst engendered by the rise of global terrorism (Alpert & Duckworth Smith, 2003; Ronen, Rahav, & Appel, 2003).

For schools that embrace a particular religious culture as a key foundational ethic, as do Catholic schools, the rise of secularism challenges the efficacy of their mission orientated endeavours to foster a traditional spiritual/religious response among students, their families and staff (Slaughter, 1996; Treston, 1997). Dwyer (1986) notes 'progressivism' as one of the central ideologies underpinning Catholic education. Progressivism seeks to foster the holistic personal development of the individual by exposure to, and involvement in, real-life situations.

The Vatican's *Congregation for Catholic Education* (1997), in their document issued to mark the change of millennia, reflected on many of these phenomena and called on Catholic educators, in collaboration with parents and local communities, to provide an educational environment conducive to the formation of students' character. Reason and faith ought to interweave to bring about a Christian understanding of the world, culture and history. Moreover, it argued education should be focused on the human person, and serve to develop the whole person (Congregation for Catholic Education, 1997, par 9).

1.5   The religious curriculum of the Catholic school

Catholic educators make a distinction between the Catholic character or ethos of the school community and the objectives of the teaching of religion as an academic subject. This has been highlighted in the Catholic Archdiocese of Brisbane's Education Office's (Brisbane Catholic Education, henceforth referred to as BCE) publication of a three volume authoritative document on religious education in Catholic Schools (Brisbane Catholic Education, 1997a, 1997b, 1997c) This document was subsequently adopted by the other Queensland Dioceses. It articulates a global statement on Religious Education (RE) in Catholic schools, and provides a template for a RE curriculum profile and syllabus (Brisbane Catholic Education, 1997b). The document, while acknowledging classroom teaching as one among a number of important contexts for the religious education and faith formation of young people, expresses the understanding that religious education, producing a combination of affective and academic outcomes, occurs in the broader context of interrelating environments of the home, school and faith communities.

The document states that in the first instance, "students are actively involved in gaining knowledge and understanding of the Catholic tradition . . . (and) some awareness of other religious traditions and of the nature of religion and its place in human life and in Australian society" (Brisbane Catholic Education, 1997c, p 8). As a consequence of this acquired knowledge, skill and understanding, BCE believes students have the opportunity to nurture their personal religious and moral development. In the syllabus volume, the document is emphatic that the aim of RE as a school subject "is to develop students' religious literacy in the light of the Catholic tradition, so that they may participate critically and effectively in the life of

their faith communities and wider society" (Brisbane Catholic Education, 1997c, p 18).

While religious literacy is the primary intended outcome of the classroom teaching of RE, students' affective faith-development is the goal of the Catholic school's meta-curriculum. In addition to classroom curriculum and pedagogy, Catholic schools adopt a wide variety of strategies to pass on specific religious values to its students. Among these are prayer and liturgical activities, specific religious language, symbols and images, spirituality programmes such as retreats, and service outreach programmes. These are intended to offer students a lived experience of Gospel values.

However, service outreach programmes are not the sole preserve of church organizations. Schools, secular and religious, facilitate such programmes because of the perceived benefits they offer students, the community, and school themselves. Principal among the desired outcomes is the potential to support the growth of students into effective citizens of their communities (Masucci & Renner, 2000). While church schools share these desired outcomes, their core motivation is responding to the Gospel mandate to serve (Moore, 1994).

Murray (2003) highlights Michael Schuck's interpretation of the sweep of papal *Catholic Social Teaching* as being primarily directed towards the support of the concept of the individual as embedded in multifaceted social relationships, hallmarked by the giving and receiving of mutual aid. Such a concept of the human person stands over and against the competing liberal ideology of autonomy and individualism (Murray, 2003).

Nonetheless, some have hypothesised that an ethic embracing the values of community and sharing is particularly prominent within the Catholic tradition (Rigney, Matz, & Abney, 2004). These authors have attempted to test the theories developed by Tropman and Greeley that within Catholicism exists a religious ethic influencing personal conduct and attitudes. Such an ethic would be a counterpart to that identified within Protestantism by Max Webber in the early 20th Century, emphasising individual achievement and self-reliance (Rigney et al., 2004). In an attempt to substantiate the Tropman theory regarding a distinctive Catholic 'sharing' ethic, Rigney et al. (2004) analysed available public and commercial survey data from the US related to self-reporting of involvement in volunteer activities. They concluded that the data does not substantiate such a claim. While there is a strong correlation between religious involvement and volunteerism, somewhat consistent with the Australian experience as reported above in Section 1.3, there is no evidence to suggest an emphasis on sharing as being exceptionally or distinctively Catholic.

1.6   Catholic Social Teaching and the Gospel mandate to serve

As expressions of Christian communities, Catholic schools are established to participate and further the mission of the church; that is, to enhance the reign of God's kingdom as heralded and established by Jesus Christ. For Christians, the Divine self is revealed and expressed in the person of Jesus of Nazareth. Christ is the incarnation of the Divine *Logos; "And the Word became flesh and lived among us"* [John 1:14 NRSV]. Christians draw their moral and ethical imperatives from Christ's own actions and teachings. Being an agent of transformation and social justice is a cardinal obligation of every Christian (Stewart, 2002).

The gospel authors present Jesus as endorsing the expression of belief through action; particularly action on behalf of those who are oppressed, marginalised, disempowered and excluded (Wainwright, 1990). The parables, a key teaching tool employed by Jesus, consistently assert practical service of others as the test of authentic faith. The parables of the true neighbour (Luke 10:29-37) and the last judgement (Matthew 25:31-46) are two prime examples of this. In Luke's Gospel, as Jesus begins his public ministry he uses the words of the prophet Isaiah to announce that God's reign has a practical expression (Luke 4: 17-21). And in John's Gospel, as Jesus neared the hour of his ultimate act of service in his self-giving on the cross, he washed his disciples' feet and he exhorted the disciples to emulate his symbolic example of service (John 13:1-17). *"If you know these things, you are blessed if you do them"* [John 13:17].

From the earliest times in the history of the church, practical aid for people in need was an expression of a conviction about the sacredness of human life (Cavanaugh, 2003) and the interconnectedness of all humanity. By acting on feelings of charity, all people of goodwill contribute to the full realisation of the kingdom of justice and peace established by Jesus of Nazareth. Schools' adoption of service outreach within the curriculum is a corporate manifestation of the gospel ethic to be of service, particularly to those on the margins of our communities (Stewart, 2002). This ethic of 'love for the poor' has found recognition in the 1994 Catechism of the Catholic Church (Sacred Congregation for the Doctrine of the Faith, 1994).

> *"The Church's love for the poor . . . is a part of her constant tradition." This love is inspired by the Gospel of the Beatitudes, of the poverty of Jesus, and of his concern for the poor. Love for the poor is even one of the motives for the duty of working so as to "be able to give to those in need." It extends not*

only to material poverty but also to the many forms of cultural and religious poverty.

Catechism of the Catholic Church, Par # 2444

Moreover, the Gospel mandate to serve the lowly, marginalised and disempowered is at the heart of Catholic Social Teaching. Catholic Social Teaching (CST) developed in the nineteenth century as a Gospel responses to the social inequities that accompanied the industrial revolution (Sacred Congregation for the Doctrine of the Faith, 1994, par # 2421). The major themes of CST include the promotion of community and the common good in the spirit of solidarity, the fundamental option for the poor and vulnerable, and encouragement of the participation of all in the life of their community (Office for Social Justice: Catholic Archdiocese of Saint Paul and Minneapolis, n.d.). School facilitated service outreach programmes respect these key dimensions of Catholic Social Teaching.

1.7   Genesis of the research focus

The facilitation of community service (service outreach) programmes is the responsibility of the researcher at his place of employment. Like many Catholic schools, this Catholic secondary school for girls in metropolitan Brisbane (for the purposes of anonymity, in this paper referred to as Sancta Sophia College), offers community service outreach programmes as a means of promoting students' personal growth and lived faith experience.

Personal experience of social action grounded in gospel values is widely supposed to be effective in fostering the faith of individuals and groups – it makes faith real (Moore, 1994). Moreover, it is believed community service fosters students' feelings

of self-worth and creates positive relationships between students and the wider community in which they live (Billig, 2000b).

The key objective of this study is to test the hypothesis that students' experience within community service programmes positively correlates with their self-esteem, their engagement with their local community and their attitude to Christianity. Community service initiatives differ markedly between schools, particularly in terms of the types of service undertaken, the duration of the service activities. Hence, a further objective of this research is an examination of the effects these differences have on student outcomes in the three domains.

The researcher's role in his school includes undertaking responsibility for the spiritual and religious development of students, and incorporates oversight of the community service programme for students in the senior school, years 11 and 12. The objectives of the community service programme are a good fit with the school's articulated goals. Research (Billig, 2000b) indicates that students' participation in community service benefits not only the people they serve but also has positive outcomes for students in a number of areas.

In an overview of research on the efficacy of student community service ['*service learning*' is the nomenclature used broadly for such initiatives in the U.S.A.], (Billig, 2000b, n.d.) indicates constructive outcomes in a number of areas including: students' personal and social development; an increased degree of social awareness and responsibility leading to enhanced community engagement; positive academic outcomes for students; increased realism regarding career aspirations; improved

school environments and student-teacher relationships; and enhanced community perceptions of schools.

This study has gathered data from several Brisbane Catholic secondary schools in addition to Sancta Sophia. This broader representation of students within the research sample contributes to the validity and generalisability of research results. Data for this study has been collected to investigate and measure the effect of community service in three main student orientated domains; self-esteem, community engagement, and attitude to religion. This research is designed to test assumptions held at the local level. It provides valuable data in the evaluation of the efficacy of community service programmes and contributes to the overall body of research on the impacts of community service.

1.8   A local context

It is helpful to explore why a Catholic secondary school, like Sancta Sophia, would view a community service programme as an authentic expression of its mission and ethos. Though the forms of service outreach vary from school to school, motivation for such activity is consistent across the schools participating in this study. Sancta Sophia College is a Catholic secondary school for girls, established and operated by a Catholic women religious order. The school has a student enrolment of approximately 700.

The educational ethos of Sancta Sophia College is the product of two centuries of development and refinement, emerging from the vision and practical experience of its founder. Like all schools operated by this particular religious order, Sancta Sophia takes direction for its curriculum and pedagogy from the five key educational

goals. These goals also constitute the criteria by which each school's performance is evaluated on a regular basis.

These *Education Goals* are directed toward: the promotion of a personal and active faith in God, a deep respect for intellectual values, the building of community as a Christian value, a social awareness that impels to action, and personal growth in an atmosphere of wise freedom.

Each of these goals is pertinent to Sancta Sophia's community service programme. Firstly, as part of the school's meta-curriculum, the programme is intended to have a positive and germane influence on students' faith. Secondly, in the tradition of St Anselm's maxim *'faith seeking understanding'*, students' experiences within the programme are reflected upon in the light of the Gospel with the intention of coming to a deeper understanding of the way such service is an extension of Jesus' own ministry. Thirdly, students' participation in the programme brings them into relationship with others, particularly others in need. Through reflection on these relationships, students can be led to appreciate the reciprocity intrinsic to the nature of Christian community. Fourthly, a long term aim of the programme is that students might become people who deliberately integrate into their lives the Christian social principle to see, judge and act. Finally, the programme intends to complement other avenues of personal growth so that students might develop to be individuals with a positive sense of self-regard who make decisions in an informed and reflective manner.

In the spirit of these educational goals it is appropriate that this research project seeks to examine students' community service experiences from several of these

perspectives; personal growth (goal 5), community engagement (goal 4) and personal faith (goal 1).

1.9 Conclusion

To this end, selected instruments have been used to measure students' self-esteem, community engagement and attitude to Christianity. To aid external validity and provide a statistically significant data pool, data has also been gathered from students participating in service outreach programmes at several other Catholic secondary schools.

2 Review of Literature

2.1 Overview

This chapter contextualises the current study within the body of research on the topics of community service, service learning, volunteerism and young people.

The notion of 'service learning' is explored. Its emphasis on linking academic learning with real life experiences in contexts beyond the classroom is of particular interest to Catholic educators who seek to lead students to a hands-on experience of the Christian teaching regarding 'service'.

As this study examines the impact of community service experiences on students' self-esteem, sense of community engagement and attitude to Christian, research literature on each of these areas is reviewed separately.

Catholic schools and Catholic educators have an additional mandate to facilitate the development of students' personal religious faith. After touching on some of the inherent difficulties associated with research in the area of personal religious faith, this chapter goes on to look at what the literature says about the place of the Catholic school in forming citizens who embody Gospel values.

Literature on the correlation between religious commitment and citizenship is explored before the chapter concludes with a brief discussion of the importance of 'student voice' in community service programmes.

2.2   The Nature of Service Learning

Much of the literature in this field uses the term 'service learning' to refer to students engaging in service activities in the wider community. However, though variously defined, what distinguishes 'service learning' from volunteer work that may be recognised or arranged through schools, is service learning's deliberate strategy to embed within the curriculum service experiences which meet real community needs (Johnson & Notah, 1999; Kielsmeier, Scales, Roehlkepartain, & Neal, 2004; Learning in Deed Organization, 2001; National Commission on Service Learning, 2002; Stewart, 2002). The curriculum connection may be such that ideas and skills generated in the classroom are applied in community settings and so bring benefits to the students as well as those served. Also, deliberately reflecting on service experiences to generate new knowledge and understandings for students is another key way 'service learning' is embedded in the curriculum (Johnson & Notah, 1999; Learning in Deed Organization, 2002; National Commission on Service Learning, 2002).

The range of service activities generally fall into three main categories; direct service; indirect support, and advocacy activities (Johnson & Notah, 1999). In direct-service activities, participants are involved directly with those who benefit from their service; for example working on a street van serving an inner-city homeless community or visiting with residents of an aged persons' facility. Indirect support activities are such that participants are working to provide funds or goods to other people or organisations that provide the face to face support; collecting donations door-to-door for the Salvation Army or running a can-drive to stock the pantry of the local St Vincent De Paul Centre are both examples of this type of

support. Advocacy activities include neither first hand provision of a service to another, nor supporting the efforts of others who provide the service. Rather, advocacy activities entail awareness raising of an issue or a need and motivating individuals or groups to action. Involvement in the work of Amnesty International and researching and facilitating a community forum on adolescent mental health issues are examples of advocacy activities.

According to Stewart (2002), the rise of service learning in schools has been in response to the observation that students have increasingly experienced a disconnection between classroom learning, their personal lives and broader community issues. This has principally come about as a consequence of the emergence of individualism as a dominate force in western culture. Service-learning's foundations are found in John Dewey's educational theory that students learn best when they are able to actively make cognitive connections between ideas and their real life experiences (Billig, 2000b; Stewart, 2002). Further, Dewey proposed that discovering these relationships between ideas and experience captures students' interest and passion, comprehensively engaging their intellectual and emotional capacities (Stewart, 2002).

In the Unites States of America, service-learning initiatives have been strongly supported by public and private organisations. Researchers (Johnson & Notah, 1999; National Commission on Service Learning, 2002) recognise the US Federal Government's *National and Community Service Act of 1990* as a watershed initiative that saw the commencement of a funding stream to support research and practical initiates in the service-learning. One third of all US public schools and over one half of US public high schools incorporate service-learning programmes into their

curriculum (Billig, n.d.). Research has confirmed that service learning has a wide range of positive effects for individual students' academic outcomes, personal development and civic responsibility. Schools and the communities they serve are also positively enhanced through service-learning initiatives (National Commission on Service Learning, 2002).

2.3 Community service and self esteem

The desirability of developing a positive sense of self in young people, often referred to as self-esteem or positive self concept, has long been recognised by educators and other professionals with responsibility for assisting them (Miller & Neese, 1997). The traditional understanding of self-esteem recognised four main factors in its development: an individual's perception of the value others appear to have towards them; their experiences of success; their concept of success and failure; and their manner of dealing with negativity from others. Also significant to the development of highly positive self-esteem is well structured environments containing limits and demands and the effect of appropriate modelling by parents and other care-givers (Miller & Neese, 1997).

More recent research suggests self esteem can act as a type of 'social barometer' which measures the degree to which an individual perceives he or she experiences inclusion (Miller & Neese, 1997). Responding to this 'social barometer', individuals will strive to act in such a way that their inclusionary status is enhanced.

The *Learning in Deed* organisation, funded by the US Government and private sectors to support the development of Service-learning programmes in US schools, hosts extensive web resources to assist educators and researchers. A review of recent

research, conducted by *Learning In Deed* (2001) cited several studies that identify the connection between students' personal development in terms of confidence, self esteem and personal efficacy, and their involvement in service-learning programmes. Billig (2000b) cites a whole raft of research that identifies the connection between young people's involvement in service-learning activities and increasing levels of their sense of self esteem. Billig (2000a) makes particular mention of a 1993 study conducted by Shaffer which establishes the connection made between engagement in service-learning and increased sense of self-efficacy and self-esteem.

Similarly, Johnson and Notah (1999) conducted a meta-analysis of research on community service and service-learning published in the 1980s and 1990s.. The enhancement of self-esteem as a result of young people's involvement in community service featured strongly.

A similar finding has emerged from the *Growing to Greatness; the State of Service Learning Project* (Kielsmeier et al., 2004). The researchers surveyed principals of 1800 US public schools in early 2004. Of schools in which service-learning programmes are established (30% of surveyed schools), 91% of respondents reported they were very positive (58%) or somewhat positive (33%) regarding its impact on students' personal and social development.

Utilising the 1967 Coopersmith Self-Esteem scale, Wang, Greathouse, and Falcinella (1998) examined several different community service projects conducted by school students. Analysis of data indicated that the most significant results vis-à-vis self-esteem enhancement were associated with older students engaged in longer community service projects. The more successful projects enjoyed high levels of

community support, enhancing students' connectedness with their communities. The authors asserted this would aid students long-term transition to the workforce (Wang et al., 1998).

Likewise, Aspras' (1997) qualitative evaluation of a community service project incorporating cross-age interactions, in this case high school students variously working collaboratively with primary school students and senior citizens, noted a near universal increase in students' self-esteem. Testing at the commencement of the 91/92 academic year identified that 87% of students had low self-esteem. Consequently the *'Cross-Age Teaching + Community Service = Enhanced Self-Esteem'* programme was developed. In addition to raising self-esteem and confidence, one of its key goals was to facilitate the growth of participants' sense of responsibility towards others. At the conclusion of the programme, students reported an enhanced sense of self-worth, increased sense of connectedness both amongst peers and with the groups with whom they had worked, and a new openness to be involved in and undertake responsibility for other projects in their community (Aspras, 1997).

In summary, school facilitated service outreach programmes facilitate the promotion of student self-esteem because they assist students to recognise themselves as caring and responsible members of their communities, with enhanced social skills enabling them to cooperate with peers and adults in making a worthwhile contribution to a task that is independent of their own self-interest (Miller & Neese, 1997).

2.4   Community service and community engagement

Fostering the development of responsible and engaged citizens is a primary objective of education. Paradoxically, it seems that the increase in opportunities to become politically informed and socially engaged in political processes has been accompanied by declining level of such engagement by high school students (Campbell, 2000). Campbell suggests that involvement in community affairs by young people has increasingly become an extra-curricular niche activity of specialised clubs and groups, such as Amnesty International, Greenpeace, St Vincent de Paul student Conferences, and Young Christian Students. These clubs must compete with sports, music and drama groups for students' time and energy. Nevertheless, Campbell (2000) presents longitudinal evidence that affirms the relationship between young people's community service and their civic engagement and political activity, both when young and later as adults.

The development of social capital is a demonstrable outcome of community service or service learning programmes. Service learning creates openings for young people to actively and positively contribute to their communities, while developing their appreciation of civic and social responsibilities (Billig, n.d.). The *Learning in Deed* Organisation (2001) cite several cases of recent research examining service learning and civic engagement. Morgan and Streb's study (cited in Learning in Deed Organization, 2001) indicates that the degree of student involvement, planning and decision making about challenging service tasks was correlated with positive civic engagement outcomes. Youniss and Yates (1999) conducted an investigation involving high school students year long participation in a social justice programme requiring them to work in an inner-city soup kitchen. They triangulated qualitative

research highlighted students' engagement with the social issues they encountered. Through the experience, students were led to ponder apparent complexities, contradictions and causes, as well as deliberate about their own capacities to bring about change through political processes. This development of social consciousness is a key outcome of student participation in community service.

