

**THE “LIMIT” EXPERIENCE OF SENIOR HIGH
SCHOOL STUDENTS: A STUDY ACROSS FOUR
CATHOLIC HIGH SCHOOLS.**

Submitted by

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STATEMENT OF AUTHORSHIP

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.

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

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

All research procedures reported in this thesis received the approval of the relevant Ethics / Safety Committees (where required).

Statistical analysis of the data presented in the thesis was provided with the assistance of Mr Bill Foster of Australian Catholic University, McAuley Campus, Brisbane.

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20 September 2001

The “limit” experience of senior high school students: A study across four Catholic High Schools.

Abstract:

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit experience” among some Catholic High School students in their final year at selected secondary colleges in Brisbane. “Limit” experience was defined as **“an experience that reveals a reality of life beyond the self, beyond the here and now.** It may be recognition of our own fragility and vulnerability as much as a joyous awareness of a reality beyond our normal encounter with life.”

The research work of the Alistair Hardy Research Centre and of Hay (1987) in particular has centred on the question, asked in various ways:

Have you ever been aware of, or influenced by, a presence or power, whether you call it God or not, which is different from your everyday life?

The survey instrument for this research was designed to divorce questions on such experiences from the direct reference to the term “religious”, although individuals might indeed interpret them as “religious”.

To approach the issue, an extensive open-ended survey was administered to senior high school students. It was designed first to determine the extent of recognition of such experiences among the students and second to examine whether factors such as home background, regular religious practice, type of school, subject choice or co-curricula activities may make a difference in enhancing the awareness of such experience.

This research has also been designed to enable comparison with similar studies. Major research in Australia by Flynn (1975, 1985, 1993) highlighted the factors above as influencing student achievement. Flynn also made connections to religious practice and

attitudes to church but not to religious experience as such. Robinson and Jackson (1987) had undertaken extensive research on religious experience in Great Britain that also has important parallels to this research. Some of the techniques of both studies and in some cases actual questions have formed part of this research instrument. This research has gone further than both studies by incorporating the Hay (1987) categorisation of types of religious experience to form the basis for direct questions on student experience.

The data gathering, treatment and analysis focused on four catholic secondary schools in the Brisbane Archdiocese. While the research focus was by definition limited, and while the results have of necessity to be treated with some caution before wider generalisation, the outcomes of the research do illuminate some of the important issues identified in the literature.

The results of the survey showed that over 90% of the respondents could affirm some association with a “limit” experience along the lines of the Hay (1987) framework. With significant strengthening of criteria to allow for meaningful statistical analysis, this reduced to 76% of respondents. Results for this smaller group were shown to be essentially independent of home background, type of school attended, co-curricula programs and level of religious practice. With the significant exception of religious education, their recognition of “limit” experience was also independent of subject choice. This last is in contrast to the earlier work of Robinson and Jackson (1987).

Exploratory analyses of the data enabled comparisons to be made with a suggested framework for “spiritual sensitivity” and the context of “relational consciousness”, both of which were first proposed by Hay and Nye (1998). This suggests some possible directions for further research into adolescent spirituality. The exploratory analyses also highlight some of the conflict between the reality of these experiences for students and their experience of dissonance with institutional religion.

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One undertakes a thesis with some feelings of trepidation re the magnitude of the work involved and the likelihood that it will actually be possible to complete it in one's lifetime, given the other commitments of daily life that must still be given attention. In some ways, to have completed the work is as much a credit to all who have supported a sometimes irascible and driven individual throughout the project as it is to the person who finally completes it.

To complete the work, in my experience anyway, requires both a passionate interest in the subject matter and a dogged belief that what might be produced will be of benefit in some way to future generations. Born of my own experience in teaching religious education classes with senior high school students, the passionate interest in the subject was created from many years of feeling that I was privileged to be allowed an insight into a deep spirituality which, I believed, existed in these young people. The dogged belief in making a difference came from happening upon, somewhat by accident, a little book on the experiential approach to R.E. teaching of which David Hay was a co-author. This gave me a supportive framework to continue a similar approach in my own teaching at the time and opened the doors to so much previous and associated work in this area of research by Hay, Hardy and many others.

The final result has required the support of my employers and colleagues. I am particularly grateful for the support of Mr William Griffiths, Director of Catholic Education in the Northern Territory and Mr David Hutton, Executive Director of Brisbane Catholic Education for their support of various phases of this research. Thanks is also due to the Principals of the Brisbane Secondary Colleges who gave permission for their students to be involved in the research project and the staff who assisted with the administration of the survey and obtaining of the required parental permissions. In this regard, particular thanks are due to Mrs. Berenice McLellan (San Sisto College), Br. Tony Galleta (Marist College, Rosalie), Br. Peter Carroll (St. Peter Claver College) and

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I trust this work will both add to the knowledge in the discipline, and, more importantly, encourage religious educators in our schools to continue to provide a wholistic education for our young people.