In their overview of research literature published in the 1980s and 1990s, Johnson and Notah (1999) presented findings from Hamilton and Fenzel's 1988 study which found that girls demonstrated more growth in social responsibility than did boys as a result of community service involvement. Moreover the gains in social responsibility were more evident when young people engaged in projects involving them directly in their community (Johnson & Notah, 1999).

Finally, in discussing the need to underpin the willingness to volunteer with the significant community infrastructure required to support this, Eisner (2005) highlighted the fact that volunteerism is indicative of wider civic engagement on the part of the individual. In fact he proposes that supporting volunteerism is an ideal starting place for facilitating a wide range of other expressions of active citizenship.

2.5 Community service and religious faith

2.5.1 Faith and research

Religious faith and its development present researchers with a problem. Faith and its development are different to other facets of the human person, such as physical, intellectual and emotional development. From a Christian perspective, faith is understood as gift; it cannot be contrived or constructed. If indeed faith is gift, the

identification of causal relationships in faith development must be problematic. At the risk of being accused of trivial semantics, research in the area of faith and its development could be more correctly described as investigating conditions in which the gift of faith might most readily be accepted and integrated in the lives of individuals. As an internal disposition, it is problematic to measure religious faith. However, it is possible to measure attitudes to religious propositions and practice.

2.5.2 The notion of 'service' and the Catholic School Curriculum

Many commentators on Catholic schools (McCann, 1998; McLaughlin, 2000; Treston, 1997) have noted a recurring theme in Church documents regarding Catholic schooling; that is, the insistence that Catholic schools contribute to the formation of responsible citizens who are committed to the promotion of peace and justice. The reciprocity of personal faith and justice issues is one way to view a key component of this current study. While faith ought underpin a commitment to justice, to what extent will the influence of first hand experiences of justice efforts contribute positively to the development of personal faith?

The ethos of contemporary Catholic schools stands over and against the prevailing public sector discourse regarding education from an economic rationalist, utilitarian, and free-market perspective (Rizvi, 1995). Catholic schooling offers a competing discourse in its commitment to a partnership with parents, church and society to facilitate a multifaceted education of the whole person; "physical, intellectual, social, emotional, aesthetic, vocational, moral and religious" (Flynn, 1985, p. 15). Religious development of the individual is not a 'bolt-on', but an integral and constitutive element. Flynn describes it as not being the icing on the cake, but rather the yeast

that gives rise to the growth of the fully human person. This view is derived from an incarnational understanding of reality; that the transcendent or spiritual is not distinct from the secular, but rather that immediate human experience is imbued with the sacred.

2.5.3 Development of students' religious faith

Within the Australian context, Marcellin Flynn's name is synonymous with in-depth study of the history, form and effectiveness of Catholic education and schooling. In his examination of the effectiveness of Catholic schools over an eighteen year period, Flynn (1985; 1993) identified key influences in the religious development of students. In data gathered in 1982 and again in 1992, the example of parents and the 'student retreat' experience were clearly most influential. While the value of example within the family context, in a sense 'practical' Christianity, was reaffirmed, organised opportunities for religious experience like the retreat were a phenomenon not in wide practice when, in 1972, Flynn first gathered data for his study. In a similar vein, the utilisation of the community service experience as a tool to promote the religious and moral growth of individuals is a relatively recent development.

Of interest to this current study is Flynn's (1993) observation that 80% of respondents were concerned about homelessness and 45% were positively disposed to being part of a group that helps others. Fahy's (1992) research also explores students' attitudes to social justice *per se*, as well as to particular social justice issues. He also identifies school and classroom environment as key factors underpinning students' sense of the importance of social justice. However there is no indication of the effect of social justice experience on students' religious or spiritual development.

Sullivan (2000) identifies the ecumenical imperative and preferential option of the poor as being particular ways Catholic schools can be schools of the Gospel. Such a perspective, he asserts, opens individuals to be converted by the poor and to discover truth from those that do not share the same religious traditions. Openness to conversion by the poor is at the heart of some voluntary community service experiences. This is especially so when experiential educative programmes heed the Gospel mandate so that 'the needs of the poor take priority over the wants of the rich; the freedom of the weak takes priority over the liberty of the powerful; the participation of the marginalised groups takes priority over the preservation of an order which excludes them' (Michael Campbell-Johnson sj, cited in Sullivan, 2000, p. 114).

Campbell (2000) suggests that Catholic Schools are exemplars of effective social service. This is due, not directly to its religious orientation, but to the fact that such schools operate in the context of a wider functional community. Campbell (2000) cites Coleman's research which found that schools within communities with high levels of cross-generational interaction supported student academic achievement, and social reciprocity and engagement.

Catholic Schools are called to be the type of authoritative community, identified in a recent YMCA report *Hardwired to connect: The new scientific case for Authoritative Communities,* which nurtures children and young people in a safe and secure environment (Boisture, 2003). Principally they assist young people to connect in an increasingly isolating environment. The YMCA report (Boisture, 2003) concluded that emerging brain research supported the proposition that human beings are 'hard-wired' for relationships. The *Commission on Children at Risk*, who authorised the

report, emphasised the need for authoritative communities, like schools, to be "groups of people who are committed to one another over time and who model and pass on at least part of what it means to be a good person and live a good life" (Boisture, 2003, p. 6).

2.5.4   Dialectic of experience and faith

While this study intends to measure the effect of social justice experiences on students' attitude to religion and faith, it is not an objective to isolate the factors that promote a sense of social justice among students. It is a reasonable hypothesis that personal involvement in justice orientated community service programmes would positively promote the development of personal faith. Particularly so in the sense that faith would become far more than an intellectual construct, but rather grounded in personal experience and integrated within an individual's world view and moral schema.

However some of the literature presents a counter-intuitive position. Firstly from an educational context: Seeking to prove their hypothesis that hands-on, experiential learning by Political Science students has the outcome of increasing their sense of citizenship, Jones and Meinhold (1999) constructed a quasi-experimental investigation involving students conducting telephone public opinion polls in their local community. Contrary to their expectation, the researchers discovered that students' hands-on experience actually led to an increased disaffection towards their local community.

Secondly, from a religious context, there is some evidence to suggest personal involvement in community service programmes is neutral with respect to faith development. Researching the religious experience of 200 Year 12 students in Brisbane Catholic schools, McQuillan (2002) found that although 76% of respondents reported a personal religious/transcendent experience, involvement in social responsibility programmes made no significant difference to the level of reporting.

Taking a different perspective, Eccles and Barber (1999) investigated the risks and benefits associated with school-aged youth's participation in various activities. They found that young people involved in church groups, community service or volunteer groups enjoyed higher rates of academic achievement and lower rates of involvement in risk-taking behaviours. Similarly, Youniss, McLellan, Su and Yates (1999) found that, irrespective of demographic factors, young people's involvement in community service activities was a predictor for political involvement, religious practice and the avoidance of substance use.

2.5.5 Religiosity and Civic Engagement

The relationship between community service and religious faith is a two way street. While some may look to community service as a means to promote the development of religious faith, there is much evidence to support the notion that religious faith leads to higher levels of community engagement and volunteerism. While the Australian Bureau of Statistics note that those who claim to have no religion are just as likely to volunteer as those who acknowledge some religious affiliation (excluding

volunteering within religious organisations) (Australian Bureau of Statistics, 2001), international research presents a different scenario when it comes to young people.

Reboot, a New York based Jewish organisation committed to the reinvigoration of their rich religious heritage in the lives of young Jews, commissioned a study of religious practice and values amongst young Americans. The report, entitled *OMG! How generation Y is redefining faith in the iPod era* (Greenberg, 2005), made the point that young people who identify themselves as religious are more likely than their non-religious counterparts to volunteer and, furthermore, are more likely to volunteer regularly.

This finding is consistent with Smith and Faris' (2002a) earlier analysis of data emanating from the 1996 *Monitoring the Future* survey, a nationally representative survey of US high school students. They found that 12th graders who attend religious services weekly are more than twice as likely as those who never attend a religious service to be engaged in volunteer work on a weekly basis or better. Likewise, they found that Year 12 students who considered religion as very important were almost twice as likely as those who considered religion of no importance to engage in volunteerism (Smith & Faris, 2002a). A similar relationship was identified between religious attitude and practice, and positive self-attitudes (Smith & Faris, 2002b).

2.6   Community Service – Voluntary or compulsory?

Mandatory or voluntary participation in community service programmes is a key variable in the design of such projects. Many schools, such as Sancta Sophia, mandate student participation in community service programmes while at the same time encouraging students to be involved further on a voluntary basis. At Sancta

Sophia students are given some direction about the types of service suitable for the programme's purposes; however it is the responsibility of each student to arrange their own placement. Student accountability is in the form of a reflective-style oral report presented to peers and teacher in a classroom setting.

It is the practice of some other schools, however, to offer students very limited choice as to the nature of the community service involvement. Research suggests that the greater degree of student voice or initiative, the higher the probability of enhanced community engagement, more positive academic outcomes, as well as strengthened respect for those different from themselves (Billig, n.d.; Morgan & Streb, 2001, n.d.; Scales, Blyth, Berkas, & Kielsmeier, 2000).

The peak Australian representative organisation for volunteers, *Volunteering Australia*, propose 11 key principals of volunteering (2004). They insist that volunteering is always a matter of choice and ought not to be compulsorily undertaken. As noted in the introduction, critiques of a proposal to introduce compulsory community service for high school students, while lauding such work by young people, are cautious about the negativity that can be generated by compelling young people (Pearlman, 2006). Such negativity, as well as contributing to some young people's alienation and disengagement from their community, could also be counterproductive for the organisations receiving the service from these individuals.

3 Research Design and Methodology

3.1 Overview

This chapter outlines the conceptual design of the research project, including the sample selection, the genesis of the research instrument, and the proposed data analysis procedures.

Section 3.2 presents a general discussion of the importance of methodology in Education research and a brief presentation of the distinctions between the quantitative and qualitative approaches. This is followed by a more detailed examination of the quantitative paradigm, with a particular emphasis on its potential strengths and weaknesses.

The research design of this study is presented in Section 3.3. The project does not attempt to introduce an innovative 'treatment' or alter the conditions of community service in any way. What it does intend to do is to examine the effects of community service 'after the event' and make comparisons between particular subsets of the sample group. This section also presents some of the key characteristics of the sample group and a broad overview of the research timeline.

The research instrument utilised in this study is a compilation of three pre-existing instruments, each of which provide data on one of the three student domains under examination. Section 3.3.3 looks at each of these instruments in turn, before presenting the combined instrument, the *Community Service Questionnaire* (CSQ).

Section 3.4 previews the data analysis procedures adopted in this project. An initial concern is the validation of the research instrument by factor analysis. It is then necessary to confirm the internal integrity of the 12 inherent scales. Pearson's *r* correlation of coefficients and MANOVA are utilised to identify significant relationships within the data.

Finally, section 3.5 presents a discussion of validity issues pertinent to this study. Of particular concern is the question of the practical restrictions on the sampling technique necessitated by a study of this nature. Because the participants of this study had undertaken community service at various times across the year, 'history' factors are also of material interest in terms of validity.

3.2 Research Methodology in Education

Research in the field of Education is directed at understanding and developing education praxis. Quantitative method has traditionally been a key approach to education research. However, since the 1980s the qualitative paradigm has risen in prominence and has enjoyed the favour of many researches in this field (Gorard, Rushforth, & Taylor, 2004; Hsu, 2005). While each paradigm approaches the research task from its own perspective, the objective viewpoint of the researcher in the quantitative approach, and the subjective viewpoint of the research subject in the qualitative approach, both paradigms offer researchers particular advantages in pursuing individual research projects.

Qualitative research adopts an inductive approach, developing constructs and theories which emerge from the combined analysis of subject-centred idiographic observations. Quantitative research, utilising deductive scientific empirical

methodology, proposes nomothetic constructs and theories, and tests or proves them in specific and particular research studies (Burns, 2000). These approaches are neither exhaustive nor mutually exclusive. As discussed by Howe (1985), and evidenced in the published research literature (Gorard et al., 2004; Hsu, 2005; Neuman, 2000), quantitative and qualitative methodologies can be usefully and validly combined in educational research studies.

This design of this study utilises the empirical quantitative approach. In a larger study or a follow-up study, it would be worthwhile to adopt some qualitative research strategies to further explore the findings of this study, particularly as they relate to the experiences of individuals or groups of individuals.

3.2.1   The Quantitative Paradigm

The **quantitative research paradigm** is an expression of the classic scientific research approach which observes and measures a phenomenon, describing and analysing what is observed, and generalising these particular observations so as to substantiate or refute theories or hypotheses. Confirmation of a theory is based on the premise that particular results will be evident when the research test or treatment is repeated. Replicability is a prime touchstone of validity in quantitative research. Quantitative research is *positivistic* in the sense that it aims to scientifically identify and prove causal relationships between variables so as to reliably (positively) predict outcomes (e.g. if the value of one variable changes in a particular way, the change in the value of the other variable can be reliably deduced) (Neuman, 2000).

Quantitative research can involve generation of data (*experimental research*), data collection (*survey research*), examination of content (*content analysis*) or the review existing data and meta-analysis of research findings (*existing statistics research*) (Neuman, 2000). In any case, quantitative educational research aims at the generation of knowledge through the implementation of proven scientific processes.

3.2.1.1 Strengths of the quantitative paradigm

Given that this study adopts the quantitative approach by analysing data collected through a survey instrument in order to test the stated hypothesis, it is apposite to discuss the paradigm's potential strengths and weaknesses. The strengths of the quantitative paradigm are considered below, while discussion of potential weaknesses follows in Section 3.2.1.2.

Exactitude: The scientific empirical inquiry tradition, in which educational research's quantitative paradigm stands, offers researchers a high degree of precision and rigour in terms of both processes and outcomes, or methods and results.

Linear process: The strength of the quantitative approach is partly attributable to its unambiguous linear sequence. Researchers have a clear appreciation of the logical linear steps a project will involve: Definition of research problem; Hypothesis formulation; Study design; Sample and Instrument selection; Data gathering; Statistical analysis of data; Deduction of conclusions; Reporting and discussion of results (Burns, 2000).

Project selection: The precision of research is in part attributable to the manner in which research projects are initially selected. The overall relevance of quantitative

research outcomes is very much dependent on where the researcher starts, and on how the project is grounded. By way of analogy, a person wishing to phone a friend whose telephone number is unknown is not likely to randomly dial numbers on their handset hoping they would make the desired contact. It is more probable that they would first consult an authoritative source such as the white pages. Even if all the relevant details of their friend were not known, they would narrow down their focus, thus increasing the likelihood of making a valid/successful call, by searching by surname, initials, suburb and street name. Similarly, selection of scholarly research projects is not random and arbitrary, but is grounded in the research experience and outcomes of others. From within the context of the work of respected others in the field, the researcher develops a hypothesis which is then explored and tested by the research project. This is the case even for ground breaking exploratory research (Neuman, 2000). Credible research is not undertaken arbitrarily. It is not atheoretical or crudely empiricist (Neuman, 2000), but is based on theory developed by the researcher or others.

Micro analysis: One of the hallmarks of quantitative research's scientific empirical basis is its capacity to observe, identify and isolate variables. This is essential in pursuit of the goal of determining the kind and degree of effect of a variable or combination of variables on the participants of the study. Adopting 'laboratory type' control of variables enables the researcher to 'drill down' to the micro-level to test proposed hypotheses. Central to the effectiveness of this procedure is the ability to isolate and control extraneous variables. This ensures that the research instrument is measuring what it is intended to measure, minimising other influences.

For instance, if a researcher is seeking to determine the relative effectiveness over twelve months of two competing reading programmes for lower primary school, it is essential that the researcher can demonstrate that there is acceptably low probability that test results for reading skills are being influenced by variables other than the competing treatments themselves. *Research design* choices impact upon overall *internal validity* of the study. In this case, in recognition that schools exist for education of students not for the conduct of research, and appreciating that teaching and learning programmes are normally implemented at a whole class level, it is likely a researcher would randomly sample cluster groups of participants (i.e. entire class groups) to participate in the study. Three groupings of randomly assigned participants would be apposite; two groupings to undergo the treatments in question, and a third, perhaps smaller, control group to detect any nil effect of the treatments as well as to ascertain if a natural maturation effect (which could compromise internal validity) has been in play over the school year (Neuman, 2000).

The researcher would want to ensure that other variables, such as the time of the day the reading programme is taught, is consistent across all participant groups in the experiment. *Pre-test* and *post-test* data on factors such as word recognition and comprehension can be used to evaluate the efficacy of the various treatments. Internal validity demands that the tests used do indeed accurately measure these factors. When the research experiment has been conducted and interpreted in an appropriate manner, the researcher can claim that the results indicate the degree of effect, if any, that each reading programme has on the reading skills of students.

Quantitative research has the ability to create knowledge at progressively deeper levels of specificity. In the case of the primary school reading program, this can be

illustrated by the possibility of conducting research on underlying variables extrinsic to the treatments themselves; for example, on the relative effect of various time scheduling for the teaching of the programs, or again, the ambient temperature in the classroom, or the amount of classroom floor-space per student.

Understanding or analysing the effect of variables can elicit knowledge about aspects of the efficacy of teaching and learning. Such analysis is generally reliable (thus promoting precision) if it follows scientific processes accepted by the research community (Bodisch-Lynch, 1983).

3.2.1.2   Weaknesses of the Quantitative Paradigm

Having reviewed the strengths of the quantitative approach in research, it is appropriate to consider potential weaknesses.

Researcher subjectivity: Notwithstanding the positivistic scientific paradigm's quest for objectivity, even the most conscientious researcher cannot help but to be subjective.   The researcher's choices about topic and method must, by their very nature, be subjective.   Absolute objectivity is unobtainable.   From a *critical* perspective, bias also exists in what the researcher takes for granted; the unquestioned status quo that forms the research's contextual back-drop.   Constas (1998) raises this issue in his appraisal of educational researchers who uncritically make presumptions about power relationships in education.

Generalisability: To be applicable in contexts other than the research project itself, the hypothesis or treatment must be generalisable; it must have *external validity*. A key question is whether the results of the research/treatment can be replicated in a

non-research setting, that is in the everyday world rather than a controlled, research-style experimental setting. If the achieved results are highly dependent on the level of control exerted by the researcher, and demand similar control to be repeated elsewhere, then it can be said that there is a low degree of external validity. Low external validity renders the treatment/hypothesis impractical and of little pragmatic worth (Neuman, 2000).

The paradox is that the very strategies utilised by researchers to promote internal validity (control of extraneous variables) can decrease the research's external validity. An ideal objective of education research is to ensure the hypothesis is tested while maintaining conditions that are as realistic as possible, thus having regard for both internal and external validity. The internal content of the experimental treatment ought to be relevant to real world conditions.

To illustrate this point, Neuman (2000), postulates that a researcher studying 'cognitive learning' could limit the effect *mundane realism* has on external validity by requiring participants to memorise factual information rather than four letter nonsensical syllables. Researchers need to be cognisant of the impact on external validity of other possible contingencies such as the Hawthorne effect, novelty effect and placebo effect. The applicability from 'the particular' to 'the general', from research to real life, is essential for a high degree of external validity.

Decontextualisation: While generalisability addresses replicability in 'real life' contexts and influences external validity, there is a further 'context' issue that needs consideration. It is this meta-context that is more readily addressed by a critical analytical approach to education embodied by critical social research (Neuman,

2000). The potential weakness of quantitative research's positivistic approach is that the 'forest might be missed because of all the trees'. The theories and variables that quantitative research focuses on do not exist in a vacuum, they are embedded in a broader socio-political reality. It is this broader reality that can be overlooked in quantitative research. As argued by Howe (1985), one of the criteria of the legitimacy of any social research is its social utility.

For example, a quantitative research project might validly be investigating the relative influence of various classroom colour schemes on students' attitudes to learning. However, it could be argued that such an investigation is meaningless if overall educational outcomes are not enhancing students' equitable access to society's institutions and resources. While, the influence of colour scheme on educational outcomes could be logically and precisely determined by quantitative processes, it might beg the question of what purpose education should best serve.

While quantitative research addresses the *what* and *how* of education, education's *content* and *process* (*curriculum* and *pedagogy*), it may fall short in its address of the *why* of education, the philosophical underpinnings of education's role in a post-modern society.

Passive role of participants: One of the drawbacks of the quantitative approach is the passive nature of the role played by research participants. The research project is, in the main, controlled by the researcher. The researcher sets the constraints of the project through design and methodology parameters. Participants are passive participants.

As an analogy, one could consider the respective roles of Barristers and Witnesses in a courtroom setting. Barristers are careful to be precise in their examination of witnesses. They hone in on the evidence considered to be most beneficial to their case. Witnesses are permitted only to answer questions put to them directly in the courtroom setting. Consequently, other information, or differing perspectives that witnesses may have, will not be aired unless asked for by Counsel. Potentially relevant and crucial evidence and information may be overlooked – even deliberately so.

So too is it with researcher directed methodologies such as quantitative inquiry. For example, consider a research project focussing on the correlation between student academic attitude and student initiative. The researcher may construct an inventory designed to measure participants' academic application as related to the promotion of student initiative through participation in a student representative council [SRC] structure. While the items in the Likert scale inventory load onto factors of *student initiative* and *attitude to academic activity* (considered relevant by the researcher), other data which research participants consider pertinent is not canvassed; for example, school faculty's level of support for the SRC, and the degree of difficulty in effectively involving the entire student cohort in the SRC structure. If given the opportunity to do so, students and staff would offer input on issues not specifically the focus of the research project but which nonetheless affect its outcomes. In this example outcomes are measured, but further correlated issues are not taken into account. Such a breadth of inquiry could be better supported by the co-utilisation of qualitative research processes which allow for a greater degree of flexibility (Wiersma, 1995), including direction and input by research participants.

3.3 Research design of this study

As discussed above, notwithstanding the caveats, quantitative educational research scientifically generates knowledge which assists in identifying and analysing what is taking place in the educational enterprise and lays the foundation for innovation and improvement in education praxis.

As previously indicated, the key focus of this research is to examine the relationship between students' community service outreach experience and their sense of self-esteem, engagement with community and attitude to Christianity. The intention of the research instrument is to measure through its items the strength of student responses in light of their previous experience (or non-experience) of service outreach. As the independent variables have not been manipulated in this research, but rather examined in retrospect, the research is *ex post factor* in nature.

This study adopts a 'between groups research design'. As distinct from a 'repeated measures design' in which the same sample group is used for each treatment condition when measuring the effect on dependant variables, the 'between groups design' utilises distinct and separate sample groups representative of the independent variables in the measurement of effect on dependant variables. The research examines the *effect* of service outreach in a variety of domains, namely self-esteem, engagement with community and attitude to Christianity. These domains are represented by 12 distinct scales incorporated in the research instrument. The study seeks to draw conclusions by examining the difference between groups as distinguished by a number of independent variables, including participation/non-

participation in community service, type of community service, duration of service activities, prior community service and gender.

3.3.1   Research Sample

The sample size for this study is $n = 225$. The participants were not randomly selected, but rather volunteered their participation in the study. The selection technique is best described as convenience sampling. A large number of schools (>30) throughout Queensland were canvassed seeking their participation in this research. Access to schools for the purpose of data collection required the permission of the school's Principal. In the case of a school being affiliated with a system, for example the local Diocesan Education Office, approval of the systemic Education Office was a further pre-requirement. In most cases, once schools gave their in-principle approval to participate, the cooperation of middle-managers and individual class teachers was critical to the process of overseeing the collection and collation of informed consent from participants and their parents/guardians before administering the research instrument. In the end, five schools agreed to assist in the collection of data. All of these schools were from the Brisbane metropolitan area, had single sex enrolment and offered community service outreach activities as part of their co-curricular programmes.

Table 3.1 displays some characteristics of the sample. Students in Years 10-12 (generally 15 to 17 years of age) from these schools were invited to participate in the research. Of the 225 students who provided informed consent and completed the research instrument, 11% were drawn from Year 10, 58% from Year 11 and 30% from Year 12. A small number of respondents did not supply their School Year level

data. The representation of males and females in the sample was approximately even. In total, 52% of participants were male and 48% female.

Among the sample were a number of students (22%) who had not participated at all in their school's community service programme. The inclusion of this group in the sample enables comparison between 'participants' and 'non-participants'. Individuals were not assigned to either the participant or non-participant group, but self-assigned by virtue of personal choice and opportunity or lack of opportunity to participate in their school's community service programme. In addition, 17% of participants reported prior involvement in community service activities independent from those facilitated by their school. Comparison of the data of this group with the data of those who participated only in school community service programmes might yield some insight into the effects of more extensive and varied community service experiences.

TABLE 3.1
CHARACTERISTICS OF THE SAMPLE

Category	n =	%
Gender		
Male	116	51.56%
Female	109	48.44%
Total	225	100.00%
School year level		
No data	3	1.33%
Year 10	24	10.67%
Year 11	130	57.78%
Year 12	68	30.22%
Community service participant		
Yes	176	78.22%
No	49	21.78%
Prior community service experience		
No data	14	6.22%
Yes	38	16.89%
No	173	76.89%

3.3.2   Research Timeline

Following approval from ACU's *Human Research Ethics Committee* in August 2004 allowing this research to proceed, prospective participant schools were approached to be involved in the data collection phase.   The only feasible time for data to be collected during that school year was in Term 4.   The advantage is that most community service projects were well advanced or already completed.   The disadvantage was that Term 4 is shorter, especially for senior students, and has the addition pressure of focus on final assessment.   However, data from all participants was collected during the same time period of the year: October – November 2004.

3.3.3   Research Instrument

The research instrument, the Community Service Questionnaire (CSQ), is an amalgam of three pre-existing and validated instruments; The State Self-Esteem Scale (SSES), The Civic Responsibility Survey (CRS), and the Attitude to Christianity Inventory (ACI).   The following sections discuss the three instruments incorporated to form the CSQ.

3.3.3.1   Measuring Self -Esteem

As indicated in the review of literature, research has shown that community service leads to participants' enhanced sense of self-esteem. This research utilised the *State Self-Esteem Scale* (*SSES*) developed by Heatherton and Polivy (1991). *SSES* is a modification of the 1958 Janis/Field *Feelings of Inadequacy Scale*. Heatherton and Polivy's modifications are such that data sought from participants effectively distinguishes 'mood' from 'feelings about self'. The *SSES* consists of 20 items loading onto three factors; 'perception of personal performance', 'perception of how I

am perceived by others' and 'perception of personal appearance', though they did not report any internal reliability scores for the three factors. However they did state, despite acknowledging the three inherent scales, that the instrument had a high overall internal validity, citing a coefficient alpha of 0.92 across the entire scale and consistent for both genders. Table 3.2 presents the CSQ items drawn from the SSES instrument, arranged according to SSES sub-scales.

TABLE 3.2
CSQ ITEMS DRAWN FROM THE SSES INSTRUMENT (SORTED ACCORDING TO SCALES)

CSQ Item #	SSES Item
Perception of personal appearance (α = not reported)	
12	I feel that others respect and admire me.
22	I feel good about myself.
38	I am dissatisfied with my weight. ^
44	I am pleased with my appearance right now.
49	I feel unattractive. ^
51	I feel satisfied with the way my body looks right now.
Perception of personal performance (α = not reported)	
11	I feel confident about my abilities.
29	I feel that I have less scholastic ability right now than others. ^
** 32	I feel like I am not doing well. ^
52	I feel frustrated or rattled about my performance. ^
53	I feel that I am having trouble understanding things I read. ^
57	I feel as smart as others.
61	I feel confident that I understand things.
Perception of how I am perceived by others (α = not reported)	
3	I am worried about whether I am regarded as a success or failure. ^
6	I feel inferior to others at this moment. ^
9	I am worried about what other people think of me. ^
13	I am worried about looking foolish. ^
40	I feel concerned about the impression I am making. ^
43	I feel self-conscious. ^
62	I feel displeased with myself. ^

** item 32 deleted after Factor Analysis
^ items reversed scored

3.3.3.2   Measuring Engagement with Community

The research hypothesis proposes that students who are significantly involved in community service have strong attachments to the communities to which they

belong. The hypothesis presupposes the greater the involvement in terms of service, the more significant the attachment. Magnitude of involvement could be expressed in terms of time devoted to the task, as well as in terms of the personal significance of such involvement; e.g. collecting for a charity as compared with helping at a holiday camp for children with profound disabilities.

The *Civic Responsibility Survey (CRS)* (1998) was developed Furco, Muller and Ammon of the Service Learning Research and Development Centre, University of California, Berkley. The *CRS* consists of 24 items which load onto three constructs; Connection to community, civic awareness, and civic efficacy. The reliability of each factor was reported as 0.63, 0.88 and 0.85 for connection, awareness and efficacy respectively. Curiously, though claiming three underlying constructs, the developers of the *CRS* report an overall reliability (all 24 items) of 0.93 on a sample size of 532. Table 3.3 presents the CSQ items drawn from the CRS instrument, arranged according to CRS sub-scales.

TABLE 3.3
CSQ ITEMS DRAWN FROM THE CRS INSTRUMENT (SORTED ACCORDING TO SCALES)

CSQ Item #	CRS Item

Connection to Community ($\alpha = 0.63$)

1	I benefit emotionally from contributing to the community, even if it is hard and challenging work.
20	I feel a personal obligation to contribute in some way to the community.
47	I have a strong and personal attachment to a particular community.
70	I have a lot of personal contact with people in the community.

Civic Awareness ($\alpha = 0.88$)

5	Becoming involved in community or social issues is a good way to improve the community.
16	I often discuss and think about how political, social, local, national or international issues affect the community.
19	I am aware of what can be done to meet the important needs in the community.
27	Being concerned about State and local issues is an important responsibility for everybody.
30	I am aware of the important needs in the community.
39	I understand how political and social policies or issues affect members in the community.
45	Helping other people is something I am personally responsible for.
54	It is easy for me to put aside my self-interest in favour of a greater good.
55	Being actively involved in community issues is everyone's responsibility, including mine.
74	It is my responsibility to help improve the community.

Civic Efficacy ($\alpha = 0.85$)

21	I participate in activities that help to improve the community, even if I am new to them.
23	Providing service to the community is something I prefer to let others do. ^
31	I feel I have the power to make a difference in the community.
33	I believe that I personally can make a difference in the community.
35	I am or plan to become actively involved in issues that positively affect the community.
**37	I try to find time or a way to make a positive difference in the community.
41	I believe that I can have enough influence to impact community decisions.
50	I often try to act on solutions that address political, social, local, national or international issues affect the community.
58	I try to encourage others to participate in community service.
66	I participate in political or social causes to help improve the community.

^ indicates item is reversed scored
** Item 37 deleted after Factor Analysis

3.3.3.3   Measuring attitude to Christianity

A further hypothesis of this research is that community service experience leads to positive changes in participants' personal religious faith. Reliable measurement of such a subjective dimension as person's religious faith is very difficult to validate. However it is possible to measure respondents' reaction to statements that indicate

attitude to a variety of aspects of religion; and in the case of this research, respondents' attitude to aspects of the Christian religion.

This study examines participants' attitudes to various aspects of Christian belief and practice as a measure of personal religious faith. To this end, the Dorman (2001) *Attitude to Christianity Inventory [ACI]* is employed. The scale is a validated 30 item multi-dimensional instrument which measures six distinct elements of attitude to Christianity. Five items load on to each of the six scales: Attitude to prayer; attitude to God; attitude to Jesus; attitude to the Bible; attitude to Christian practice; attitude to social justice. Of these six sub-scales, it is expected that most significant change will occur in the attitude to social justice scale.

The *ACI* is a development on the uni-dimensional instruments developed by Francis, Greer Turner and others. Review of literature regarding the 1978 Francis' *Attitude to Christianity Scale* (Aycock, 1999) reveals a high degree of both reliability (Cronbach's alpha coefficients ranging from .954 to .971) and validity. Dorman (2001) reported the internal consistency of the *ACI's* six underlying constructs as ranging from .92 to .98.

In Table 3.4, below, are the *ACI's* 30 items as they load on to the six subscales. CSQ items 4, 17, 24, 25, 65 and 71 are reverse scored.

TABLE 3.4
CSQ ITEMS DRAWN FROM THE ACI INSTRUMENT (SORTED ACCORDING TO SCALES)

CSQ Item #	ACI Item

Attitude to Christian Practice ($\alpha = 0.96$)

17	I think going to church is a waste of time. ^
18	I would go to church on Sunday even if free to stay away.
36	Christians should participate regularly in church ritual
60	I think that Christians should go to church on Sunday.
63	The church is very important to me.

Attitude to God ($\alpha = 0.98$)

8	The idea of God means much to me.
26	I know that God helps me.
48	God is very real to me.
67	God means a lot to me.
68	God helps me to lead a better life.

Attitude to Jesus ($\alpha = 0.98$)

7	I know that Jesus is very close to me.
34	I believe that Jesus still helps me.
46	I want to love Jesus.
56	I know that Jesus helps me.
71	Jesus doesn't mean anything to me. ^

Attitude to Prayer ($\alpha = 0.97$)

14	I think that praying is a good thing.
28	Saying my prayers helps me a lot.
42	Prayer helps me a lot.
64	I believe that God listens to prayers.
65	I think that saying prayers does no good. ^

Attitude to Social Justice ($\alpha = 0.92$)

4	Homeless and disadvantaged people don't concern me at all. ^
59	All Australians should respect people of a different race, nationality or religion.
69	I would like to be part of a group that helps other people.
72	I try to be friendly to others who are rejected or lonely.
73	It concerns me that a large part of the world suffers from hunger and malnutrition.

Attitude to the Bible ($\alpha = 0.95$)

2	I am interested in Scripture readings from the Bible.
10	The Bible is an important book to me.
15	I like to hear Bible stories.
24	I find it boring to listen to the Bible. ^
25	I think the Bible is out of date. ^

^ indicates item is reversed scored

3.3.3.4   The Community Service Questionnaire (CSQ)

The instrument utilised in this research, the *Community Service Questionnaire* (*CSQ*), consists entirely of the items that comprise the SSES, the CRS and the ACI. The questionnaire as seen by respondents is reproduced in Appendix A.

The items of each of the three constitutive instruments were randomly ordered to create the CSQ. The random arrangement of the 74 items meant respondents were frequently required to switch their focus. While this was intended to mitigate against the possibility of respondents becoming bored and 'switching off', especially when items load on the same construct, it is possible that the frequent change of focus inherent in the questionnaire might lead to a degree of confusion or frustration on the part of some respondents.

The CSQ comprises 74 items, each of which seeks a response along a six point Likert scale: 1 Strongly Disagree, 2 Disagree, 3 Slightly Disagree, 4 Slightly Agree, 5 Agree, 6 Strongly Agree. Ordinal level measures like Likert scales necessitate a minimum of two steps (e.g. 'Agree' and 'Disagree'). On the one hand, two steps alone would offer only a crude assessment of a response to a given item. On the other hand, after 11 steps the increased reliability is served and may in fact cause confusion for respondents. Reliability reaches a peak at about seven scale steps (Nunnally, cited in Neuman, 2000). Further, assigning an increasing numerical value to each scale descriptive reinforces the ordinal progression from 'Strongly Disagree' (1) to 'Strongly Agree' (6).

The choices for respondents are evenly balanced between degrees of 'disagree' and 'agree'. Having given a descriptive for each numeric value of the Likert scale

(e.g. 4 = 'Slightly Agree') as well as offering an even number of potential responses (i.e. 6) has limited the possibility of respondents adopting a neutral position. Similarly, responses such as 'Neither Agree nor Disagree' or 'Don't know' were not offered. It is argued that this can be helpful in encouraging respondents to make a considered response and place themselves in either the 'Agree' or 'Disagree' sub-range, especially so when the item focus might be challenging or difficult (e.g. in the case of religious belief). Nevertheless, participants are free not to offer a response at all to any item, simply by leaving it blank. It would be invalid to apply an interpretation to a 'no response' to an item; a respondent may simply have skipped it in oversight.

3.4   Data Analysis

Before proceeding to analyse the data so as to ascertain its implications for the main objective of the study, it is first necessary to confirm the validity and integrity of the research instrument used to gather that data.

The *Community Service Questionnaire* (CSQ), the instrument used in this study, is an amalgam of three pre-existing instruments, each of which gathers data related to one of the three student domains under examination; self, esteem, engagement with community, and attitude to Christianity. Confirmatory factory analysis will be utilised to verify that the CSQ is indeed gathering data on the three discrete student domains. Three factors will be sought in this investigation.

Once the overall structure of the CSQ is confirmed, the internal consistency of the instrument's 12 scales will be tested. Cronbach's alpha scrutinizes the degree to which each individual item of a scale in fact contributes to the construct underlying

that scale. If necessary, an item can be removed from consideration in the process of further analysis if it is deemed that it does not contribute to the strength and integrity of the scale.

With the component structure of the instrument and the reliability of the individual scales substantiated, it is appropriate to move on to an examination of the data to identify statistically significant relationships. As the study is *ex post factor* in nature, there is a single pass in the gathering of data. There is no test of change over time requiring a pre-test/post-test design with multiple capturing of data. Data analysis will be directed towards understanding within-sample and between-participant differences and associations.

A comparative examination of the descriptive statistics of the data and the scales will offer an insight into nature of the sample. Exploration for correlations will be undertaken using Pearson's *r* correlation coefficients. Pearson's *r* identifies linear relationships between pairs of individual variables. While not implying a causal relationship, a strong *r* value will offer a high degree of predictability so that when the value of one variable changes, the degree and direction of change in the associated variable can be reliably deduced.

The main data analysis technique to be conducted will be Multivariate Analysis of Variance. A set of MANOVAS will be used to investigate the effect of six 'between-participants' effects on the 12 scales. The scales will be the dependant variables with the independent variables being the between participant differences, namely: participation/non participation in the school's community service programme; the

nature of community service undertaken; the duration of community service; the extent of community service independent the school's program; and gender.

3.5   Validity Issues

The question of validity is an essential concern in any research. A consideration of validity scrutinizes the extent to which the research actually examines that which it claims to examine. Validity is not an 'all or nothing' affair; it is not as cut and dried as asserting a research project or research instrument is either valid or invalid. Validity, as a property of research, ranges along a continuum from low to high. Validity can be assessed in a variety of arenas, from the research instrument itself, and the precision of its focus, to the generalisability of its results.

Validity is quite distinct from reliability. Reliability refers to consistency and repeatability. It is possible for an instrument to perform consistently time and again, without accurately measuring that which it intends to measure. For example, a thermometer which has incorrectly calibrated markings will be reliable in the sense that its results will be consistent over time and place, however will be invalid because it does not in fact accurately measure temperature as it sets out to do. Moreover, it is important to note that an unreliable instrument can never offer validity.

Internal validity goes to the question of the precision of the research. Research with high internal validity successfully controls or eliminates confounding variables; these being variables, other than the treatment, to which differences in findings or outcomes could be possibly attributed (Price, 2000a). As this research utilises existing and previously validated instruments, construct validity will be confirmed

through the examination of the data via factor analysis to identify the three key constructs and, subsequently, coefficient alpha to affirm internal consistency of items within factors.

A further identified threat to internal validity is 'history'. While notionally referring to the potential of events other than the treatment affecting participants between pre-test and post-tests (Burns, 2000) and thereby confounding results, history can also refer to the variability of circumstances affecting individuals and groups at the time data is collected. Although in the case of this current research all data was collected in the same four week period at the end of the academic year, students were in different stages of their secondary education. For example, Year twelve students ($n = 68$ or 30.22%) had either completed or were in the final stages of completing their assessment. Year 10 and 11 students would have been in the midst of examinations. While this clearly can be perceived as a disadvantage, the advantage of the timing of data collection was that it gave participants the longest possible timeframe within the school year to undertake community service/service outreach experiences. In any case, it is reasonable to expect that all students in the various year level groupings would have been experiencing some similar school related stressors at the time they took the questionnaire instrument. This would not necessarily have been the case if participants had been surveyed at various times across the school year.