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LIST of DEFINITIONS

(as used in this research thesis)

<u>AHRC</u>	Alister Hardy Research	<u>Congregational College</u>	secondary
Centre		school owned and administered by a	
		religious congregation	
<u>Archdiocesan College</u>	secondary	<u>Contingency</u> (experience of)	coming
high school owned and administered by		to terms with the meaning of our	
the Archdiocese through Brisbane		comings and goings in life and with its	
Catholic Education		final end	
<u>Awareness sensing</u>	being attentive to	<u>Interpretative experience</u>	experience
one's attention or 'being aware of one's		in which a person already has a	
awareness'		framework of belief and interprets	
		events in the light of this	
<u>Christianity</u>	the religion derived from	<u>"Limit" experience</u>	an experience that
Jesus Christ, based on the Bible as		reveals a reality of life beyond the self,	
sacred scripture, and professed by		beyond the here and now. It may be	
Eastern, Roman Catholic, and Protestant		recognition of our own fragility and	
bodies		vulnerability as much as a joyous	
		awareness of a reality beyond our	
<u>Church</u>	the body of Christian	normal encounter with life.	
believers			
<u>Cognitive</u>	based on cognition - the	<u>Manifoldness</u>	the
act or process of knowing including both		interpenetration between what can be put	
awareness and judgment		into words and what cannot that is	
		characteristic of all "limit" experience	
		(Ahern 1990)	

Mystery Sensing an awareness of aspects of our life experience which are in principle incomprehensible

Mystical experience may have four characteristics: the subject may apprehend an ultimate reality; feel free of time and space; have a sense of oneness or experience bliss or serenity

Numinous experience an experience of a power or presence beyond the self

“Peak” experience a term used by Maslow (1964) to describe “ecstatic” or “transcendent” experiences: perceiving the whole universe as an integrated whole; experiencing emotions of wonder, awe, reverence, humility; a sense of timelessness; a sense of goodness and well being.

Quasi-sensory experience primarily consisting of a physical sensation, such as hearing, touch or smell

Regenerative experience a type of experience having the effect of renewing the subject’s faith

Relational Consciousness a type of consciousness underlying ordinary conscious activity that enables an individual to be receptive to and understand their “religious” or “limit” experience

Religion an institutionalised system of religious attitudes, beliefs, and practices

Religiosity the external expression of a person's belief structure as evidenced by such things a church attendance, number of prayers said or professed affiliation with some particular church group

“Religious” experience an experience interpreted by an individual as relating to or manifesting an ultimate reality or deity

RERU (or RERC) Religious Experience Research Unit (or Centre) first established by Sir Alister Hardy at Westminster College, Oxford.

Revelation something that is revealed by God to humans

Revelatory experiences characterised by sudden convictions, inspiration or enlightenment

an experience of value that transcends personal concerns

Scientific method a path of research relating to objective study of an issue and following the principles of science

Unitive experience an experience that all things are one

Self-actualisation to become all we are capable of becoming. Maslow's prerequisite for achieving self-actualisation is to fulfil the needs that stand lower in his hierarchy of needs.

Spirituality sensitivity or attachment to religious values; associated with love, inspiration, wholeness, depth, mystery and personal devotion. Not formally religious.

Transcendent experience an experience extending or lying beyond the limits of ordinary experience

Trigger (experience) the event or sequence of events immediately preceding a "limit" experience

Value sensing part of a progression from self-centred emotion to

Chapter 1

The Research Defined

1.1 Introduction

This research study looks at the occurrence and recognition of “limit experience “ and “religious experience” among some Catholic High School students in Brisbane secondary colleges.

Tracy (1975, p. 64) believes that the task of fundamental theology is a twofold reflection upon: first, the meanings present in our “common human experience”; second, the meanings present in the Christian fact. “Limit” experience he defines as one part of that common human experience. He believes that (p. 65):

most human beings, effectively, and sometimes reflectively, realize that an appeal to experience is not always an appeal to what I can see, taste, touch smell or hear; much less to what I can scientifically verify from controlled experiment.

Questions such as the meaning of our existence, what is our destiny and in particular, why do we have to endure suffering, are timeless and lead us to the edge of our understanding.

There are also times when we seem able to stand aside from the norm. We can be caught up in the ecstasy of the moment. Listening to music, walking alone in the bush or being awed by the beauty of nature can produce such feelings. We can feel “at one” with the scene, or perhaps completely above it, as a spectator, as if watching another world. At still other times we may be aware of a “presence” beyond and more powerful than ourselves.

For instance, (Maxwell & Tschudin, 1990, p. 81) this account:

..I was immediately overwhelmed by the feeling of Presence/Light/Love, all around; it seemed everywhere, I really can't explain. It appeared to last a minute or two, although I can't be sure. I lost all sense of time. I was left with an indescribable feeling of peace and joy.

And again, (p.97)

..I heard no voice but something within me told me the exact time the rain would cease, so that I went with perfect assurance out of that old building... and told P quite simply 'The rain will stop at 5:15 pm.'

And also, (p. 47)

Suddenly my mind 'felt' as if it had changed gear ...I still saw the birds and everything around me but instead of standing and looking at them, I **was** them and they were me. I was also the sea and the sound of the sea and the grass and the sky. Everything and I were the same, all one.

In an effort to give a name to such experiences several terms have been used: religious, mystical, numinous, transcendent, peak. As will be explained further below, this research will prefer to use the term "limit" experience to cover the wide variety of different experiences that have been recorded in the research of others.

My own interest in this field of research stems from many years of teaching senior high school students. Many of the confidential accounts they wrote of their own spirituality over the years are exactly the type of account that would fall within my definition of "limit". I could not keep the confidential records, but have remained interested in the frequency of such experiences among our young people and the relevance they may have for religious educators.

1.2 Limit Experience

Sir Alister Hardy first laid the foundations of this research in Great Britain. Hardy (1978, 1997) began via public advertisement, among other methods, to collect and classify individual descriptions of experiences beyond the everyday. Hardy was Professor of Zoology at Oxford for many years and thus it was natural for him to take an objective approach to the question and use the classic methods of collection and classification to make scientific progress in this area.

After retiring from Oxford, Hardy founded the Religious Experience Research Unit (RERU) to house the collection and continue the research. His research could be described as a collection of responses to what has become known as the “Alister Hardy Question”, although it was actually framed in these terms by his successor at RERU, David Hay (1987, p. 114):

Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday world?