In terms of external validity, it is recognised that a non-random sampling method such as employed in this research has the potential to compromise generalisability (Burns, 2000). Given the nature of this research task and the fact that school enrolment is predetermined by the personal circumstances around the enrolment

choices of others, convenience sampling is the only feasible sampling method. The sample is not necessarily indicative or representative of the target population, in this case Catholic secondary school students. Access to potential participants is dependent upon the cooperation of the authorities of schools in which students are enrolled. Further, once school authorities have approved the participation of students, access to students themselves was reliant on the facilitation of school middle-managers and individual class teachers. Although briefed about the purpose and objectives of the study, there was little effective control as to how participation in the survey was promoted to students within the various participant schools. Further, potential participants (the majority of whom were minors) were required to give written informed consent in addition to the written consent of parents or guardians, prior to collection of data. As a consequence, the relatively low response level, and particularly so in relation to the number of items in the instrument (i.e. 225 participants and 74 items), constitutes a significant threat to generalisability and therefore external validity.

In addition, because HREC mandated ethical protocols demand prior informed consent of participants, as well as consent of parents or guardians if the participant was below 18 years of age (the majority of participants were under 18 years of age), it was impossible to coopt whole year level cohort or whole class participation in the survey. Because the ethical demands for informed consent required some effort on the part of participants to complete and return forms (including in most cases parental consent) it is possible that individuals predisposed to the objectives of the research may have been more likely to respond than those who were ambivalent or found the effort required to comply with the ethical consent requirements too

onerous. If this were the case, the representative nature of the sample may be somewhat skewed.

If indeed it has been the case that individuals predisposed to support the objectives of the research were more likely to participate, then it is possible that the *Hawthorne effect* could be in play in answering the questionnaire through participants' realisation they are part of a research project (Burns, 2000). The enthusiasm to perform might distort responses to the questionnaire. Conversely, in a reverse Hawthorne effect, participants who are negatively disposed to some of the concepts under investigation, or indeed to participation in any survey *per se*, might deliberately submit a rogue set of responses. Long term studies can ameliorate the influence of the Hawthorne effect.

4 Quantitative Data Analysis

4.1 Overview

The prime objective of this study is to test through analysis of quantitative data the hypothesis that experiences of community service on the part of secondary school students has a positive effect on students' self-esteem, engagement with community and attitude to Christianity. To gather data to test this hypothesis, a research instrument was assembled comprising all the items of three pre-existing instruments which individually focus on one of these domains.

Section 4.2 presents a picture of the sample group by highlighting some of the characteristics evident in the data. After describing the sample in terms of gender, year level, and rates of participation in current and prior community service, a more detailed presentation follows of the types of community service in which students have been involved, and the duration of those service experiences.

The validation of the research instrument is the focus of section 4.3. Factor analysis is undertaken to confirm the integrity of the constructs underpinning the three primary instruments that comprise the *Community Service Questionnaire*. Scale reliability is validated by calculation of Cronbach's alpha values and then comparing these with the α values for each scale as established by the developers of the various primary instruments. To enable meaningful comparison between the 12 scales, scale scores are presented in a per-item value format.

This study seeks to come to an understanding of the relationship between community service involvement and student self-esteem, community engagement, and attitude to

Christianity.   Section 4.4 examines between-participant and within-sample associations.   Associations are identified by utilising Pearson's r correlation coefficients, before MANOVA scrutinizes relationships between the 12 scales as dependant variables and independent variables which include; participation/non-participation in community service, type of community service, duration of community service, prior community service experience, and gender.

4.2   Descriptive statistics

Some characteristics of the sample were described in Section 3.3.1 above; namely, the representation of males and females, the school year of participants, the participation rate in community service, and the incidence of community service experience prior to that organised by the school.   Table 4.1, below, represents this information, though characterises the sample according to gender.

<div align="center">

TABLE 4.1
CHARACTERISTICS OF THE SAMPLE BY GENDER

</div>

	gender %	year level %				CS participant %		prior CS experience %		
		10	11	12	nd	yes	no	yes	no	nd
Male (n = 116)	51.56	9.78	30.67	10.67	0.44	36.00	15.56	3.11	44.89	3.56
Female (n = 109)	48.44	0.89	27.11	19.56	0.89	42.22	6.22	13.78	32.00	2.67
Total (n = 225)	100.00	10.67	57.78	30.22	1.33	78.22	21.78	16.89	76.89	6.22

each number is a percentage of the total sample (n = 225 ≡ 100%)
CS = Community Service
nd = no data supplied

As can be seen in Table 4.1, the representation of male and female participants is closely approximate; males comprise 52% and females 48% of the sample. Participants were drawn from school year levels 10, 11 and 12. Their proportion of the sample was 11%, 58% and 30 % respectively. In Year 10 more males than females were represented by a factor of 10 to 1, roughly an equivalent percentage of

males and females made up the Year 11 portion of the sample, and from Year 12 twice as many females as males were represented in the sample.

Within the sample, 78% of participants (comprising 36% male and 42% female) participated in a school facilitated community service/service outreach activity. Of the 22% of non-participants, 16 % were male and 6% female. Only 17% of the sample had prior community service/service outreach experience; this 17% comprised 14% females and 3% males. Of the 77% without any prior experience of community service/service outreach, 45% were male and 32% female.

In addition to the information set out in Table 4.1, the research instrument, the *Community Service Questionnaire* (CSQ) (the CSQ is reproduced in Appendix A) sought from participants specific information regarding the type of community service in which they engaged, the duration of their community service experience, as well as the nature of their previous community service, if applicable.

4.2.1 Types of Community Service

The CSQ invited participants to outline the nature of their community service experience. The questionnaire instrument allowed respondents several lines for free response. In total, 175 of the 225 participants offered some description of the service outreach experience. While the majority of these 175 nominated only one type of community service in which they were involved (66%), some nominated two types of community service (23%), while a further smaller number nominated three or four (11%).

Participant's responses were reviewed and coded into six categories. These categories were established in line with the observations made by Johnson and Notah (1999) that the range of service activities generally fall into three main categories; direct service; indirect support, and advocacy activities. Table 4.2 outlines the six categories, the types of service experiences included, and the number of mentions. That the total number of mentions exceeds the sample size reflects the fact that 33% of participants who outlined their community service experience ($n = 175$) mentioned more than one service type. In total, the 175 respondents made 255 mentions of community service types.

TABLE 4.2
COMMUNITY SERVICE CATEGORIES

	Type	Description	n =	%
1	Direct assistance as member of a group	group direct assistance to community disadvantaged; e.g. homeless outreach , refugee support; SVdeP	72	28%
2	Direct assistance as an individual	Individual visiting and social support of sick, disabled, aged, homebound	75	29%
3	Direct assistance in an education setting	education settings; e.g. early childhood, primary school, peer tutoring	27	11%
4	Direct assistance - other	involvement in community groups: e.g. surf-life-saving, child minding, church	34	13%
5	Indirect assistance	charity collecting and other fundraising support; e.g. Red Shield Appeal, 40 Hour Famine	33	13%
6	Advocacy	membership of justice and environmental advocacy groups; e.g. Greenpeace, Amnesty	14	5%
	Total **		255	100%

** 33% of the 175 respondents who provided data mentioned more than one type of community service

Table 4.2 shows that of those participants who nominated their service type, approximately an equal number were involved in direct assistance to others as a member of a group (category 1) as were involved as an individual visiting and support others in need (category 2). The aggregate for involvement in direct service totals 81% when categories 1 and 2 are combined with educational (category 3 -

11%) and church, club and child-minding activities (category 4 - 13%). Involvement in indirect-service, by way of support for organisations providing face-to-face service (category 5) makes up 13% of reported activity. Involvement in advocacy activities (category 6) accounts for 5% of all reported service.

Figure 4.1, below, displays the six categories of community service and their relative contribution to the total range of service experiences undertaken within the sample.

Community Service Categories
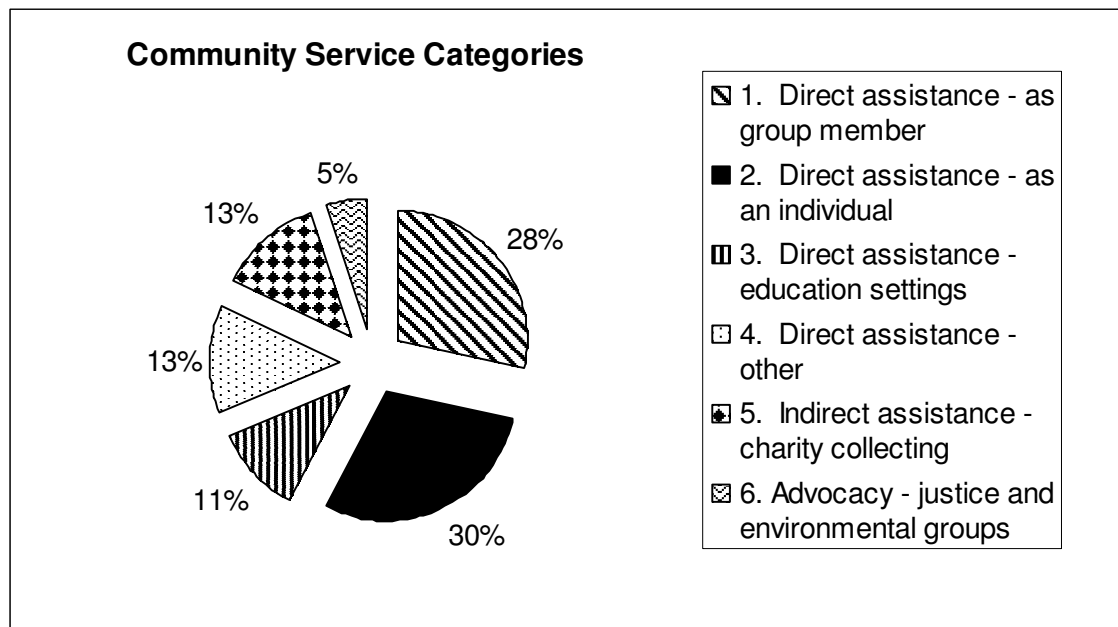
FIGURE 4.1 CATEGORIES OF SCHOOL BASED COMMUNITY SERVICE

4.2.2 Duration of community service involvement

CSQ respondents were asked to nominate the extent of their community service involvement in terms of hours. A total of 144 respondents (64%) gave an indication of the length of their service experience. The length of involvement ranged from 1 hour to 200 hours. The median response was 18 hours. With 144 respondents, a median value of 18 indicates that 72 respondents, approximately half of all reporting

respondents, were engaged for 18 hours or less, while the remaining 72 reporting respondents were engaged for 18 hours or more.

The 144 responses were coded in bands of time served; less than 10 hours, 10-20 hours, 21-40 hours, 41-80 hours, 81-120 hours, and greater than 120 hours. Figure 4.2, below, presents these six bands and the numbers of respondents falling within each of these bands of time served.
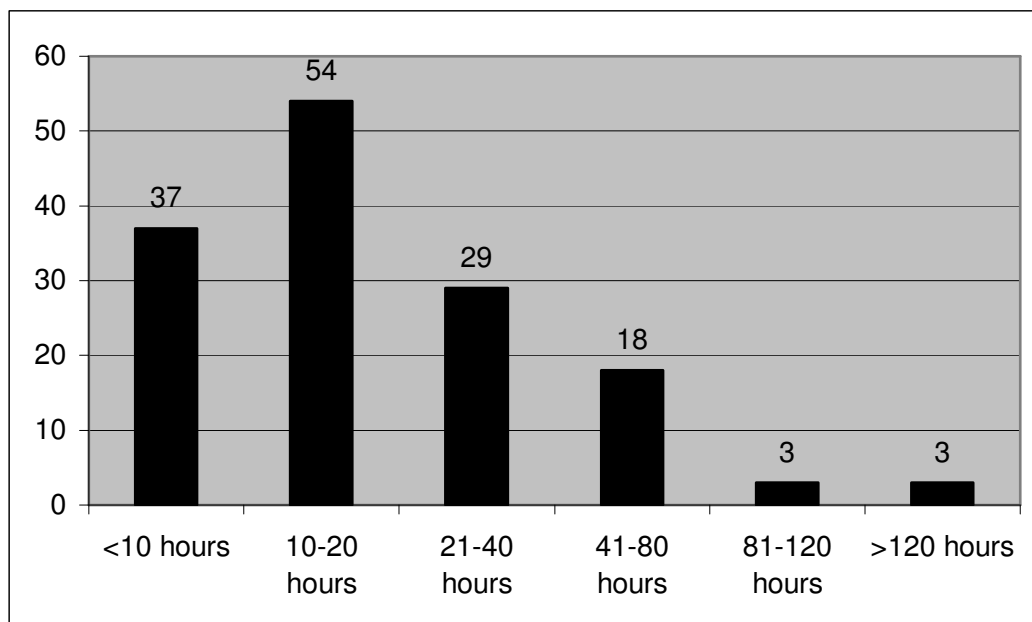
FIGURE 4.2 HOURS DURATION OF COMMUNITY SERVICE EXPERIENCES

As can be seen in Figure 4.2, of all the bands the 10-20 hour band includes the greatest number of participants, 54. Table 4.3 displays the cumulative percentage of participant participation in the various time bands. Forty percent of participants were engaged for 20 hours or less. Sixty one percent were involved for 40 hours or less. Only 10% of participants reported an involvement greater than 40 hours.

TABLE 4.3
HOURS DURATION OF COMMUNITY SERVICE EXPERIENCES – CUMULATIVE PERCENTAGE

Band	n =	Percentage	Cumulative percentage
<10 hours	37	16%	16%
10-20 hours	54	24%	40%
21-40 hours	29	13%	53%
41-80 hours	18	8%	61%
81-120 hours	3	1%	63%
>120 hours	3	1%	64%
No data	81	36%	100%
Total	**225**	**100%**	

4.2.3   Prior community service experience

Of the 176 students involved in community service experiences through their school, 38 of these (22%) had prior community service experience. As was the case with school based community service experiences, CSQ respondents were invited to nominate the type of community service in which they were involved.   The 38 respondents made a total of 52 mentions of service types.   Figure 4.3, below, displays the percentages of the various types of community service undertaken by respondents prior to the school community service involvement.

In contrast to current community service involvement, a smaller proportion of those who engaged in prior community service activities were involved in various types of direct service (55% compared to 81%), while 24% and 21% were previously involved in indirect service and advocacy activities respectively.

Prior Involvement in Communtiy Service Types

21%   23%
24%   10%
12%   10%

1. Direct assistance - as group member
2. Direct assistance - as an individual
3. Direct assistance - education settings
4. Direct assistance - other
5. Indirect assistance - charity collecting
6. Advocacy - justice and environmental groups
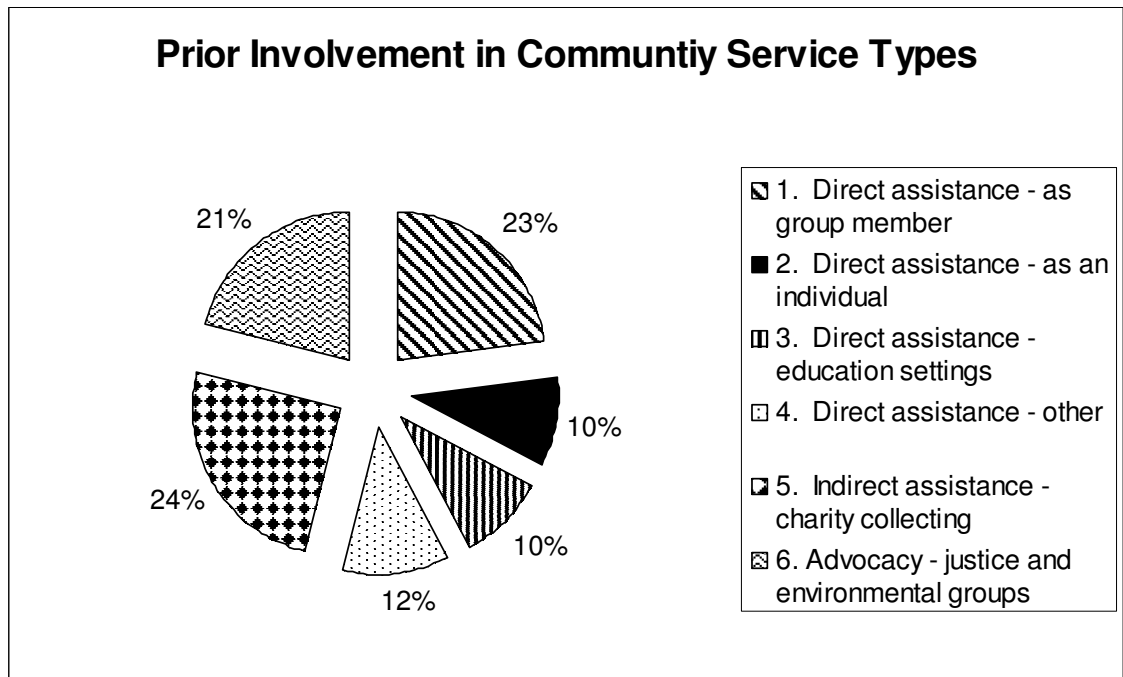
FIGURE 4.3 TYPES OF PRIOR COMMUNITY SERVICE

4.3   Validation of Instruments

Before proceeding to the main analysis of the data, it is essential to prove the research instrument's dependability.   Factor analysis will be used to verify the integrity of the three instruments that have been combined to form the questionnaire used to gather the data.   Subsequent examinations will ascertain the internal reliability of the 12 scales inherent to the instrument.

4.3.1   Factor Analysis

The *Community Service Questionnaire* (CSQ), the data collection instrument utilised in this research, is a compilation of three pre-existing instruments, namely; the *State Self Esteem Scale* (SSES) (T. F. Heatherton & Polivy, 1991), the *Civic Responsibility Survey* (CRS) (Furco, Muller, & Ammon, 1998) and the *Attitude to Christianity Inventory* (ACI) (Dorman, 2001).   All of the items from each of these instruments were incorporated into the CSQ in random order.

Factor analysis as a statistical tool is utilised to identify and confirm the existence of latent constructs by establishing that the component items of a scale representing that construct do in fact load on the same factor. Factor analysis can also be used to identify and discard potential scale items which cross-load on more than one factor (Garson, 2005a).

Initial confirmatory factor analysis of the CSQ data was undertaken to ascertain the degree of integrity of the three component instruments within the CSQ. When three factor components were sought (disregarding values < 0.35) the rotated component matrix identified only two of the 72 items as not loading on any factor: Item 32 (*I feel like I am not doing well*) which was part of the State Self Esteem Scale, and Item 37 (*I try to find time or a way to make a positive difference in the community*) which originated from the Community Responsibility Scale.

When these two items were excluded from the data set, factor analysis (disregarding values < 0.35) confirmed that the remaining 70 items loaded onto three factors which in most part corresponded with the three discrete instruments integrated into the CSQ. The anomaly was that the entire set of items identified by Dorman (2001) as forming the 'Attitude to Social Justice' scale of the *Attitude to Christianity Inventory* in fact wholly loaded with the items comprising the *Community Responsibility Scale*. A review of the focus of the items in the ACI's 'Attitude to Social Justice' scale corroborates their conceptual similarity to the CRS items. It would seem reasonable that, as verified by the factor analysis, these items should load together.

Having validated through factor analysis the incorporation of items from these three independent and discrete scales, the reliability of the constructs within each of these scales was examined.

4.3.2 Scale Reliability

The data collection instrument utilised in this research, the Community Service Questionnaire (CSQ), is a compilation of three pre-existing instruments; the (SSES) (T. F. Heatherton & Polivy, 1991), the Civic Responsibility Survey (CRS) (Furco et al., 1998) and the Attitude to Christianity Inventory (ACI) (Dorman, 2001). As seen, the CSQ's three component instruments have been independently developed and validated. The original developers, Heatherton and Polivy for the State Self Esteem Scale (1991), Furco, Muller and Ammon (1998) for the Civic Responsibility Survey, and Dorman (2001) for the Attitude to Christianity Inventory, had each identified a number of latent constructs within their instruments and have published research findings validating the reliability of the relevant items loading onto the various scales. The SSES, CRS and ACI have respectively three, three and six inherent scales.