Hay’s (1987) later work with Gallup Poll surveys gave outcomes he found astounding. He found that almost 50% of the sample could respond positively to this question. The population of Britain, no less secular than our own in Australia, related strongly to what could be loosely termed “religious” experiences. Hay’s categorisation of religious experience classified types of such experiences as: a patterning of events, awareness of the presence of God, awareness of receiving help in prayer, awareness of a guiding presence not called God, awareness of the presence of the dead, awareness of a sacred presence in nature, awareness of an evil presence and the experience that all things are “one”.

In reporting more recent research (Hay & Hunt, 2000), a telephone survey in Britain showed that more than 76% of the population would admit to having had a spiritual or religious experience.

Hay (1987) recognized that many of his respondents did not refer to their experience as specifically “religious”, in that they did not interpret it as an experience of “god” as such. However, he was clearly surprised by the extent of reports of experiences considered beyond the edge of the normal human understanding of reality. He found in follow-up interviews that many of his respondents did not connect “religion” or “god” with the reality of their experience, even though they often resorted to religious language to describe it. Others reacted negatively to any use of religious language in connection with the experience. Religion, then, was often a confounding variable in his work.

Because of this large negative response to the mention of traditional religious themes, perhaps due to their association with institutional church, Hay’s (1987) preference would be not to refer to the experiences above as “religious” as such. Rather he prefers to classify them as the type of experience some people might call religious. This research will use the term “limit” experience, leaving its interpretation in a religious context to the individual.

A limit experience is defined for the purposes of this research as an experience that reveals a reality of life beyond the self, beyond the here and now. It may be recognition of our own fragility and vulnerability as much as a joyous awareness of a reality beyond our normal encounter with life.

Greeley (1996, p. 113) grounds a similar definition of what he terms a “limit”, “horizon”, or “grace” experience in the theology of Tracy (1975). For Greeley such experiences point “towards a limit or a horizon of life”. They hint that “there may be something beyond that horizon”. Despite the similarity of the definition there are fundamental differences in the work of Hay (1987) and Greeley.

Greeley (1975, 1996) begins from the basis of sociological research, aiming to develop a theory of religious affiliation and hence bases much of his sampling on those who associate in some way with formal religion. Hay (1987), following Hardy (1978), works at a more fundamental level and is concerned with collection and classification of reports

of these experiences from whatever source. Greeley's population in the United States is also very different from the populations surveyed by both this research and that of Hay.

Americans are very religious, Greeley (1996, p. ix) quotes the following figures of the U.S. (corresponding figures for Australia, see Bentley and Hughes (1998, p. 116) are given in brackets): 65% (34%) pray weekly, 44% (24%) attend church regularly and 78% (52%) believe in the after life. There are also stronger statistical parallels between church affiliation in Britain and Australia (Christian Research Association, 2000b). The decline in church attendance and the age profile of attenders are very similar, in percentage terms between Australia and the United Kingdom. Both are in clear contrast with the United States population.

Because of the similarity between the church affiliations in Australia and the U.K. this research will follow the approach of the English researchers. Reference to the work done in the United States will be made at times, but because Hay (1987) and Greeley (1975, 1996) have different starting points this will be only for the sake of comparison.

“Limit” experience subsumes “religious” experience as such. The individual makes the interpretation of an experience as being “religious”. Although the research may infer from individual responses the level of “religious” interpretation being given to them, the primary purpose is to collect clear evidence of the occurrence of “limit” experiences among senior high school students. No attempt will be made to judge these as religious or otherwise.

1.3 The Australian Context

Bentley and Hughes (1998, p. 122) believe that Australia has been affirmed as a good place to live by the number of people from all over the world who have made it their home. This inflow continues to bring a diversity of race, culture and religion to our shores. Although there has been a growth in the numbers of those professing “no

religion” (Bentley & Hughes, 1998, p. 22), as there has been in the number professing Islam, Buddhism and Hinduism, still over 70% of Australians identify in some way with Christian churches. However, the proportion of Christians is declining.

While half of the Australian population sees religion as “important” or “very important” (Bentley & Hughes, 1998, p.114) and around 50% believe in a personal god, qualitative accounts from teachers would indicate there may be much less certainty about this belief among young people. Flynn’s (1985) research among senior students in Catholic schools found (p. 253) 59% of students from “religious homes” able to say “my faith means a lot to me”. Only 38% of those from “non-religious homes” could say this. Flynn defined religious homes as those where parents and children attended church as a family on a weekly basis. He found (p. 209) that 55% of his sample attended church at least once each week.

Bentley and Hughes (1998, p.123) believe that while Australians in general feel positively towards the churches, they do not see them as important or relevant. Less than 25% of Australians (p. 117) now claim to attend church at all and only 13% would actually attend on any given week. Given that regular attendance has declined so much, it could be expected that significantly fewer students would hold “faith” in as high regard in 2000.

A confounding variable could be the ethnicity of populations. Those from a first generation immigrant background with strong family ties and strong traditional religious beliefs may tend to raise the average of students for whom “faith” as such has significance.

Continuing his comparison of home background against survey response, Flynn (1985, p. 71) found far less difference between those from religious and nonreligious homes in his response to the question “I have experienced times when I felt close to God”. In both cases the response rates were higher than for the question on “faith” above, at 68% and 56% respectively. This would appear to lend weight to David Hay’s (1987) suggestion

that many interpret “religion” negatively and associate it with “church”. Yet, it seems from Hay’s work they may well relate to the “limit” experience concepts of his survey.

Such a result is affirmed in the Australian context by the continued interest of Australians in spirituality. In a 1998 Australian Community Survey conducted by the Christian Research Association (2000a, p. 3) 67% saw spirituality as important or very important. Yet of these only 30% attended church on any regular basis. The hope of this research is that it will validate the real interest in, and experience of, spirituality by students at senior level in our schools. It is likely that it will also uncover an underlying disenchantment with formal religion.

Flynn’s (1985) increased positive response when asking about personal experience of God also points to ways forward for this research. In the light of the results from Australian surveys and Hay’s (1987) British work with adults, it might be reasonable to expect that questions on “experience”, not centred on “god” as such, could draw a quite positive response from students. If this is so, it may also have implications for Religious Education programs. In the British context the call for a more experiential approach to teaching has been one result of similar research work. (Hammond et al., 1990).

1.4 Research Sites

The research focuses on administration of a survey to all Year 12 students in four secondary colleges in the greater Brisbane area administered by Brisbane Catholic Education. Two co-educational secondary colleges were chosen along with one all boys secondary college and one all girls secondary college. All of the secondary colleges were towards the lower end of the Ross-Farish Modified A Index of Socio-Economic circumstance (Commonwealth Department of Education Training and Youth Affairs, 1998). This index, with a national mean of 100, has been designed to measure the relative socio-economic background of school communities and is used by the Commonwealth Government to determine levels of recurrent funding to individual schools. Thus it has

validity as an indicator of relative socio-economic circumstance of the population of families associated with particular schools.

The secondary colleges chosen had scores of 89.9, 91.6, 101 and 103.3 on this scale. These scores cluster around the national mean of 100. Nationally, SES scores tend to have a minimum around 86, although a few are below 80. The more established and affluent independent schools in metropolitan areas have an SES range from 109 through to higher scores in the 120+ range. Thus, it is clear that the schools chosen could be regarded as those with middle to lower income ranges among their families.

As expressed above, the ethnicity of many within the schools may positively influence their church attendance. However, the lower socio-economic circumstances of this group might be expected to have a negative effect. Church attenders in Australia have a disproportionate representation among those with tertiary qualifications (Bentley & Hughes, 1998, p. 32). Although there is no final conclusion that can be drawn from this, it could be inferred that the sample group might at least be under-represented in church attendance. Certainly it is not a select group likely to be biased because of its higher social status.

The survey instrument was administered to all Year 12 students on the one day in each particular school and under controlled conditions. All results were collected during first and second terms of 2000.

1.5 The Purpose of the Research

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit” experience and “religious” experience among some Catholic High School students in Brisbane secondary colleges. As has already been pointed out (p. 5) “limit” experience subsumes the term “religious”. The questions in the survey instrument are based on types of “limit” experience rather than targeting specifically “religious”

experience as such. This is intended to minimise the possible confounding variable of a negative attitude to “religion” or “church”. The interpretation of an experience as “religious” will be inferred from the types of experience reported and the language in which they are described.

This research is designed to delineate the reality and types of “limit” experience among the survey population of catholic school students. It will explore connections between recognition and reporting of such experiences and the environment of the students. In particular, the home background, the religious education program and what Flynn (1985, 1993) refers to as the “hidden curriculum” of the school will be examined for their potential to positively influence the recognition of such experiences. The research also seeks links between the reality of “limit” experience and the religious affiliation and faith of the students. Such links may point out ways to bridge what Flynn’s (1975, 1985, 1993) results have identified as a growing gap between the formal institution of church and the values and experiences of many of the youth in catholic schools.

The analysis of the research results will provide information on those practices in our schools that might aid students to be aware of this experiential side of their nature. Can it be related to particular subjects, a type of school, participation in formal worship or is it more related, as Flynn (1985, 1993) found for religious practice, to home background? Examining experience and how it may relate to other factors in students’ lives may inform future practice.

1.6 The Significance of the Research

Flynn (1975, 1985, 1993) has measured the effectiveness of Catholic schools across a range of criteria and across both secular and religious curriculum. The seminal work of Hardy (1978, 1997), Hay (1987, 1990), Hay and Hunt (2000) and others in the British context have created a method of study which is both objectively scientific and deeper in

its questioning. This has the potential to add further depth to the Flynn research by determining the underlying spiritual consciousness of catholic school students.

This link between lived experience and religious faith is the essence of catholic school education. The National Catholic Education Commission (2000) states that one aim of catholic schools is to provide an “educational foundation for life to the full, meaning the full development of the person - intellectually, spiritually, physically, morally and emotionally”. This research aims to explore the links between the recognition of “limit” experience and all of the above foundations.

The items on “limit” experience in this research survey cover the range of categories identified by Hay (1987) in classifying reports of religious experience in Britain. Linking these categories to reports of “limit” experience for the respondents to this research will provide an opportunity to validate the categories in an Australian context and to compare the relative frequency of reports from the survey cohort to those among British adults.

Some items in the research survey use questions sourced from the extensive research of Flynn (1975, 1985, 1993) on the effectiveness and culture of some Australian catholic schools. Although Flynn did not address religious or “limit” experience in his work, use of Flynn’s items, either word for word or slightly adapted for this survey, will allow comparisons to be made with his much larger cohorts and more extensive survey. It will allow comparison between those factors Flynn identified as determinants of effectiveness and culture and the possible determining factors for “limit” experience.

Robinson and Jackson’s (1987) extensive survey of British high school students did directly address the question of religious experience. Use of some of the Robinson and Jackson items in this research will provide comparisons of the types of experience reported by high school students in both countries. Some of the hypotheses of this research are similar to those proposed by Robinson and Jackson. This will enable validation of or contrast with their conclusions.

Finally, exploratory analyses of the data from this research will provide possible extensions to the earlier research of Flynn (1975, 1985, 1993) and Robinson and Jackson (1987). They will also explore potential links to the recent work of Hay and Nye (1998) with children in the United Kingdom. Hay and Nye have proposed the concept of “relational consciousness” as a framework for understanding the religious experience of children. Comparison of the experiences reported by the survey cohort with the Hay and Nye framework will further progress the research in this new area of exploration.