Analysis (with the data associated with items 32 and 37 removed as discussed in section 4.3.1, above) was conducted to validate the reliability of these 12 constructs incorporated in the CSQ. The *Cronbach's alpha* (α) score for each of these scales was calculated. Cronbach's alpha is a coefficient of reliability measure to determine how well each of the selected items that are asserted to contribute to the make-up of a particular uni-dimensional construct actually load statistically onto that scale (UCLA Academic Technology Services, n.d.). The closer the alpha score

approaches 1.00, the more reliable the correlation between the items of that scale. It is commonly accepted that an alpha score of 0.70 and above indicates acceptable scale reliability (Garson, 2005b). Garson also points out that while some researchers set their lower acceptable threshold at 0.80, others will accept 0.65 or even 0.60 as an indication of acceptable reliability.

Table 4.4 outlines the Cronbach's alpha reliability scores for each of the three research instruments and their constitutive scales as determined by their original developers. These can be compared with the Cronbach's alpha scores derived from the analysis of data collected via the CSQ. The comparison confirms the internal reliability coefficient of the three Instruments and their scales which form the *Community Service Questionnaire*.

TABLE 4.4
COMPARISON OF CRONBACH'S ALPHA VALUES

Instruments and scales	Number of items	Previously validated Cronbach's alpha $\alpha =$	CSQ data Cronbach's alpha $\alpha =$
State Self Esteem Scale			
Perception of personal appearance	6	not reported	0.81
Perception of personal performance	7 (6**)	not reported	0.76
Perception of how I am perceived by	7	not reported	0.80
Civic Responsibility Survey			
Connection to community	4	0.63	0.66
Civic awareness	10	0.88	0.82
Civic efficacy	10 (9**)	0.85	0.86
Attitude to Christianity Inventory			
Attitude to social justice ***	5	0.75	0.74
Attitude to God	5	0.94	0.95
Attitude to Jesus	5	0.92	0.93
Attitude to prayer	5	0.92	0.92
Attitude to Christian practice	5	0.89	0.86
Attitude to the Bible	5	0.88	0.84

** one item has been discarded from this scale after factor analysis of CSQ data
*** Factor analysis indicates this scale fits more closely with the CRS scales

4.3.3 Validation of the *State Self Esteem Scale* Scales

Heatherton and Polivy's (1991) *State Self Esteem Scale* (SESS) measures self esteem as a construct independent from 'mood'. Factor analysis identified three subscales (see Table 4.5); Personal Performance (related to the participant's perception of their own personal performance), Social Evaluation (related to the participant's sensitivity as to how they are perceived by others) and Appearance (related to the participant's own perception of their personal appearance). Heatherton and Polivy state a coefficient alpha of $\alpha = 0.92$ across the entire scale. Curiously, however, their study did not report a Cronbach's alpha score for the discrete constructs of the sub-scales they identified.

Although the SSES has 20 items, item 32 (*I feel like I am not doing well*) was removed from the data set of this current study after initial factor analysis identified that it did not load on any of the SSES subscales. This item was reported by Heatherton and Polivy (1991) as loading on the 'perception of personal performance' subscale. Data collected through the CSQ related to the remaining 19 SSES items were extracted for reliability analysis. The three subscales in fact had a good degree of internal reliability with scores of $\alpha = 0.81$ for 'perception of personal appearance', $\alpha = 0.76$ for 'perception of personal performance' and $\alpha = 0.80$ for 'perception of how I am perceived by others'.

In this current analysis, removal of item #32 improved the ''perception of personal performance'' subscale's Cronbach's alpha score from $\alpha = 0.67$ to $\alpha = 0.76$, further validating its removal from the data set.

TABLE 4.5
FACTOR LOADINGS OF CSQ ITEMS ONTO SSES SCALES

CSQ Item #	Item	Factor loadings
Perception of personal appearance ($\alpha = 0.81$)		
49	I feel unattractive.	.787
44	I am pleased with my appearance right now.	.716
22	I feel good about myself.	.701
38	I am dissatisfied with my weight.	.658
51	I feel satisfied with the way my body looks right now.	.655
12	I feel that others respect and admire me.	.401
Perception of personal performance ($\alpha = 0.76$)		
52	I feel frustrated or rattled about my performance.	.737
11	I feel confident about my abilities.	.558
61	I feel confident that I understand things.	.546
57	I feel as smart as others.	.508
29	I feel that I have less scholastic ability right now than others.	.465
53	I feel that I am having trouble understanding things I read.	.404
** 32	I feel like I am not doing well.	n/a
Perception of how I am perceived by others ($\alpha = 0.80$)		
62	I feel displeased with myself.	.799
43	I feel self-conscious.	.639
9	I am worried about what other people think of me.	.627
6	I feel inferior to others at this moment.	.516
13	I am worried about looking foolish.	.480
3	I am worried about whether I am regarded as a success or failure.	.423
40	I feel concerned about the impression I am making.	.421

** Item 32 deleted after Factor Analysis

4.3.4   Validation of the Civic Responsibility Survey Scales

Furco, Muller and Ammon's (1998) Civic Responsibility Survey (CRS) measures individuals' engagement with their community. They identified three distinct constructs related to affective, cognitive and practical relationships. These subscales were named 'connection to community' ($\alpha = 0.63$), 'civic awareness' ($\alpha = 0.88$) and 'civic efficacy' ($\alpha = 0.85$). .

Data from the 24 CRS items were extracted from the CSQ. After factor analysis it was determined that item 37 (*I try to find time or a way to make a positive difference in the community*), reported by Furco et al (1998) as loading on the civic efficacy

subscale, was not loading onto any of the subscales. It was subsequently deleted from the data set. In this current analysis, removal of item 37 had a neutral impact on the subscale's Cronbach's alpha score, lowering it marginally from $\alpha = 0.866$ to $\alpha = 0.861$. Subscale reliability scores from the current CSQ data were 'connection to community' ($\alpha = 0.66$), 'civic awareness' ($\alpha = 0.82$) and 'civic efficacy' ($\alpha = 0.86$). Table 4.6 lists the items identified as loading onto these scales.

TABLE 4.6
FACTOR LOADINGS FOR CSQ ITEMS ONTO CRS SCALES

CSQ Item #	Item	Factor loadings
Connection to Community ($\alpha = 0.66$)		
20	I feel a personal obligation to contribute in some way to the community.	.703
1	I benefit emotionally from contributing to the community, even if it is hard and challenging work.	.482
70	I have a lot of personal contact with people in the community.	.452
47	I have a strong and personal attachment to a particular community.	.440
Civic Awareness ($\alpha = 0.82$)		
74	It is my responsibility to help improve the community.	.750
45	Helping other people is something I am personally responsible for.	.668
55	Being actively involved in community issues is everyone's responsibility, including mine.	.664
16	I often discuss and think about how political, social, local, national or international issues affect the community.	.546
19	I am aware of what can be done to meet the important needs in the community.	.532
5	Becoming involved in community or social issues is a good way to improve the community.	.527
30	I am aware of the important needs in the community.	.487
27	Being concerned about State and local issues is an important responsibility for everybody.	.473
39	I understand how political and social policies or issues affect members in the community.	.452
54	It is easy for me to put aside my self-interest in favour of a greater good.	.418
Civic Efficacy ($\alpha = 0.86$)		
35	I am or plan to become actively involved in issues that positively affect the community.	.702
58	I try to encourage others to participate in community service.	.658
21	I participate in activities that help to improve the community, even if I am new to them.	.653
23	Providing service to the community is something I prefer to let others do.	.642
66	I participate in political or social causes to help improve the community.	.614
33	I believe that I personally can make a difference in the community.	.613
31	I feel I have the power to make a difference in the community.	.584
50	I often try to act on solutions that address political, social, local, national or international issues affect the community.	.549
41	I believe that I can have enough influence to impact community decisions.	.438
**37	I try to find time or a way to make a positive difference in the community.	n/a

** Item #37 was removed from the data set after Factor Analysis

4.3.5 Validation of the Attitude to Christianity Inventory Scales

The Attitude to Christianity Inventory (ACI) was refined and validated by Dorman (2001) to measure individuals' attitude to a number of key aspects of relationships and practices associated with Christianity. Dorman's research indicates the ACI's six scales as each having high overall reliability. Cronbach's α values range from α = 0.75 for 'Attitude to Social Justice', to α = 0.94 for 'Attitude to God'. Reliability scores for the remaining scales were: 'Attitude to Jesus' α = 0.92; 'Attitude to Prayer' α = 0.92; 'Attitude to Christian Practice' α = 0.89; and 'Attitude to the Bible' α = 0.88.

Reliability scores for the scales from CSQ data were comparable to those reported by Dorman: 'Attitude to Social Justice' α = 0.74; 'Attitude to God' α = 0.95; 'Attitude to Jesus' α = 0.93; 'Attitude to Prayer' α = 0.92; 'Attitude to Christian Practice' α = 0.86; and 'Attitude to the Bible' α = 0.84. Items related to each of the scales are presented in Table 4.7.

TABLE 4.7
FACTOR LOADINGS FOR CSQ ITEMS ONTO ACI SCALES

CSQ Item #	Item	Factor Loading
Attitude to Christian Practice ($\alpha = 0.86$)		
63	The church is very important to me.	.813
18	I would go to church on Sunday even if free to stay away.	.705
60	I think that Christians should go to church on Sunday.	.674
36	Christians should participate regularly in church ritual	.634
17	I think going to church is a waste of time.	.602
Attitude to God ($\alpha = 0.95$)		
68	God helps me to lead a better life.	.895
67	God means a lot to me.	.891
48	God is very real to me.	.877
8	The idea of God means much to me.	.851
26	I know that God helps me.	.835
Attitude to Jesus ($\alpha = 0.93$)		
46	I want to love Jesus.	.895
56	I know that Jesus helps me.	.888
34	I believe that Jesus still helps me.	.870
7	I know that Jesus is very close to me.	.843
71	Jesus doesn't mean anything to me.	.756
Attitude to Prayer ($\alpha = 0.92$)		
42	Prayer helps me a lot.	.879
28	Saying my prayers helps me a lot.	.850
14	I think that praying is a good thing.	.846
64	I believe that God listens to prayers.	.808
65	I think that saying prayers does no good.	.648
Attitude to Social Justice ($\alpha = 0.74$) ***		
69	I would like to be part of a group that helps other people.	.637
73	It concerns me that a large part of the world suffers from hunger and malnutrition.	.577
72	I try to be friendly to others who are rejected or lonely.	.452
4	Homeless and disadvantaged people don't concern me at all.	.423
59	All Australians should respect people of a different race, nationality or religion.	.373
Attitude to the Bible ($\alpha = 0.84$)		
10	The Bible is an important book to me.	.799
15	I like to hear Bible stories.	.651
2	I am interested in Scripture readings from the Bible.	.650
25	I think the Bible is out of date.	.465
24	I find it boring to listen to the Bible.	.410

*** Factor analysis indicates 'Attitude to Social Justice' scale fits more closely with the CRS scales

With the embedded scales validated, an analysis of the scale scores will present a picture of the data as it relates to the core focus of this research; the impact of

community service outreach on participant's self-esteem, engagement with their community and attitude to Christianity.

4.3.6   Scale Descriptives

Scale scores were calculated for each of the twelve scales identified. These have been examined to identify patterns and trends in the data. Table 4.8 presents the raw descriptive statistics for these scales.

TABLE 4.8
DESCRIPTIVE STATISTICS OF THE 12 CSQ SCALES

	# Items in scale	Range	Min	Max	Mean	sd
State Self Esteem Scale						
Perception of personal appearance	6	28	8	36	24.26	5.70
Perception of personal performance	6	22	14	36	25.60	5.07
Perception of how I am perceived by others	7	30	12	42	25.52	6.56
Civic Responsibility Survey						
Civic awareness	10	45	12	57	40.30	7.22
Civic efficacy	9	42	9	51	32.13	7.58
Connection to community	4	20	4	24	15.74	3.33
Attitude to Christianity Inventory						
Attitude to Christian practice	5	25	5	30	15.47	5.72
Attitude to God	5	25	5	30	17.97	7.17
Attitude to Jesus	5	25	5	30	18.17	6.81
Attitude to prayer	5	25	5	30	17.97	6.83
Attitude to social justice	5	22	8	30	23.43	4.13
Attitude to the Bible	5	25	5	30	14.94	5.68

However, ready comparison of the twelve scales is difficult because of variation in the number of items that constitute the various scales, i.e. the *Attitude to Christianity* scales each have five items, the *Civic Responsibility Survey* scales range from 10 to 4 items, and the scales of the *State Self Esteem Scale* have either 6 or 7 items. To facilitate meaningful comparison of this data it is necessary to calculate a 'per item' value for each scale by dividing the mean and standard deviation scores of each scale

by the number of items comprising that scale. Table 4.9 presents the comparative values of the twelve scales.

The CSQ was constructed with a six point Likert scale inviting responses to item statements in an array from 'strongly disagree' to 'strongly agree' (see Appendix A). Each item response has a potential numerical value ranging from 1 to 6; an interval value of 5. Dividing the raw scale scores (as in Table 4.8) by the number of items constituting that scale has the effect of presenting the data as if each scale consisted of only a single item. Accordingly, the minimum and maximum score for all scales (as presented in Table 4.9) is 1 and 6 respectively. The broadest range possible is therefore 5. The higher the mean scale score reported in Table 4.9 the stronger the support for its inherent construct. A mean scale score $\bar{x} > 3.5$ indicates overall support for the construct amongst the sample, while a mean scale score $\bar{x} < 3.5$ is indicative of disagreement with the notion represented by that construct.

TABLE 4.9
COMPARATIVE PER ITEM DESCRIPTIVE STATISTICS OF THE 12 CSQ SCALES

	Range	Min	Max	Mean	sd
Originating from State Self Esteem Scale (SSES)					
Perception of personal appearance	4.67	1.33	6.00	4.04	0.95
Perception of personal performance	3.67	2.33	6.00	4.27	0.85
Perception of how I am perceived by others	4.29	1.71	6.00	3.65	0.94
Originating from Civic Responsibility Survey (CRS)					
Civic awareness	4.50	1.20	5.70	4.03	0.72
Civic efficacy	4.67	1.00	5.67	3.57	0.84
Connection to community	5.00	1.00	6.00	3.94	0.83
Originating from Attitude to Christianity Inventory (ACI)					
Attitude to God	5.00	1.00	6.00	3.59	1.43
Attitude to Jesus	5.00	1.00	6.00	3.63	1.36
Attitude to prayer	5.00	1.00	6.00	3.59	1.37
Attitude to the Bible	5.00	1.00	6.00	2.99	1.14
Attitude to Christian practice	5.00	1.00	6.00	3.09	1.14
Attitude to social justice**	4.40	1.60	6.00	4.69	0.83

** factor analysis indicates this scale loads with the CRS scales

It is evident from the per item scale means reported in Table 4.9 that respondents' 'attitude to social justice' scale ($\bar{x}$ = 4.69) enjoyed the highest level of support. A similar comparative high level of support is apparent for the scales 'perception of personal performance' ($\bar{x}$ = 4.27), 'perception of personal appearance' ($\bar{x}$ = 4.04), and 'civic awareness' ($\bar{x}$ = 4.03). Conversely, the scales 'attitude to the Bible' ($\bar{x}$ = 2.99) and 'attitude to Christian practice' ($\bar{x}$ = 3.09) were the least strongly supported. These were the only scales whose mean fell below the 3.5 mid point.

A standard deviation (*sd*) value is the average distance between any score in a distribution and the mean value of that distribution (Price, 2000b). The standard deviation indicates the degree of tightness of the grouping of individual scores around the mean; the lower the *sd* value the more tight the grouping, the higher the *sd* value the broader the spread of responses from the mean. It is evident from the *sd* scales reported in Table 4.9 that in general there was a far broader spread in responses to attitude to Christian scales than the other scales within the CSQ (the remarkable exception to this is the *sd* of the 'attitude to social justice scale *sd* = 0.83). The broadest *sd*, 'attitude to God' scale (*sd* = 1.43), was almost twice the spread of the tightest *sd*, 'civic awareness' scale (*sd* = 0.72).

Another helpful visual indicator of the spread of values within each scale is presented by the box plot in Figure 4.4. The shaded boxes represent the inter-quartile values between the 25th and 75th percentiles for each scale; i.e. the middle 50% of values for that scale. The horizontal line within each box represents the median value or 50th percentile of that scale. The vertical whiskers extending from either end of the box indicate the scale's highest and lowest values (outliers have been removed).
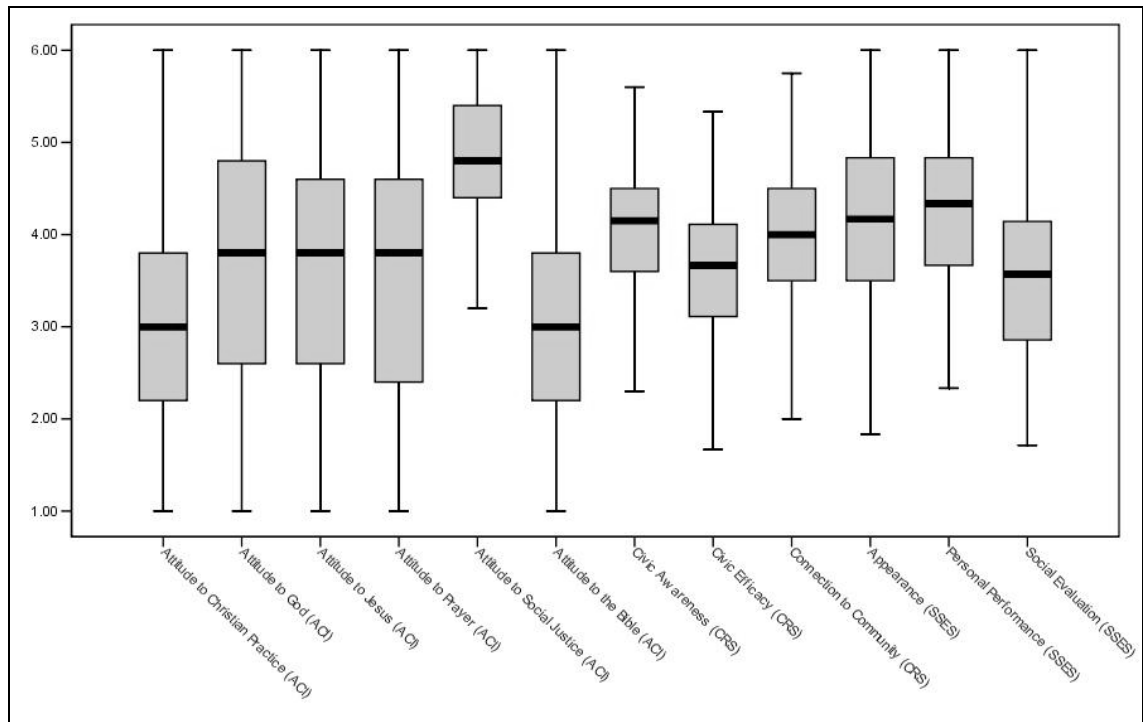
FIGURE 4.4 BOX PLOT OF CSQ'S 12 FACTORS; RANGE, MEDIAN, AND INTER-QUARTILE

As can be seen in Figure 4.4, the 'Attitude to Social Justice' scale enjoys the strongest positive response. The scale has the highest median (50th percentile), no respondent has scored below a 3 (slightly disagree), and the central 50% of responses are grouped relatively tightly around the median.

On the other hand, both the 'Attitude to Christian Practice' and the 'Attitude to the Bible' scales have the lowest medians (50th percentile) of the 12 scales. As with the other *Attitude to Christianity* scales (with the exception of the 'Attitude to Social Justice' scale which factor analysis indicates loads with the *Civic Responsibility Survey* scales), participant scores fall along the full scope of the range (1-6). A range value of 5 indicates the sample is the least homogenous in opinion regarding the constructs underpinning these five *Attitude to Christianity* scales.