1.7 Design of the Research

The project is quantitative in nature. However, it is more than an examination of the external phenomenology of religion. The experience questions have been deliberately designed to avoid, as far as possible, any reference to “religion” or “God” as such. The key questions have been designed not to ask for an experience of God, but simply to invite a response from students about their experience of aspects of the mystery of life.

Hughes (1997, p. 5), in commenting on a pilot survey on religious experience conducted in 1995 among 450 high school students in Melbourne, suggests this type of approach as potentially leading to “wider and more significant responses”. He believes the response may have been more positive if the relationship to God and religion had not been a direct part of the questioning.

Investigations in Britain have found an experience of a power or presence beyond the self as being remarkably common in modern Western society. This research will attempt to identify such common human experiences of mystery and wonder among senior students in various schools. Whether they are seen as “religious” or not or what the real nature of such experiences may be is not part of this study. The aim is to identify them and to compare their frequency among groups from various school backgrounds

The research will follow the objective, scientific direction established by Hardy (1978, 1997) and his successors. It will collect samples, classify and analyse them and attempt to link results to causes or triggers. It is hoped that, by sheer weight of recorded results, the reality of such “limit” experience for our students will be established.

1.8 The Research Issues

Informed by so much research that has been performed in other parts of the world, six hypotheses are proposed for this research work. For all but the first, they have been framed as null hypotheses. As will be explained for each, there is much evidence to suggest that each null hypothesis might be refuted.

1.8.1 Hypothesis 1

That a significant number, in excess of 30%, of students have had a “limit” experience and are able to recognise it as such

The extensive work of Hay (1987) among the British public has been quoted above. Certainly among British adults the evidence is clear that a minimum figure of 30% for those claiming such experience is to be expected. Hay (1990, pp. 80–81) cites the frequencies of positive response to questions on religious experience in various surveys in different countries and among similar age cohorts to those in this survey. They show the following results: In the USA: Greeley (1975), 32%; Gallup (1978), 27%; In the UK: Hay and Morisy (1978), 29%; Gallup (1985), 25%; and in Australia, Morgan Research (1983), 42%. The most recent work among adults in the UK by Hay and Hunt (2000) quotes a 76% positive response rate.

Of particular interest to this research is the work of Robinson and Jackson (1987) with senior high school students in Britain. Electing not to ask the Alistair Hardy question

directly, they found significant numbers of their sample able to identify certain types of limit experience. In particular they found (p. 12):

- 30% claimed an experience “very like” feeling “somehow part of a mysterious whole”, while a further 49% claimed to have had an experience “fairly like” this
- 33% felt that they had often been “uplifted by the beauty of nature”, while a further 33% believed this happened for them sometimes
- 22% had often felt that in some strange way they were a “small part of everything around” them. A further 31% had sometimes experienced this
- 19% had often experienced an “unseen power” to “turn to in times of difficulty or danger” and a further 21% had sometimes had this experience

Some of the survey questions in this research are similar to the Robinson and Jackson (1987) approach. It would be expected that students in the Australian context would bear many similarities to those in British schools.

1.8.2 Hypothesis 2

That there will be no significant difference in the number of reports from different types of schools: all-girls schools, co-educational schools and all-boys schools

Hay (1987) remarks that other surveys on religious experience, particularly those conducted in the United States, found that more females than males gave a positive response to questions on the occurrence of religious experience. This gives reason to suspect that the results of any survey on limit experience across different types of schools might show a positive bias towards female responses.

Research from related fields supports such a proposition. In the education sector gender difference has been a developing field for the past twenty years. Woolfolk (1993), for instance, quotes U.S. figures to show that more boys than girls complete Maths and Science courses while girls have the better results in English and languages. She

attributes the difficulties to a bias at the instructional level. Such a bias, if it exists in the survey schools, might lead to difference in the recognition of “limit” experience.

Gilligan (1993, p. 18) challenges the Piagetian foundations of modern instruction. She believes Piaget’s theory of cognitive development to be biased towards a male way of understanding the world. “In Piaget’s account (1932) of the moral judgement of the child, girls are an aside, a curiosity to whom he devotes four brief entries in an index that omits ‘boys’ altogether because ‘the child’ is assumed to be male.” Gilligan proposes a new way of “knowing”, subjectivism, that is basic to a female perspective of the world. Subjectivism or subjective knowing is defined as the move away from internal silence and an externally oriented perspective on knowledge and truth to a conception of truth as private, personal and subjectively known or intuited.

For Belenky, Clinchy, Goldberger and Tarule (1996) the female way of knowing is “connected”. It relies on empathy with the other and a realisation that because they cannot enter fully into the other’s experience they can only have limited access to their knowledge. Separate thinkers, a majority of whom are male, on the other hand, are adept at the academic game of knowledge. Their central question is “what does this person want me to know?”. Burns (1993) believes that our school systems have been centred heavily on this way of learning and that it is only one of at least four ways in which children might learn about the reality of the world.

Beutel & Marini (1995) measured the attitudes of adolescents towards material success versus compassion for others and meaning for living. They found gender to have a significant effect on all three measures of values. Females are more likely to value compassion and meaning and less likely to value material success.

All of this points to there being, potentially, a significant difference between results in all boys schools compared to all girls schools. The results for co-educational schools are less clear cut theoretically, but could be expected to have at least a higher proportion of girls from within them who would respond positively to the survey questions.

However, there is still the potentially confounding problem of instructional methods being biased towards one way of knowing the world. This extends across all subjects, even Religious Education. Berryman (1990) believes that Religious Education has been dominated by the work of Piaget and others as if theological cognition were the same kind of knowing that is needed to perform the scientific method. Both he and Robinson (1977) lament that many adults assume children do not experience existential questions and frame their instruction based on this assumption.

It may be that the instruction and curriculum used in schools, even all girls schools, will place some barriers in the way to students being fully in touch with their limit experiences.

1.8.3 Hypothesis 3

That students whose instruction in a particular subject area has stirred deep questions about life will be no more likely than others to be open to limit experiences than other students.

Flynn (1985) found that the informal curriculum of schools was an important factor in the satisfaction of students and was a primary factor in their attitude to religion. He also found (p. 327) that the Religious Education curriculum had a “primary unique effect” on “personal faith” but did not relate this to awareness of “limit” experience per se. However, what about the science curriculum, the mathematics teacher or the art class? Is it not reasonable to suppose that a good teacher, capable of raising the awareness of students to the mystery of life, might not also have a profound effect on attitude to religion and perhaps to the experience of “limit”?

The Robinson and Jackson (1987) research attempted to relate religious awareness to experience of individual subject areas. In particular they hypothesised that Science

teaching which encouraged curiosity would enhance this. However, they found no clear evidence that this was the case (p. 67), although they also did not find clear evidence to dismiss the hypothesis.

On the other hand, Hay and Nye (1998), working with younger children in their interviews found that the language of science and technology was used by some as their way of describing an experience they were struggling to put into words. This seemed to indicate that they saw the world of science as synonymous with wonder and awe. Does the emphasis on Piagetian approaches progressively blot out this capacity for wonder or can it be found in good science teaching in schools?

Excellent teaching in other subjects such as english, the social sciences and religious education could arguably achieve this recognition of wonder and awe in students as well.

1.8.4 Hypothesis 4

That students actively involved in social responsibility programs and / or actively involved with school life will be no more likely to be open to limit experiences than those who are not.

Robinson and Jackson (1987) also asked questions about school related activities such as social work programs in an attempt to relate these back to religious awareness. They had a similar hypothesis but omitted involvement in general school activities such as sport, limiting their questions to social work type programs. They found (p. 67) the evidence in favour was adequate but “hardly overwhelming”.

My personal experience in schools leads me to believe that these types of programs, well executed and de-briefed, do have a profound effect on students. It was hoped that this research might provide some empirical evidence for this intuitive feeling.

From a different perspective, Shea (1989) sees that there are five paths to a human appreciation of mystery. Two of the paths may be significant in a school context. They are (pp. 25 – 30):

Contingency – meditating on our coming and going we are forced to ask the meaning of it all. This is the path traveled by most.

Dialogue and communion – human beings come to be through dialogue with others. Through communion they are loved and accepted.

Social responsibility programs can raise the issue of contingency with students. There is much in ordinary school life that can bring students to reflect on meaning. Major traumas for instance, the death of a student or classmate, can raise questions of contingency. Good retreat programs can do the same. Flynn (1985) found these to have a significant effect on religious attitudes.

The school community is also a major source for students of dialogue and communion. Student satisfaction at school was found to be an important factor in attitude to religion in Flynn's (1985) work. However, it can only be inferred that this happiness relates to active membership of a school community. Some of the survey questions are intended to provide possible links between satisfaction at school, participation in a range of programs offered by the school and awareness of limit experience.

1.8.5 Hypothesis 5

That students who participate in organised religion will be no more likely to be open to limit experiences than those who do not.

Robinson & Jackson (1987) had a similar hypothesis. Overall their finding (p.70) tended to confirm this view. Flynn (1985, p.327) also found that home was a primary influence on religious practice. However, Flynn's work did not investigate "religious" experience per se. Francis and Wilcox (1993) studied two hundred and thirty 16 to 18 year old girls

in England. They found a positive correlation between church attendance and prayer. However, the relatively low result confirmed for them that church attendance and prayer did not “tap the same dimension” (p. 246). The experience of God in prayer was indeed potentially different to church attendance as such.

Hay (1987) confirmed this view. He found that church-going does not necessarily imply a higher probability of report of any religious experience. On the other hand Tilley (1994) found that experience of church did provide an important pre-requisite for religious experience. He concluded that an institutional element is a necessary constituent of religious experience. Secondly Tilley believes that religious institutions as such do have a profound effect on religious experience for those who accept the tradition.

The question for these students then may be twofold. Is there a greater incidence of “limit” experience among church-going members of the school? Perhaps just as important, how prevalent is acceptance of the tradition as such?

1.8.6 Hypothesis 6

That students who experience a happy and stable home background are no more likely to be open to limit experiences than those who do not have such a home background.

Flynn (1985, p. 70) had found that 18% of “non-religious” homes had parents divorced or separated, while only 3% of “religious homes” lived in a similar situation. Thus it seems that being “religious” assisted stability at home. His definition of a “religious” home was along the traditional line of religious “practice”, that is, that the parents go to church weekly and expect their children to do so. However, Flynn did not attempt to examine links to “limit” experience.

Flynn (1985, p. 226) also found that a large majority (70%) of Year 12 students believe the example and life of their parents had a most important influence on their religious

development. He further found (p.327) that the home, followed by the Religious Education curriculum had the “primary” and “secondary unique effect” on church attendance. Personal faith was affected by the same two variables but in the reverse order.

Flynn’s later (1993) study concludes (p. 293) that “the *influence of parents* on students’ religious development has not altered significantly over the period 1982 to 1990.” His sample populations had 87% (1985) and 84% (1993) from “stable” homes, defined as those in which both biological parents are living together. However, this level of stability is above the norm in Australia today. Bentley and Hughes (1998, p. 36) cite 65% of the 30 to 40 year age group and 73% of the 40 to 50 age group as being in a stable marriage relationship. Thus it could be expected that the level of domestic stability of this research sample might be significantly below the levels found by Flynn.