4.4 Between Scale Associations

With the construction and attributes of the scales established, exploration of the relationships between the scales gives some further insight into the characteristics of the data as a whole.

4.4.1 Correlation

The correlation coefficient, though not implying a causal relationship, indicates the degree of strength evident in the linear relationship between two variables (Burns, 2000). This bi-variate relationship is expressed numerically (r) by a score ranging from +1.00 to -1.00. A score of $r = +1.00$ is an indication of perfect positive correlation; a change in score of one variable is matched in the other variable to the same extent and in the same direction. Conversely a score of r = -1.00 indicates a perfect negative correlation between the variables; with a change in one variable being matched with an exact proportional change in the other variable, though in the opposite direction. The closer an r value to +1.00 or -1.00, the stronger the correlation. Any r value in the +0.7 to +1.00, or -0.7 to -1.00 range is considered a strong association (Simon, 2005).

Pearson's r correlation coefficients were calculated for the twelve scales comprising the CSQ. Table 4.10 displays the correlation matrix. While many correlations were significant at either the $p < 0.05$ or $p < 0.01$ levels (47 of the 66 possible correlations between the 12 scales), only six of these correlations were strong at $r > \pm0.70$ range.

These strong correlations were between: 'attitude to God' and 'attitude to Jesus'($r = 0.925$); 'attitude to God' and 'attitude to prayer ($r = 0.891$); 'attitude to Jesus' and

'attitude to prayer' ($r = 0.877$); 'attitude to Christian practice' and 'attitude to the bible' ($r = 0.723$); 'civic awareness' and 'civic efficacy' ($r = 0.725$); and finally 'civic efficacy' and 'connection to community' ($r = 0.708$). All of these correlations were very significant at the $p < 0.01$ level.

TABLE 4.10
PEARSON'S CORRELATION COEFFICIENTS

	attitude to Christian practice	attitude to God	attitude to Jesus	attitude to prayer	attitude to social justice	attitude to bible	crs civic awareness	crs civic efficacy	crs connection to community	sses 'perception of personal appearance'	sses perception of personal performance	sses perception of how I am perceived by others
attitude to Christian practice	1	.699**	.696**	.677**	.244**	**.723****	.218**	.336**	.358**	-.018	-.130	-.175*
attitude to God	.699**	1	**.925****	**.891****	.218**	.622**	.214**	.247**	.405**	.006	-.057	-.118
attitude to Jesus	.696**	.925**	1	**.877****	.246**	.627**	.200**	.254**	.419**	-.033	-.074	-.126
attitude to prayer	.677**	.891**	.877**	1	.323**	.644**	.276**	.286**	.441**	-.054	-.132	-.180*
attitude to social justice	.244**	.218**	.246**	.323**	1	.322**	.670**	.550**	.590**	-.075	.080	-.083
attitude to bible	.723**	.622**	.627**	.644**	.322**	1	.333**	.362**	.404**	-.142*	-.142*	-.244**
crs civic awareness	.218**	.214**	.200**	.276**	.670**	.333**	1	**.725****	.636**	.024	.161*	-.062
crs civic efficacy	.336**	.247**	.254**	.286**	.550**	.362**	.725**	1	**.708****	.050	.148*	-.002
crs connection to community	.358**	.405**	.419**	.441**	.590**	.404**	.636**	.708**	1	-.033	.022	-.168*
sses 'perception of personal appearance'	-.018	.006	-.033	-.054	-.075	-.142*	.024	.050	-.033	1	.669**	.537**
sses perception of personal performance	-.130	-.057	-.074	-.132	.080	-.142*	.161*	.148*	.022	.669**	1	.466**
sses perception of how I am perceived by others	-.175*	-.118	-.126	-.180*	-.083	-.244**	-.062	-.002	-.168*	.537**	.466**	1

** Correlation is significant at the 0.01 level 2-tailed.
* Correlation is significant at the 0.05 level 2-tailed.

What for most would seem to be a reasonable assumption, that attitudes to God, Jesus and prayer are positively correlated, is borne out by the data. It is interesting to note the scales 'attitude to the Bible' and 'attitude to Christian practice' are not only positively correlated, but that they also have the lowest per item scale mean. They are closely associated, but are regarded with a relatively lower disposition towards them on the part of respondents.

4.4.2   Between participant (within sample) analysis

Given the *ex post factor* nature of this research, it was not possible to manipulate the conditions of participants' community service experiences. However it is possible to test the effect of the differences within the nature, type and extent of community service as reported by the participants. The central hypothesis of this research is that student participation in community service outreach experiences would lead to positive influences on individuals' self esteem, engagement with community and attitude to Christianity. To test this hypothesis, comparisons of the twelve scales as dependant variables with several independent variables, namely: participation in community service, type of community service duration of community service, and prior community service involvement have been computed using MANOVA tests.

MANOVA, multivariate analysis of variance, is a way of determining whether statistically significant differences of mean exist between two or more samples or treatments (Burns, 2000). In this case, because the research design is post-hoc in nature, the test of mean differences within the sample becomes the factors or independent variables, namely: participation in community service and non-participation in community service; prior community service experience or no prior

community service experience; type of community service undertaken and length (hours duration) of community service experience. MANOVA analysis can determine the statistical significance of such within-participant variations. The 12 scales identified within the CSQ are the dependant variables

In this current study, the null hypothesis is that involvement in community service activities will have no effect on student's self esteem, engagement with community, and attitude to Christianity. In attempting to disprove the null hypothesis (setting the level of statistical significance at $p < 0.05$), MANOVA takes into account individual differences both within treatments and between participants, and experimental error. The effect of the treatment (or, as in this case, the differences between samples) is said to be statistically significant if the probability of the difference occurring as a result of chance alone is less than 5%, or five cases in one hundred ($p < 0.05$).

4.4.3 Effect of participation/non-participation in community service

An initial MANOVA was performed with the twelve CSQ scales as dependant variables and participation/non participation in community service as the independent variable. Table 4.11 displays the results of this analysis.

TABLE 4.11
MANOVA: PARTICIPANTS' PARTICIPATION / NON PARTICIPATION IN COMMUNITY SERVICE

Dependant variables	SS	df	MS	F	sig.
attitude to Christian practice	9.341	1	9.341	.263	.609
attitude to god	39.879	1	39.879	.767	.383
attitude to Jesus	44.750	1	44.750	.943	.333
attitude to prayer	18.360	1	18.360	.378	.539
attitude to social justice	119.127	1	119.127	8.276	.005
attitude to bible	7.232	1	7.232	.209	.648
civic awareness	78.137	1	78.137	1.551	.215
civic efficacy	139.028	1	139.028	2.436	.121
connection to community	28.129	1	28.129	2.786	.097
Perception of personal appearance	25.341	1	25.341	.753	.387
Perception of personal performance	4.368	1	4.368	.173	.678
Perception of how I am perceived by others	77.608	1	77.608	1.701	.194

As can be seen in Table 4.11, participation in community service proved to have no significant effect on the majority of the scales, thus in large part disproving the hypothesis. The only between sample variance of statistical significance (indeed the significance is strong at $p < 0.01$) is identified with the 'attitude to social justice' scale. Table 4.12 presents the descriptive statistics for the 'attitude to social justice'.

TABLE 4.12
PER ITEM SCALE DESCRIPTIVE STATISTICS FOR THE WITHIN-SAMPLE VARIABLE
'PARTICIPATION IN COMMUNITY SERVICE'

	Com Service Y/N	Mean	Std. Deviation	N
attitude to social justice	1 (yes)	4.87	0.74	132
	2 (no)	4.43	0.85	30

$p < 0.01$

The possible range for the 'attitude to social justice' scale on a per item basis is 5, with a possible min = 1, max = 6. While the mean score for non-participants in community service is a relatively high $\bar{x}$ = 4.43, participation in community service sees an increase in the mean by near to half a standard deviation to $\bar{x}$ = 4.87 (refer Table 4.12). The two samples' *standard deviation* values indicate that the individual participant scores are grouped more tightly around the mean for the 'participating in community service' sample (*sd* -= 0.74) than for the sample group of non-participators (*sd* = 0.85).

4.4.4 Effect of type of community service undertaken

Respondents to the CSQ were asked to identify the type of community service they undertook. The responses were sorted and coded into seven categories: no data; educational support activities; assisting disadvantages, homeless and refugees in the community; participation in justice and environmental groups; charity collecting; and assisting through babysitting, lifesaving, church involvement and visiting the elderly.

TABLE 4.13
MANOVA: 'COMMUNITY SERVICE TYPE' AS THE INDEPENDENT VARIABLE

Dependant variables	SS	df	MS	F	sig.
attitude to Christian practice	286.60	6	47.77	1.37	0.230
attitude to God	443.96	6	73.99	1.45	0.200
attitude to Jesus	445.06	6	74.18	1.60	0.151
attitude to prayer	396.82	6	66.14	1.39	0.223
attitude to social justice	200.03	6	33.34	2.33	0.035
attitude to bible	399.46	6	66.58	2.01	0.067
civic awareness	235.75	6	39.29	0.77	0.594
civic efficacy	620.69	6	103.45	1.85	0.092
connection to community	68.22	6	11.37	1.12	0.354
perception of personal appearance	136.57	6	22.76	0.67	0.675
perception of personal performance	97.98	6	16.33	0.64	0.698
perception of how I am perceived by others	362.33	6	60.39	1.33	0.245

Table 4.13 displays the MANOVA results for the 12 scales with 'community service type' as the independent variable. Again, the only scale to show a significant effect (at the 95% level) is 'attitude to social justice'.

TABLE 4.14
'ATTITUDE TO SOCIAL JUSTICE' PER ITEM SCALE DESCRIPTIVE STATISTICS
FOR WITHIN-SAMPLE VARIABLE 'COMMUNITY SERVICE TYPE'

Community service type	Mean	sd	N
1. Direct assistance - as group member	4.84	0.98	43
2. Direct assistance - as an individual	4.96	0.71	35
3. Direct assistance - education settings	5.20	0.85	18
4. Direct assistance - other	4.73	0.69	19
5. Indirect assistance - charity collecting	5.17	0.44	14
6. Advocacy - justice and environmental groups	4.72	0.78	2

$p < 0.05$

The 'community service type' descriptive statistics for the 'attitude to social justice' scale (Table 4.14) indicate that the service type '3. Direct assistance - education settings' has the greatest effect on 'attitude to social justice' with a very high mean of $\bar{x} = 5.20$. The relatively high value of the standard deviation ($sd = 0.85$) indicates that individual participant scores are grouped relatively more loosely around the mean.

4.4.5 Effect of duration of community service experiences

When questioned about the length of time involved in their community service projects, participants reported widely different amounts of time, ranging from 1 through to 200 hours. Participant's responses were grouped and coded within five bands; up to 10 hours, 11 to 20 hours, 21 to 40 hours, 41 to 100 hours, and more than 100 hours. MANOVA examination (Table 4.15) indicated that 'hours duration' as

the independent variable had a significant effect on the scales 'civic efficacy' and 'connection to community' ($p < 0.05$).

TABLE 4.15
MANOVA: COMMUNITY SERVICE DURATION (HOURS)

Dependant variables	SS	df	MS	F	sig.
civic efficacy	781.46	5	156.29	2.87	0.016
connection to community	133.39	5	26.68	2.76	0.02

$p < 0.05$

Descriptive statistics of these two scales, 'civic efficacy' and 'connection to community', including the six levels as described above, appear in Table 4.16 below.

TABLE 4.16
PER ITEM SCALE DESCRIPTIVE STATISTICS FOR WITHIN-SAMPLE VARIABLE 'HOURS DURATION'

Scale	Hours Duration	Mean	Std. Deviation	N
civic efficacy	up to 10 hours	3.76	0.95	30
	11 to 20 hours	3.74	0.89	27
	21 to 40 hours	3.89	0.87	19
	41 to 100 hours	5.33	.	1
	more than 100 hours	3.00	0.62	3
connection to community	up to 10 hours	4.14	0.97	30
	11 to 20 hours	4.22	0.60	27
	21 to 40 hours	4.12	0.96	19
	41 to 100 hours	5.50	.	1
	more than 100 hours	4.08	0.72	3

$p < 0.05$

The scale 'civic efficacy' describes participant's attitude to practical and positive involvement in their community while the scale 'connection to community' describes participant's sense of belonging and enmeshment with their community. The sample size of levels five and six , with 1 and 3 participants respectively, would seem too

small on which to make reliable inferred assertions about effect of 'hours duration' of community service. Taking this into account, the data in Table 4.16 suggests that there is no consistent pattern of effect of 'hours duration' on either 'civic efficacy' or 'connection to community'. The optimum hours duration for positively effecting 'civic efficacy' would seem to be 21 to 40 hours, while for 'connection to community' 11-20 hours would produce the optimum effect.

4.4.6 Effect of prior involvement in community service

Despite participation in community service only having a statistically significant effect on one of the twelve scales, it is worthwhile investigating whether other within sample groups prove to be influential on scale scores. Participants were asked to indicate if they had involvement in community service activities prior to their current school initiated community service programme. MANOVA on this factor as the independent variable revealed a suite of scales where such prior community service was significant.

TABLE 4.17
MANOVA: PARTICIPANTS' PRIOR PARTICIPATION IN COMMUNITY SERVICE

Dependant variables	SS	df	MS	F	sig.
attitude to Christian practice	178.47	1	178.47	5.18	.024
attitude to God	151.09	1	151.09	2.94	.088
attitude to Jesus	205.38	1	205.38	4.42	.037
attitude to prayer	237.23	1	237.23	5.03	.026
attitude to social justice	315.70	1	315.70	23.98	.000
attitude to bible	264.27	1	264.27	8.02	.005
civic awareness	781.99	1	781.99	17.00	.000
civic efficacy	921.60	1	921.60	17.66	.000
connection to community	189.61	1	189.61	20.86	.000
perception of personal appearance	360.14	1	360.14	11.41	.001
perception of personal performance	62.25	1	62.25	2.50	.116
perception of how I am perceived by others	407.95	1	407.95	9.37	.003

Table 4.17 shows that with the exception of the 'attitude to God' and 'personal performance' scales, prior community service experience has a significant effect on the remaining scales which portend to participants' self esteem, engagement with community, and attitude to Christianity (and all of these at the very significant $p < 0.01$ level). The descriptive statistics are charted in Table 4.18 below.

TABLE 4.18
PER ITEM SCALE DESCRIPTIVE STATISTICS FOR WITHIN-SAMPLE VARIABLE
'PRIOR COMMUNITY SERVICE EXPERIENCE'

	Other Com Service	Mean	sd	N
attitude to Christian practice	1 (yes)	3.58	1.33	25
	2 (no)	3.00	1.14	137
attitude to Jesus	1 (yes)	4.20	1.40	25
	2 (no)	3.58	1.36	137
attitude to prayer	1 (yes)	4.23	1.29	25
	2 (no)	3.56	1.39	137
attitude to social justice	1 (yes)	5.44	0.44	25
	2 (no)	4.67	0.77	137
attitude to bible	1 (yes)	3.66	1.07	25
	2 (no)	2.95	1.16	137
civic awareness	1 (yes)	4.56	0.54	25
	2 (no)	3.95	0.70	137
civic efficacy	1 (yes)	4.22	0.80	25
	2 (no)	3.48	0.80	137
connection to community	1 (yes)	4.61	0.62	25
	2 (no)	3.86	0.78	137
Perception of personal appearance	1 (yes)	3.48	1.06	25
	2 (no)	4.17	0.91	137
Perception of how I am perceived by others	1 (yes)	3.09	0.82	25
	2 (no)	3.71	0.96	137

$p < 0.01$

Of interest, the participants that report prior community service involvement have a higher mean in the relevant statistically significant ACI scales and CRS scales, yet a lower mean in the 'self esteem' scales.

4.4.7 Effect of gender

Both male and female students were surveyed about their community service experiences and were asked to report on their attitudes and perceptions regarding self-esteem, engagement to community and attitude to Christianity. Though not a core element of the hypothesis, it is useful to ascertain how gender, as the independent variable, affects the 12 scales identified in the CSQ.

As is shown in Table 4.19, three scales are identified as having a statistically significant effect (all at the $p < 0.01$ level) related to gender; 'attitude to social justice', 'civic awareness', and 'perception of personal appearance'.

TABLE 4.19
MANOVA: GENDER AS THE INDEPENDENT VARIABLE

Dependant variables	SS	df	MS	F	sig.
attitude to Christian practice	32.90	1	32.90	0.93	0.336
attitude to God	19.36	1	19.36	0.37	0.543
attitude to Jesus	24.50	1	24.50	0.52	0.474
attitude to prayer	109.19	1	109.19	2.28	0.133
attitude to social justice	426.97	1	426.97	34.24	0.000
attitude to bible	65.49	1	65.49	1.92	0.168
civic awareness	600.89	1	600.89	12.75	0.000
civic efficacy	176.30	1	176.30	3.10	0.080
connection to community	31.12	1	31.12	3.09	0.081
perception of personal appearance	392.00	1	392.00	12.50	0.001
perception of personal performance	24.50	1	24.50	0.97	0.325
perception of how I am perceived by others	144.50	1	144.50	3.20	0.076

The descriptive statistics for these three scales (Table 4.20) indicate that gender = female has a greater effect for the 'attitude to social justice' and 'civic awareness' scales, with females recording a higher mean on both. However for the 'perception

of personal appearance' scale, females record a lower mean than their male counterparts.

TABLE 4.20
SCALE DESCRIPTIVE STATISTICS FOR WITHIN-SAMPLE VARIABLE
'GENDER'

	Gender	Mean	sd	N
'attitude to social justice'	Male	4.46	0.83	81
	Female	5.11	0.56	81
'civic awareness'	Male	3.85	0.74	81
	Female	4.24	0.63	81
'perception of personal appearance'	Male	4.32	0.91	81
	Female	3.80	0.96	81

$p < 0.01$

4.5   Summary of Data Analysis

Analysis of the *Community Service Questionnaire* (CSQ) data set confirmed the overall integrity of the three component instruments that were incorporated into the questionnaire. The CSQ comprises items combined from the *State Self Esteem Scale* (SSES) (T.F. Heatherton, 1991), the *Community Responsibility Survey* (CRS) (Furco et al., 1998) and the *Attitude to Christianity Inventory* (ACI) (Dorman, 2001). As a result of initial factor analysis, two of the 72 items (one each from SSES and CRS) were identified as cross loading on more than one factor and were excluded from all further analysis.   Subsequent confirmatory factor analysis seeking three factors confirmed the integrity of incorporating into the CSQ the SSES, CRS and ACI instruments.   The one anomaly was that factor analysis indicated that the ACI's 'attitude to social justice' scale sits more appropriately with the three CRS scales. Review of the similarity of focus of these four scales' items supported such a conclusion.

In their published literature, the developers of the SSES, CRS and ACI discussed the scales, twelve in total, validated within these instruments. Cronbach's alpha coefficient of reliability was calculated and used to validate the twelve inherent scales within the CSQ. The CSQ Cronbach's alpha measures were consistent with those reported by the developers of the three original instruments.

With the twelve scales identified and validated, Pearson's r correlation coefficients were calculated to ascertain linear relationships within the CSQ. Strong correlations were identified between: 'attitude to God' and 'attitude to Jesus' ($r = 0.925$); 'attitude to God' and 'attitude to prayer ($r = 0.891$); 'attitude to Jesus' and 'attitude to prayer' ($r = 0.877$); 'attitude to Christian practice' and 'attitude to the bible' ($r = 0.723$); 'civic awareness' and 'civic efficacy' ($r = 0.725$); and finally 'civic efficacy' and 'connection to community' ($r = 0.708$). All of these correlations were significant at the $p < .01$ level.

Given the post-hoc nature of this research, manipulation of a treatment was not possible. However, it was possible to ascertain the effect on scale scores of between-participant or within-sample variations. With statistical significance set at the 95% level, MANOVA was used to determine the effect of a number of factors on scale scores. These factors included participation/non-participation in community service, type of community service, duration of community service, prior community service involvement, and gender. The results of MANOVA analysis are outlined in Table 4.21 below.