Hence, it seems reasonable to explore the influence of the home on “limit” experience as such. Does stability, which appears to influence religious practice, also influence openness to these experiences?

1.8.7 Summary

It was expected that the research results might confirm the first hypothesis and disprove hypotheses 2 through 6. As has been outlined above in reference to each hypothesis, there is a significant body of evidence for each that might indicate a conclusion different to that proposed in hypotheses 2 to 6.

1.9 Limitations of the Research

With the research focus only on Year 12 students and only conducted in four schools, the conclusions drawn from the data must be treated with caution and not interpreted as though they can be applied universally. The sample itself has been restricted to those students who returned permission forms signed by parents, thus allowing them to take

part. While the response rate was good, as will be demonstrated in section 4.2 (p. 92) there is, of necessity, missing data from students whose results could not be included.

There are also limitations that must be placed on the survey results due to the possibility of differing interpretations of the individual survey items by the respondents. Statements seeking a response on “limit” experience may have been interpreted differently to the way intended by the researcher. On the other hand, the descriptive passages on experience may not have captured the reality of a similar experience for a respondent. Hence a negative response to the question “have you ever had an experience like this?” might only indicate that the passage did not strike a chord in the respondent, even though a similar experience may have been part of their life.

1.10 Outline of the Thesis

The thesis consists of six chapters. The first chapter introduces the research and provides a brief conceptual framework for the research. The second chapter is an extensive review of the literature. After a brief introduction it deals with five broad themes: “limit” experience, the experience of the holy and what might lead to interpreting an experience as religious, the debate among psychologists on the reality of these experiences, the influence of society on reporting and recognition of experiences and previous research in the field. Chapter three details the design of the research. Chapter four presents the results of the research. Chapter five interprets and discusses the results and Chapter six provides a summary of the research conclusions and their implications for further research.

Chapter 2

Review of the Literature

2.1 Introduction

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit” experience and “religious” experience among some Catholic High School students in Brisbane secondary colleges. As has already been pointed out “limit” experience subsumes the term “religious”. The questions in the survey instrument are based on types of “limit” experience rather than targeting specifically “religious” experience as such. This is intended to minimise the possible confounding variable of a negative attitude to “religion” or “church”. The interpretation of an experience as “religious” will be inferred from the types of experience reported and the language in which they are described.

The review of the literature first addresses the concept of “limit” experience and its interface with “religious” experience. Once one ventures into the realm of “religious” experience, the question goes beyond reality of a particular experience to its interpretation. This has been a contentious issue that has at times led modern science and psychology into conflict with theology. After examining definitions of “religion” and “religious” experience, the review looks at the seminal work of William James (1902 / 1985). James takes a clear stand at the religious end of a debate between psychology and religion. At the opposite extreme of interpretation is Freud (1946), who saw religion as being derived from infantile needs. It is appropriate to look at the divergent approaches of the psychologists to the reality of the “religious”.

Individuals are part of their society. The review considers the possibility that “religious” experience as such could be masked by the prevailing mores of society and hence can remain hidden if that society is not oriented towards a public display of individual

religious orientation. The literature indicates that such experience may be more readily identified in childhood before the “noise” of modern society creates interference.

Finally, the review will examine recent research work in the field. Of particular importance is research in Britain with adolescents, the work done on classification of the thousands of reports in the Alister Hardy collection and the major studies of Flynn (1975, 1985, 1993) in Australian High Schools. Lastly the recent research of Hay and Nye (1998) and their concept of “relational consciousness” will be considered.

An overview of the organization of this review follows as Table 2.1.

Table 2.1 Themes of the Literature Review

Topic	Theme
Introduction	
Theme 1	Limit Experience – the Experience of Contingency
Theme 2	The Experience of the Holy – when is experience religious?
Theme 3	The Approach of the Psychologists
Theme 4	The Influence of Society
Theme 5	Researching Religious Experience
Summary	

2.2 *Limit Experience – the Experience of Contingency*

2.2.1 The Idea of a Limit Experience

Tracy (1975, p. 64) describes “the enterprise of fundamental theology as philosophical reflection upon the meanings present in our common human experience and the meanings present in the Christian fact.” He contends that (p. 93):

all significant explicitly religious language and experience (the “religions”) and all significant explicitly religious characteristics of our common experience (the “religious dimension”) will bear at least the “family resemblance” of articulating or implying a limit-experience, a limit-language, or a limit-dimension.

“Limit” experience Tracy (1975) defines as one part of that common human experience. The human person faces situations that expose him or her to the ultimate limit or horizon to existence. These are either (p. 105) “boundary” situations of “guilt, anxiety, sickness and the recognition of one’s own death as ... destiny”, or “ecstatic” experiences of “intense joy, love reassurance, creation.”

Schillebeeckx (1977) has a similar theological viewpoint. He believes that (p. 47):

Man (sic) comes up against limits in all his experiences of knowing and trying. In these boundary experiences he is no longer the prisoner of the system of his transitory planning. Consequently reason is only rational if it recognizes this boundary experience.

For the most part, only partial experiences of meaning and salvation are available to us. Schillebeeckx (1977) sees that the “transcendent” lies in human experience and its expression in the language of faith – but as an inner reference of what this experience and language of faith have called to life.

Shea (1980) provides a similar categorisation of these experiences. He prefers to describe them as an “awareness of mystery”. He sees a number of paths towards this awareness. First is **contingency** or coming to terms with the meaning of our comings and goings in life and with its final end. Second is **dialogue** with others. A close relationship with another or with a group allows a person to develop a sense of who he or she is and where the journey is leading. Shea believes a third path to awareness of mystery is **collapse**. We find meaning often by living through what seem to be insurmountable difficulties in life. A fourth path is in **coming to terms with the moral ambiguities of life**. Although a person may choose a path to travel, the concrete reality of the everyday eventually reveals something different. We may realise one day that “I am not now what I wished myself to be.” Coming to terms with this reality in life awakens an awareness of this mystery that is life itself.