TABLE 4.21
SUMMARY OF MANOVA ANALYSIS

Between participant (within-sample) factors	Scales demonstrating significant effects
Participation/non-participation in community service	'attitude to social justice'
Type of community service	'attitude to social justice'
Duration of community service	'civic efficacy' 'connection to community'
Prior community service involvement	'attitude to Christian practice' 'attitude to Jesus' 'attitude to prayer' 'attitude to social justice' 'attitude to bible' 'civic awareness' 'civic efficacy' 'connection to community' 'perception of personal appearance' 'perception of how I am perceived by others'
Gender	'attitude to social justice' 'civic awareness' 'perception of personal appearance'

$p < 0.05$

5 Interpretation and Discussion

5.1 Overview

The key focus of this research was to study the effect of participation in school-facilitated community service or service outreach programmes on students' self-esteem, community attachment, and attitude to Christianity.

This focus can be broken down to three questions: Did involvement in community service have an affect on student self-esteem? Did involvement in community service have an affect on student civic engagement? Did involvement in community service have an affect on student attitude to Christianity? Each question will be dealt with separately by drawing upon relevant aspects of the preceding data analysis.

Finally, in the light of the findings of the study, some comments about implications for school-facilitated community service programmes and recommendations regarding furthering research in this area are offered.

5.2 Community Service and Self-Esteem

The first area this research sought to explore was the effect of students' participation in community service on their sense of self-esteem. The research instrument, the *Community Service Questionnaire* (CSQ), incorporated the entire 20 items that comprised the *State Self Esteem Scale* (SSES). Confirmatory factor analysis verified the overall integrity of the SSES items within the CSQ. Subsequent reliability analysis, utilising Cronbach's alpha, confirmed the internal consistency of the SSES's three scales; 'perception of personal appearance', 'perception of personal

performance', and 'perception of how I am perceived by others' (see Table 3.2 for a description of the SSES items).

The CSQ employed a six point Likert scale, making 3.5 the scale mid-point. The sample mean scores for the scales were 'perception of personal appearance' $\bar{x} = 4.04$, perception of personal performance' $\bar{x} = 4.27$, and 'perception of how I am perceived by others' $\bar{x} = 3.65$. All these mean vales were in the slightly positive range (3.5 to 4.5).

MANOVA computations were undertaken to identify within-sample relationships. MANOVA was conducted utilising the three SSES scales as dependant variables and with five independent variables; participation/non participation in community service; length (hours duration) of community service, type of community service, prior/no prior community service experience, and gender.

MANOVA analysis of the CSQ data did not reveal any statistically significant evidence ($p < 0.05$) that participation in school organised community service initiatives had an effect, positive or negative, on student self-esteem.

However, counter-intuitively, it is evident that prior involvement in community service experiences is allied with a likelihood that self-esteem will be diminished. Analysis of variance ('prior community service experience' as the independent variable) revealed a negative relationship with both the SSES's 'perception of personal appearance' scale and the 'perception of how I am perceived by others' scale (see Table 4.18). It seems this group is slightly more self-conscious than those who have had no prior community since experience.

As outlined above in Table 4.18, the mean scores for those with prior community service experience were $\bar{x} = 3.48$ for the 'perception of personal appearance' scale and $\bar{x} = 3.09$ for the 'perception of how I am perceived by others' scale. Those with no prior community service experience recorded the slightly higher means of $\bar{x} = 4.17$ and $\bar{x} = 3.71$ respectively for the same scales. It is worth noting that the scale score mid-point is 3.5. That the mean scores for the 'prior community service' group fall below the mid-point indicates a slightly negative sense of self-esteem; whereas the 'no prior community' group report a slightly positive sense of self esteem in the aspects represented by the relevant scales.

This result for 'previous experience of community service' is clearly in contradiction with the evidence reported in the literature (Aspras, 1997; Billig, 2000a, 2000b, n.d.; Kielsmeier et al., 2004; Learning in Deed Organization, 2001). In light of findings of Wang et al. (1998) that the most significant impact in relation to self-esteem involved older students engaged in longer community service projects, it would have seemed plausible that prior community service experience would have in fact increased the likelihood that self-esteem would be enhanced by further such involvement. However, this has not been substantiated by the data in this instance. Perhaps this result is partially attributable to cohort size; the fact that over five times as many participants had not undertaken prior community service ($n = 137$) as those that had ($n = 25$).

Thought not directly related to community service involvement, analysis has revealed a statistically significant relationship between gender and self-esteem. For the scale 'perception of personal appearance' (see Table 3.2 for a description of the scale items), males have a mean of $\bar{x} = 4.32$ while females have a mean of $\bar{x} = 3.80$

(see Table 4.20). Statistically, it is probable amongst the population this sample represents that gender will influence how individuals perceive their personal appearance. Moreover, it is statistically likely that males will have a slightly higher perception of their personal appearance than will females.

In review, analysis of the CSQ data does not offer evidence of a statistically significant relationship between student participation in school-facilitated community service and student self-esteem. However a relationship, though negative in character, is evident between prior participation in community service and aspects of student self-esteem. Finally, an association between gender and perception of personal appearance is apparent, with males more likely than females to be more positive in this area of self-esteem.

5.3   Community Service and Sense of Community Engagement

The second key task of this research is to explore the influence students' community service experience has on their sense of engagement with their community. To facilitate this exploration, the CSQ incorporated the 24 items of the *Civic Responsibility Survey* (CRS) (see Table 3.3 for a description of the CRS items).

With respect to community engagement, factor analysis of the CSQ produced some unexpected results. In undertaking this confirmatory analysis, three factors were sought. Interestingly, while two items did not load on any factor and were subsequently removed, the entire set of items comprising the *Attitude to Christianity* instrument's 'attitude to social justice' scale loaded with the CRS items.

TABLE 5.1
ITEM COMPARISON – CRS AND ACI'S 'ATTITUDE TO SOCIAL JUSTICE' SCALE

CSQ Item #	Item Description
CRS	
Connection to community (α = 0.66)	
1	I benefit emotionally from contributing to the community, even if it is hard and challenging work.
20	I feel a personal obligation to contribute in some way to the community.
47	I have a strong and personal attachment to a particular community.
70	I have a lot of personal contact with people in the community.
CRS	
Civic awareness (α = 0.82)	
5	Becoming involved in community or social issues is a good way to improve the community.
16	I often discuss and think about how political, social, local, national or international issues affect the community.
19	I am aware of what can be done to meet the important needs in the community.
27	Being concerned about State and local issues is an important responsibility for everybody.
30	I am aware of the important needs in the community.
39	I understand how political and social policies or issues affect members in the community.
45	Helping other people is something I am personally responsible for.
54	It is easy for me to put aside my self-interest in favour of a greater good.
55	Being actively involved in community issues is everyone's responsibility, including mine.
74	It is my responsibility to help improve the community.
CRS	
Civic efficacy (α = 0.86)	
21	I participate in activities that help to improve the community, even if I am new to them.
23	Providing service to the community is something I prefer to let others do. ^
31	I feel I have the power to make a difference in the community.
33	I believe that I personally can make a difference in the community.
35	I am or plan to become actively involved in issues that positively affect the community.
**37	I try to find time or a way to make a positive difference in the community.
41	I believe that I can have enough influence to impact community decisions.
50	I often try to act on solutions that address political, social, local, national or international issues affect the community.
58	I try to encourage others to participate in community service.
66	I participate in political or social causes to help improve the community.
ACI	
Attitude to social justice (α = 0.74)	
4	Homeless and disadvantaged people don't concern me at all. ^
59	All Australians should respect people of a different race, nationality or religion.
69	I would like to be part of a group that helps other people.
72	I try to be friendly to others who are rejected or lonely.
73	It concerns me that a large part of the world suffers from hunger and malnutrition.

^ indicates item is reversed scored
** Item 37 deleted after Factor Analysis

Reliability testing of these four constructs revealed Cronbach's alpha values ranging from α = 0.66 to α = 0.86. Though each of these four scales represents a distinct construct, a review of the scale items (Table 5.1) confirms their close relationship.

The *Attitude to Christianity Inventory* (ACI) was developed to measure attitude to Christian belief and action (Dorman, 2001). A review of the nature of the items in these four scales reveals related themes. The five items comprising the 'attitude to social justice' scale do not contain specific religious language or connotations. Though consistent with Christian practice, a positive regard for social justice is also a credible manifestation of community engagement. Thus, it is reasonable to include the 'attitude to social justice' scale with the three CRS scales (and excluding it from assessments in relation to attitude to Christianity) when discerning the impact of students' community service experience on their sense of engagement with their community.

The literature also supports this notion that there is a clear nexus between 'attitude to social justice' and connection to community (Billig, n.d.; Learning in Deed Organization, 2001). Youniss and Yates (1999) and Campbell (2000) indicate that participation in community service projects contribute to the development of social conscience and a consequent enduring commitment to active involvement in political processes so as to bring about lasting change in community.

The means for the four scales were calculated. The 'attitude to social justice' scale had the highest mean of the 12 CSQ scales at $\bar{x} = 4.69$, evidencing a high regard for social justice. The means for the CRS scales were: 'civic awareness' $\bar{x} = 4.03$, 'civic efficacy' $\bar{x} = 3.57$, and 'connection to community' $\bar{x} = 3.93$. All CRS scale means were in positive territory, indicating slight positive support for the underlying constructs.

Computation of Pearson's *r* correlation coefficients identified two strong relationships among CRS scales (at the $p < 0.01$ level of significance); between 'civic awareness' and 'civic efficacy' ($r = 0.725$), between 'civic efficacy' and 'connection to community' ($r = 0.708$). A level of awareness of the community's issues and needs is associated with a similar level of confidence about taking action within the community. Likewise, the level of confidence about taking action within the community is associated with a similar level of a sense of being connected to the community.

MANOVA analysis identified a statistically significant relationship ($p < 0.01$) between participation in community service and 'attitude to social justice' (see Table 4.12). This was the only significant effect of participation in community service identified in this study. The 'attitude to social justice' scale mean for the group who did not participate in community service, though already relatively high at $\bar{x} = 4.43$, rose by approximately a half standard deviation ($sd = 0.85$) to $\bar{x} = 4.87$ for the community service participant group. Interpretation of the data from this study indicates that student participation in school-facilitated community service programmes is highly likely to result in a positive, though slight, increase in their attitude to social justice. (There is less than one percent likelihood that such an increase is the result of chance alone.)

This result is consistent with the body of literature on the effects of community service on students' sense of community engagement (Billig, n.d.; Campbell, 2000; Eisner, 2005; Learning in Deed Organization, 2001; Youniss & Yates, 1999). This research supports the assertion that it is highly likely that students' sense of engagement with community, particularly as expressed by their 'attitude to social

justice', will be enhanced through their involvement in school facilitated community service programmes.

Further MANOVA analysis revealed other statistically significant associations related to students' sense of community engagement. Type of community service, duration of community service, prior community service experience, and gender were all significant ($p < 0.05$) in their affect on various aspects of students' sense of community engagement.

The type of community service in which students engage was statistically significant in its relationship with the 'attitude to social justice' aspect of community engagement (see Table 4.14). Students involved in direct assistance in an education setting had the highest mean ($\bar{x} = 5.20$). Students involved in indirect assistance activities, for example charity collecting, had a similarly high mean ($\bar{x} = 5.17$), though in this case they had the smallest standard deviation ($sd = 0.44$) indicating that this group was gathered most closely around the mean. The lowest mean ($\bar{x} = 4.72$) was recorded by group involved in advocacy activities; though the sample size is unreliable at a low of $n = 2$. The finding of this study that 'direct assistance' community service was more efficacious in promoting civic engagement supports Hamilton and Fenzel's 1988 research (cited by Johnson & Notah, 1999).

Hours duration of community service has an effect of significance ($p < 0.05$) on both the 'civic efficacy' and 'connection to community' scales (see Table 4.16). The 40-100 hours duration band scores the highest mean for both scales, however the group size of $n = 1$ renders this assertion unreliable. Apart from the mean for the 'civic efficacy' scale recording a relatively low mean of $\bar{x} = 3.00$ for the group undertaking

more than 100 hours of community service, the scale means for the other 'hours duration' bands are only marginally different. All the same, it can be inferred from these statistics that the time spent engaged in community service has had a minor effect on participants' sense of community engagement.

All four scales evidenced the positive effect prior participation in community service has on students' sense of community engagement (see Table 4.18). It is statistically probable ($p < 0.01$) that if students had engaged previously in community service, in comparison to the group who had no previous community service experience, they would have a higher sense of social justice (a very high mean $\bar{x} = 5.44$ compared to the 'no prior experience' group mean $\bar{x} = 4.67$), their sense of belonging to their community would be enhanced ($\bar{x} = 4.61$ as compared with $\bar{x} = 3.86$), their awareness of the needs and issues in their community would be more acute ($\bar{x} = 4.56$ as compared with $\bar{x} = 3.95$), and they would be more positive about their capacity to take action in their community ($\bar{x} = 4.22$ as compared with $\bar{x} = 3.48$).

Finally, analysis indicates it is the females who are statistically more likely ($p < 0.01$) to be more supportive of social justice and to be more ware of the needs and issues within their community (see Table 4.20). Females' scale mean for 'attitude to social justice' was a high $\bar{x} = 5.11$, while males recorded a mean of $\bar{x} = 4.46$. In terms of the 'civic awareness' scale, the female mean was $\bar{x} = 4.24$, while for males it was $\bar{x} = 3.85$. This result concurs with Hamilton and Fenzel's findings (cited by Johnson & Notah, 1999) that girls demonstrate greater improvement in the area of social responsibility as an effect of participation in community service than do boys.

In summary, 'sense of community engagement' was the only personal domain that evidenced any relationship, positive or negative, with student participation in school-facilitated community service programmes. Students' attitude to social justice, an element of their sense of community engagement, was positively associated with their community engagement. Moreover, 'sense of community engagement' was also statistically correlated with type of community service undertaken, the duration of community service, prior community service experience, and gender.

5.4   Community Service and Attitude to Christianity

The third principal objective of this study was to probe the effect of school community service programmes on student attitude to Christianity. This research objective was particularly apposite for schools operating out of an explicitly Christian value system. All of the data for this study was collected from students enrolled in Catholic secondary schools.

The CSQ incorporated all 30 items from the *Attitude to Christianity Inventory* (ACI). The ACI comprises 6 scales relation to a variety of aspects of Christian belief and experience; attitude to God, attitude to Jesus, attitude to prayer, attitude to the Bible, attitude to Christian practice, and attitude to social justice. As discussed above in Section 4.6.2, factor analysis revealed that as part of an amalgam of instruments, all five items of the 'attitude to social justice' scale loaded with the 24 items of the *Civic Responsibility Survey*. As a result of a review of the character of all items involved, the decision was made for the purposes of this research to consider the 'attitude to social justice' scale as a contributing aspect of students' sense of community engagement. Consequently, only the five remaining ACI scales were considered

when investigating associations with student attitude to Christianity (see Table 3.4 for a description of the ACI items). Internal reliability of the five scales, as established by Cronbach's alpha, proved to be consistent with that reported by the ACI's developer.

Whole cohort scale means were calculated for the five ACI scales; 'attitude to God' $\bar{x} = 3.59$, 'attitude to Jesus' $\bar{x} = 3.63$, 'attitude to prayer' $\bar{x} = 3.59$, 'attitude to the Bible' $\bar{x} = 2.99$, and 'attitude to Christian practice' $\bar{x} = 3.09$. Of the CSQ's 12 scale means, the only two to fall below the 3.5 mid-point were 'attitude to the Bible' and attitude to Christian practice'. On the whole the sample was slightly negative in attitude to these aspects of Christianity. Scale means for student attitude to God, Jesus and prayer fell only marginally above the mid-point indicating only a slight positive regard.

Calculation of Pearson's r correlation coefficients identified several strong relationships among ACI scales (at the $p < 0.01$ level of significance); between 'attitude to God' and 'attitude to Jesus' ($r = 0.925$), between 'attitude to God' and 'attitude to prayer'($r = 0.891$), between 'attitude to Jesus' and 'attitude to prayer'($r = 0.877$), and between 'attitude to the Bible' and 'attitude to Christian practice'($r = 0.723$). While not implying causation between the pairs, knowledge of the value of one would lead to a confident prediction of the value of the other. In this case, a low scale score for 'attitude to God' would indicate a similarly low scale score for 'attitude to Jesus'. Attitude to God, Jesus and prayer enjoyed a three way correlation. It is interesting to note that 'attitude to the Bible' correlated with 'attitude to Christian practice', and that these two scales were the least favoured within the sample.

Investigation through MANOVA did not identify any statistically significant relationship between participation in community service and student attitude to Christianity.

The only relationship of significance ($p<0.01$) identified via MANOVA was between all of the ACI scales (with the exception of 'attitude to God') and the independent variable, prior community service experience (see Table 4.18). Bearing in mind the mid-point between negative regard and positive regard is 3.5, most of the scale means evidence a move out of slight negative territory (as for those with no prior community service experience) to slight positive territory for those who have previously undertaken community service. Scale means for those with no prior community service experience as compared to those with prior experience were as follows: 'attitude to Jesus' $\bar{x} = 3.58$ as compared with $\bar{x} = 4.20$, 'attitude to prayer $\bar{x} = 3.56$ as compared with $\bar{x} = 4.23$, 'attitude to the Bible $\bar{x} = 2.95$ as compared with $\bar{x} = 3.66$, and 'attitude to Christian practice $\bar{x} = 3.00$ as compared with $\bar{x} = 3.58$. These results raise the question as to why previous community service experience would be linked with a more positive regard for Christianity. One possible explanation, as raised in the literature, is that teen church goers are more likely to volunteer for community service (Smith & Faris, 2002a), which would inturn be reflected in a greater representation in the 'prior community service' group.

Summing up, means for the scales related to student attitude to Christianity were the lowest recorded overall. Though analysis did not find any statistically significant relationship between participation in community service and attitude to Christianity, there is a link evident between prior community service experience and a more positive stance towards Christian belief and activity.

5.5 Implications for School Community Service Programmes and further Research

As observed in the orientation to this research project, many schools are facilitating community service programmes for their students because of the presumed benefits to students, the community and the school itself. There is a great body of literature pointing to the benefits offered by community service, particularly when such service is designed to meet real needs within the community, and when service activities are strongly linked to the classroom curriculum (Johnson & Notah, 1999; Kielsmeier et al., 2004; Learning in Deed Organization, 2001; National Commission on Service Learning, 2002; Stewart, 2002). To successfully achieve these objectives, community service cannot be *ad-hoc* in nature; it requires significant commitment in terms of planning and resources (Eisner, 2005).

The fact that this study did not identify a statistically significant link between community service participation and self-esteem should not cast doubt on the efficacy of service experiences in this regard. As it was beyond the scope of this study, the research design did not provide for multiple measures over time for analysis of variance. A research design selecting community service participation as the treatment, and incorporating pre-test and post-tests for both treatment and control groups would have likely identified the positive effect on student self-esteem evidenced in the literature (Johnson & Notah, 1999).

The significant finding of this study is that community service involvement is associated with an increased sense of engagement with community, particularly as expressed by student commitment to social-justice. Commitment to social justice is conceptually linked to being aware of needs within the community, particularly

needs resulting from inequities, and a sense of confidence that such needs should and can be addressed.

Catholic educators can take heart from this finding as it affirms success in terms of the contribution such programmes make to the formation of responsible citizens who are committed to the promotion of peace and justice; a key objective of Catholic schooling. A caveat worth making though is that individuals and organisations operating out of a religious ethic and value system do not hold a copyright on 'goodness and justice'. Promoting a sense of justice amongst young people is not exclusively in the domain of religious organisations. A longitudinal study would be useful in understanding whether students who engage in community service, particularly when such service is mandated by the school, carry forward a commitment to service and volunteerism into their adult lives.

Perhaps most disappointing to Catholic educators is that the study does not identify a significant association between participation in community service and enhanced attitudes to Christianity. 'Attitude to social justice', while having a specific religious element to it, it is not uniquely so. Many people who have a commitment to social justice do so out of a motivation or conviction disassociated of any specific religious or spiritual character (Australian Bureau of Statistics, 2001; Australian Government Department of Families Community Services and Indigenous Affairs, 2005). Given that the religious indicators (with the exception of attitude to social justice) show no correlation of effect from participation in community service activities, it seems reasonable to conclude that it would be unsafe to claim the effect on the scale 'attitude to social justice' as a religious motivation. Such a conclusion would also

accord with the evidence derived from factor analysis indicating 'attitude to social justice' as forming part of the overall appreciation of community engagement.

Although the literature speaks of the increased likelihood of young people with a religious commitment being more likely to engage in community service and volunteerism (Greenberg, 2005; Smith & Faris, 2002a), it does not assert that engagement in volunteerism and service activities leads to increased religious commitment. While volunteerism may be an ideal expression of religious commitment, the question remains as to how personal faith and religious commitment can be engendered in young people.

Of further concern to Catholic educators is the apparent low status that the Bible and Christian practice is held in relation to the other constructs (God, Jesus, and prayer) contributing to attitude to Christianity. 'Attitude to the Bible' and 'attitude to Christian practice' are also very strongly correlated. It would be worthwhile in a future study investigating this correlation to gain a deeper understanding of the reasons behind student attitudes in this area.

In summary, analysis of the findings of this research gives grounds for making the following recommendations for future research. It is recommended that:

- further research, incorporating a significantly larger sample, be undertaken seeking to confirm the results of this study.

- adoption a research design incorporating multiple measures over time (pre-test and post-test) to more effectively assess community service participation on the dependant variables.

- there be a specific examination of the effect of various resourcing levels on the efficacy of service outreach and community service programmes

- the undertaking of a longitudinal study to examine the association between student community service involvement and rates of volunteerism in later adult life.

- investigation of the underlying causes of students' apparent low regard of the Bible and Christian practice.

5.6 Conclusion

Community service programmes are increasingly contributing to the broad curriculum of Australian schools, and Australian Catholic schools in particular. This research has investigated the effect student participation in community service activities has had on student self-esteem, attachment to community, and attitude to Christianity.

The key finding from this research was that student participation in school facilitated community service programmes has a statistically significant effect on student engagement with community as expressed in 'attitude to social justice. However, no statistically significant effect was evident in terms of self-esteem or attitude to Christianity.

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7 Appendix A – the CSQ Questionnaire

Community Service Questionnaire

Thank you for agreeing to participate in this survey.

This survey is part of a Research Project investigating the effect of schools' Community Service projects.

It is specifically looking at three areas of effect:
- Participants' self-esteem
- Participants' sense of connection with their community
- Participants' attitude to Christianity.

Please spend a minute giving some general information before moving on to the Questionnaire.

Your Gender: Male ☐   Female ☐
Your Year Level at School: _____

Please briefly describe the Community Service you are/have been involved in (for example: assisting with Horse-riding for the disabled; visiting at a Retirement Village). _____

_____

_____

How long will this community service be? (*for example; 20 hours over four weeks*). _

_____

Are you involved in community service activities other than this school project? If **YES**, please give a brief description (*for example: St Vincent De Paul Group; Clean Up Australia*)? **YES** ☐   **NO** ☐

_____

_____

_____

Questionnaire Instructions

This questionnaire has 74 items concerning self-perception, attitudes towards your community and attitudes to Christianity.
There are no right or wrong answers.
It is your opinion at this point of time that is being sought here.
Circle the response number that most closely matches your opinion about the statement.
Do not spend too long on any one question.

All information is **confidential** and all questionnaire responses are **anonymous**. Consent forms are kept separate from Survey forms at all times. You will not be able to be identified from the answers you give in this Survey. Please **DO NOT** write your name on this questionnaire.
Thanks!

	Please read each Item Statement carefully, then respond by circling one number as appropriate under either Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, Agree, or Strongly Agree.						
	Item statement	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	I benefit emotionally from contributing to the community, even if it is hard and challenging work.	1	2	3	4	5	6
2	I am interested in Scripture readings from the Bible.	1	2	3	4	5	6
3	I am worried about whether I am regarded as a success or failure.	1	2	3	4	5	6
4	Homeless and disadvantaged people don't concern me at all.	1	2	3	4	5	6
5	Becoming involved in community or social issues is a good way to improve the community.	1	2	3	4	5	6
6	I feel inferior to others at this moment.	1	2	3	4	5	6
7	I know that Jesus is very close to me.	1	2	3	4	5	6
8	The idea of God means much to me.	1	2	3	4	5	6
9	I am worried about what other people think of me.	1	2	3	4	5	6
10	The Bible is an important book to me.	1	2	3	4	5	6
11	I feel confident about my abilities.	1	2	3	4	5	6
12	I feel that others respect and admire me.	1	2	3	4	5	6
13	I am worried about looking foolish.	1	2	3	4	5	6
14	I think that praying is a good thing.	1	2	3	4	5	6
15	I like to hear Bible stories.	1	2	3	4	5	6
16	I often discuss and think about how political, social,	1	2	3	4	5	6

	Item statement	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
	local, national or international issues affect the community.						
17	I think going to church is a waste of time.	1	2	3	4	5	6
18	I would go to church on Sunday even if free to stay away.	1	2	3	4	5	6
19	I am aware of what can be done to meet the important needs in the community.	1	2	3	4	5	6
20	I feel a personal obligation to contribute in some way to the community.	1	2	3	4	5	6
21	I participate in activities that help to improve the community, even if I am new to them.	1	2	3	4	5	6
22	I feel good about myself.	1	2	3	4	5	6
23	Providing service to the community is something I prefer to let others do.	1	2	3	4	5	6
24	I find it boring to listen to the Bible.	1	2	3	4	5	6
25	I think the Bible is out of date.	1	2	3	4	5	6
26	I know that God helps me.	1	2	3	4	5	6
27	Being concerned about State and local issues is an important responsibility for everybody.	1	2	3	4	5	6
28	Saying my prayers helps me a lot.	1	2	3	4	5	6
29	I feel that I have less scholastic ability right now than others.	1	2	3	4	5	6
30	I am aware of the important needs in the community.	1	2	3	4	5	6
31	I feel I have the power to make a difference in the community.	1	2	3	4	5	6
32	I feel like I am not doing well.	1	2	3	4	5	6
33	I believe that I personally can make a difference in the community.	1	2	3	4	5	6
34	I believe that Jesus still helps me.	1	2	3	4	5	6
35	I am or plan to become actively involved in issues that positively affect the community.	1	2	3	4	5	6
36	Christians should participate	1	2	3	4	5	6

Please read each Item Statement carefully, then respond by circling one number as appropriate under either Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, Agree, or Strongly Agree.

	Item statement	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
	regularly in church ritual						
37	I try to find time or a way to make a positive difference in the community.	1	2	3	4	5	6
38	I am dissatisfied with my weight.	1	2	3	4	5	6
39	I understand how political and social policies or issues affect members in the community.	1	2	3	4	5	6
40	I feel concerned about the impression I am making.	1	2	3	4	5	6
41	I believe that I can have enough influence to impact community decisions.	1	2	3	4	5	6
42	Prayer helps me a lot.	1	2	3	4	5	6
43	I feel self-conscious.	1	2	3	4	5	6
44	I am pleased with my appearance right now.	1	2	3	4	5	6
45	Helping other people is something I am personally responsible for.	1	2	3	4	5	6
46	I want to love Jesus.	1	2	3	4	5	6
47	I have a strong and personal attachment to a particular community.	1	2	3	4	5	6
48	God is very real to me.	1	2	3	4	5	6
49	I feel unattractive.	1	2	3	4	5	6
50	I often try to act on solutions that address political, social, local, national or international issues affect the community.	1	2	3	4	5	6
51	I feel satisfied with the way my body looks right now.	1	2	3	4	5	6
52	I feel frustrated or rattled about my performance.	1	2	3	4	5	6
53	I feel that I am having trouble understanding things I read.	1	2	3	4	5	6
54	It is easy for me to put aside my self-interest in favour of a greater good.	1	2	3	4	5	6
55	Being actively involved in community issues is everyone's responsibility, including mine.	1	2	3	4	5	6
56	I know that Jesus helps me.	1	2	3	4	5	6
57	I feel as smart as others.	1	2	3	4	5	6
58	I try to encourage others to participate in community service.	1	2	3	4	5	6
59	All Australians should respect	1	2	3	4	5	6

Please read each Item Statement carefully, then respond by circling one number as appropriate under either Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, Agree, or Strongly Agree.

	Item statement	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
	people of a different race, nationality or religion.						
60	I think that Christians should go to church on Sunday.	1	2	3	4	5	6
61	I feel confident that I understand things.	1	2	3	4	5	6
62	I feel displeased with myself.	1	2	3	4	5	6
63	The church is very important to me.	1	2	3	4	5	6
64	I believe that God listens to prayers.	1	2	3	4	5	6
65	I think that saying prayers does no good.	1	2	3	4	5	6
66	I participate in political or social causes to help improve the community.	1	2	3	4	5	6
67	God means a lot to me.	1	2	3	4	5	6
68	God helps me to lead a better life.	1	2	3	4	5	6
69	I would like to be part of a group that helps other people.	1	2	3	4	5	6
70	I have a lot of personal contact with people in the community.	1	2	3	4	5	6
71	Jesus doesn't mean anything to me.	1	2	3	4	5	6
72	I try to be friendly to others who are rejected or lonely.	1	2	3	4	5	6
73	It concerns me that a large part of the world suffers from hunger and malnutrition.	1	2	3	4	5	6
74	It is my responsibility to help improve the community.	1	2	3	4	5	6

Please read each Item Statement carefully, then respond by circling one number as appropriate under either Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, Agree, or Strongly Agree.

End of Questionnaire

Thank you for your participation today!

8 Appendix B – HREC Documentation

Australian Catholic University
Brisbane Sydney Canberra Ballarat Melbourne

✠ ACU National

Human Research Ethics Committee

Committee Approval Form

Principal Investigator/Supervisor: A/P Allan Doring   Brisbane Campus

Co-Investigators: Mr William Foster   Brisbane Campus

Student Researcher: Mr Luke Reed   Brisbane Campus

Ethics approval has been granted for the following project:
The effect of participation in school-facilitated community service programs on student's self-esteem, sense of community engagement and attitudes to Christianity.

for the period: 16th August 2004 - 30th June 2005

Human Research Ethics Committee (HREC) Register Number: Q2003.04-23

The following underlined standard conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans* (1999) apply:

(i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
   - security of records
   - compliance with approved consent procedures and documentation
   - compliance with special conditions, and

(ii) that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
   - proposed changes to the protocol
   - unforeseen circumstances or events
   - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than minimum risk. There will also be random audits of a sample of projects considered to be of minimum risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

Signed: .... Date: ....
          (Research Services Officer, McAuley Campus)

(Committee Approval.dot @ 28.06.2002)   Page 1 of 1

PARENT/GUARDIAN CONSENT FORM

[COPY FOR PARENTS/GUARDIANS TO KEEP]

TITLE OF PROJECT: The effect of participation in school-facilitated community service programmes on students' self-esteem, sense of community engagement and attitudes to Christianity.

STAFF SUPERVISOR: Associate Professor Allan Doring

STUDENT RESEARCHER: Mr Luke Reed

PROGRAMME IN WHICH ENROLLED: Master of Education (Research)

I .... (*the parent/guardian*) have read (*or, where appropriate*, have had read to me) and understood the information provided in the Letter to the Participants. Any questions I have asked have been answered to my satisfaction. I agree that my child, nominated below, may participate in this activity, realising that I can withdraw my consent at any time. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify my child in any way.

NAME OF PARENT/GUARDIAN:

(block letters)

SIGNATURE ....…… DATE......................................

NAME OF CHILD

(block letters)

SIGNATURE OF SUPERVISOR:

DATE: 18 October 2004

SIGNATURE   OF   STUDENT   RESEARCHER:

DATE: 18 October 2004

PARENT/GUARDIAN CONSENT FORM

[COPY TO SUBMIT TO RESEARCHER]

TITLE OF PROJECT: The effect of participation in school-facilitated community service programmes on students' self-esteem, sense of community engagement and attitudes to Christianity.

STAFF SUPERVISOR: Associate Professor Allan Doring

STUDENT RESEARCHER: Mr Luke Reed

PROGRAMME IN WHICH ENROLLED: Master of Education (Research)

I .... (*the parent/guardian*) have read (*or, where appropriate*, have had read to me) and understood the information provided in the Letter to the Participants. Any questions I have asked have been answered to my satisfaction. I agree that my child, nominated below, may participate in this activity, realising that I can withdraw my consent at any time. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify my child in any way.

NAME OF PARENT/GUARDIAN:

(block letters)

SIGNATURE ....……   DATE.......................................

NAME OF CHILD

(block letters)

SIGNATURE OF SUPERVISOR:

        DATE: 18 October 2004

SIGNATURE OF STUDENT RESEARCHER:

        DATE: 18 October 2004

ASSENT OF PARTICIPANTS AGED UNDER 18 YEARS

I ……………………………………… (*the participant aged under 18 years*) understand what this research project is designed to explore. What I will be asked to do has been explained to me. I agree to take part in the project, realising that I can withdraw at any time without having to give a reason for my decision.

NAME OF PARTICIPANT AGED UNDER 18:

(block letters)

SIGNATURE ....   DATE.................................………...

SIGNATURE OF SUPERVISOR:

DATE: 18 October 2004

SIGNATURE OF STUDENT RESEARCHER:

DATE:. 18 October 2004

ASSENT OF PARTICIPANTS AGED UNDER 18 YEARS

I …………………………………… (*the participant aged under 18 years*) understand what this research project is designed to explore. What I will be asked to do has been explained to me. I agree to take part in the project, realising that I can withdraw at any time without having to give a reason for my decision.

NAME OF PARTICIPANT AGED UNDER 18:

(block letters)

SIGNATURE ....   DATE.......................………...

SIGNATURE OF SUPERVISOR:

DATE: 18 October 2004

SIGNATURE OF STUDENT RESEARCHER:

DATE:. 18 October 2004

Request FROM SCHOOL AUTHORITIES for Permission to Collect Research Data

TITLE OF PROJECT: The effect of participation in school-facilitated community service programmes on students' self-esteem, sense of community engagement and attitudes to Christianity.

STAFF SUPERVISOR: Associate Professor Allan Doring

STUDENT RESEARCHER: Mr Luke Reed

PROGRAMME IN WHICH ENROLLED: Master of Education (Research)

Dear Principal

As an enrolled post-graduate student in the Master of Education (Research) programme at ACU, McAuley Campus, Mr Luke Reed is conducting research into the effect of School Community Service programmes on students' self-esteem, community engagement and attitude to Christianity. Permission is sought from you as the School's competent authority for the gathering of research data in your school from students in Years 11, and 12.

Data will be gathered through participants' voluntary and anonymous completion of questionnaires focusing on self-esteem, sense of community engagement and attitudes to Christianity. Participants will be invited to anonymously complete a questionnaire on attitudes, requiring responses along a sliding scale. It is expected that the questionnaire could be completed in approximately twenty minutes. The questionnaire will be administered before and after students participate in your school's community service programme, thus providing a measure of the effect of the programme.

It is envisaged that the probability and magnitude of harm or discomfort anticipated to be experienced by participants in this research will not be greater in and of themselves than those ordinarily encountered in daily life.

This research is likely to benefit participants through the insights gained into the effects of community service programmes. At a more general level, this research will contribute to the body of knowledge on self-esteem, community engagement and attitudes to Christianity and related influencing factors. Research findings will be presented in a Masters of Education thesis paper to the Australian Catholic University. Further, results from the study may be summarised in a way that does not in any way identify participants and appear in publications or be provided to other researchers

Please be aware that students are free to refuse consent altogether without having to justify that decision, or to withdraw consent and discontinue participation in the study at any time without giving a reason. If students do choose not to consent, or at any stage choose to withdraw their consent, there will not be any ramifications for their pastoral care or academic progress.

Participants' confidentiality will be maintained at all times. Apart from a code to enable the matching of 'before' and 'after' questionnaires, participants will not be required to provide any information that will be personally identifying. Reporting of results will only be on an aggregated basis. Individual participants will be unidentifiable in reporting of results. Consent forms will be kept separate from questionnaires.

Any questions concerning the procedures of this project should be directed to the Research Supervisor:
Associate Professor Allan Doring
        on telephone number 07 3623 7152
        School of Education
        Australian Catholic University
        Brisbane Campus
        PO Box 456
        Virginia QLD 4014

If you so wish, feedback on the results of this research will be provided to you at the completion of the study. Results will be accessible through the Research Supervisor.

The Human Research Ethics Committee at Australian Catholic University has approved this study.

In the event that you have any complaint or concern about the way the School or its students have been treated during the study, or if you have any query that the Supervisor and Student Researcher have not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee care of the nearest branch of the Research Services Unit.

Chair, HREC
C/o Research Services
Australian Catholic University
Brisbane Campus
PO Box 456
Virginia QLD 4014
Tel: 07 3623 7294
Fax: 07 3623 7328
Any complaint or concern will be treated in confidence and fully investigated. The complainant will be informed of the outcome.

Your response at the earliest possible convenience would be greatly appreciated.

SIGNATURE OF SUPERVISOR:

DATE: 18 October 2004

SIGNATURE OF STUDENT RESEARCHER:

DATE: 18 October 2004

INFORMATION LETTER TO PARTICIPANTS

TITLE OF PROJECT: The effect of participation in school-facilitated community service programmes on students' self-esteem, sense of community engagement and attitudes to Christianity.

STAFF SUPERVISOR: Associate Professor Allan Doring

STUDENT RESEARCHER: Mr Luke Reed

PROGRAMME IN WHICH ENROLLED: Master of Education (Research)

Dear Student

This letter is an invitation for you to participate in a research study project, the purpose of which is to investigate the effect that school facilitated community service experiences have on Secondary School Students' self-esteem, sense of community engagement and attitude to Christianity. Data will be gathered through the voluntary and anonymous completion of a questionnaire focusing on these areas.

It is envisaged that the probability and magnitude of harm or discomfort anticipated to be experienced by participating in this research will not be greater in and of themselves than those ordinarily encountered in daily life.

If you agree to participate you will be asked to anonymously complete a questionnaire on your attitudes, requiring responses along a sliding scale. It is anticipated that the questionnaire could be completed in approximately twenty minutes.

This research is likely to benefit you and your fellow students through the insights gained into the effects of community service programmes. At a more general level, this research will contribute to the body of knowledge on self-esteem, community engagement and attitudes to Christianity and related influencing factors. Research findings will be presented in a Masters of Education thesis paper to the Australian Catholic University. Further, results from the study may be summarised in a way that does not in any way identify participants and appear in publications or be provided to other researchers.

Please be aware that you are free to refuse consent altogether without having to justify that decision, or to withdraw consent and discontinue participation in the study at any time without giving a reason. If you do choose not to participate, or at any stage choose to withdraw your consent, there will not be any ramifications for your care or academic progress as a student of your School.

Your confidentiality will be maintained at all times. You will not be required to provide any information that will be personally identifying and consent forms will be kept separate from the questionnaires. Reporting of results will be aggregated on the basis of groupings of participants. Individual participants will be unidentifiable in reporting of results.

Any questions concerning the procedures of this project should be directed to:
the Research Supervisor Associate Professor Allan Doring

      on telephone number 07 3623 7152
      School of Education
      Australian Catholic University
      Brisbane Campus
      PO Box 456
      Virginia QLD 4014

If you so wish, feedback on the results of this research will be provided to you at the completion of the study. Aggregate feedback will be provided to each participating school. If you wish to personally receive a copy of the study's findings this can be arranged through the Research Supervisor.

The Human Research Ethics Committee at Australian Catholic University has approved this study.

In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Supervisor and Student Researcher have not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee care of the nearest branch of the Research Services Unit.

Chair, HREC
C/o Research Services
Australian Catholic University
Brisbane Campus
PO Box 456
Virginia QLD 4014
Tel: 07 3623 7294
Fax: 07 3623 7328

Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

If you agree to participate in this project, you should sign both copies of the Consent Form, retain one copy for your records and return the other copy to the Researcher.

Thank you for giving this request your consideration.

SIGNATURE OF SUPERVISOR:

      DATE: 18 October 2004

SIGNATURE OF STUDENT RESEARCHER:

      DATE: 18 October 2004