Psychology also attempts to understand such experiences. Maslow (1964) used the term “peak” experiences, akin to Tracy’s (1975) “ecstatic” experiences. He found that some of the common threads running through “peak”, “ecstatic” or “transcendent” experiences were: perceiving the whole universe as an integrated whole; experiencing emotions of wonder, awe, reverence, humility; a sense of timelessness; a sense of goodness and well being.

Maslow (1964) found such experiences so common that he began to expect that any normal person would report them. So surprised was he to find that some failed to do so that he made a study of those he terms “non-peakers”. Maslow found that (p. 353) “precisely those persons who have the clearest and strongest identity” to be most likely to report experiences of such transcendence. “Non-peakers”, by contrast, were characterized by a fear of emotion and often tended towards the compulsive-obsessive personality.

Hay (1987, p. 174) also argues that those who have these experiences are psychologically normal. While he admits that more research is required in this area, he believes that “all

the evidence to date suggests that those reporting religious experience are ... more adequate psychologically than other people.”

These analyses of “limit” in our common human experience have led to the definition used in this research for “limit” experience, already given in Chapter 1 (p. 4):

“A limit experience is defined as an experience that reveals a reality of life beyond the self, beyond the here and now. It may be recognition of our own fragility and vulnerability as much as a joyous awareness of a reality beyond our normal encounter with life.”

2.2.2 The “Common Human Experience” – the Work of Hardy and Hay

2.2.2.1 Alistair Hardy and the Religious Experience Research Unit

Hardy (1974, 1978, 1997) believed in the value of science and the scientific method. His academic background was as a zoologist and in his younger days he headed a major expedition to the Antarctic on *Discovery*. Thence he held a new chair in Zoology at the University College of Hull and the Regius Chair of Natural History at Aberdeen before returning to Oxford. He was Linacre Professor of Biology at Oxford from 1946-61. Morgan (1998) describes how, with his zoological background, Hardy looked at collecting individual witness accounts of what a person interpreted as religious experience. His intention was to collect a body of evidence, seeing this as the proof needed to establish the truth of the spiritual nature of human beings. Such evidence from observation is the essence of the Biological Sciences. The difference in the approach in this case was the further complication of recording and classifying individual testimonies to personal experience rather than objective observation and recording of the characteristics of living creatures.

He cherished a deep-seated belief that science was not capable of explaining the mystery of human consciousness. Hardy (1978, 1997) believed that many scientists of his time regarded the mystery of the mind – body relationship as either unreal or irrelevant in their investigations. Although Hardy deplored this idea, he was running against a tide that had flowed strongly since the Enlightenment. He brings two significant dimensions to research on “limit” experience.

First, he believed that religious experience was the common experience of humankind. For Hardy (1978, p. 26):

..there is overwhelming evidence (1) to show that religious experience has played and can play an important part in human behavior; (2) that there is a certain consistent pattern in reports of such experience; (3) that on so many occasions men and women have achieved, by what they call divine help.... that which they would have regarded as beyond their normal capabilities.

Second, he attempts to apply the scientific method to his investigation of experience. It is Hardy's (1978, 1997) belief in the scientific method that lays the foundation of this research. As has been explained above, it was his natural approach to a problem to begin to collect accounts of experiences from those who claimed to have had them and then to seek to classify them into their different types. This approach led him to advertise for accounts of experiences and, eventually, to founding the Religious Experience Research Unit (RERU).

The approach must be understood for what it is. It has its roots clearly set in Hardy's (1978, 1997) background in Zoology. Hardy's position is that a natural theology is reasonable and can be brought into a relation with science as we now understand it. Secondly, it can eventually become, along with psychology, a recognized branch of science. Hardy later went further, proposing the theory that religion is a possible factor in the survival of the human race. In Hardy's opinion, conscious behaviour and social learning plays an increasingly important part in evolution among the higher forms of life.

In some way religion has been a part of this social pattern for most human societies. Thus Hardy concluded that religion endured through the ages precisely because it has significant survival value for human beings.

On the other hand, he did not see that he could comment in any scientific way on the emotional reality of a particular experience or set of experiences. Hardy (1978, p. 33) was convinced that:

we must now adapt the ...(scientific).. method to serve the extra-sensory world of spiritual experience although we know that in itself it cannot deal with the emotional side, we can certainly use it for a systematic study of the external evidence.

In this way, Hardy believed that science and religion could again be reconciled and the problems of a theology threatened by the outcome of scientific investigation resolved. This problem of communication he saw as in no small measure due to theology ignoring the possible use of the scientific approach to its problems.

In 1969, Hardy's dream of the Religious Experience Research Unit (RERU) became reality. Through it he aimed to make a systematic study of written accounts of experiences sent in from around the world. To begin the study, according to Morgan (1998), Hardy had first asked a press agency to make a collection of cuttings on religious experience spanning the years from 1925-1955. He seems to have been disappointed with the result, but tried again for cuttings in the years from 1960 to 1965. By 1969 he had arranged with Manchester College, Oxford, for premises to continue his research. His next attempt to collect accounts was via articles and appeals in about thirty religious journals.

The number of replies (200) was disappointing, but a further campaign through press, radio and TV brought about 4000 responses. An article in *The Observer* (see Hardy, 1997, p. 18) on 8th March 1970 asked:

Professor Hardy proposes, if readers will kindly cooperate, to study and compare as many personal records of experiences as possible. He invites all who have been conscious of, and perhaps influenced by some such power, whether they call it God or not, to write a simple and brief account of these feelings and their effects. They should include particulars of age, sex, nationality, religious upbringing and other factors thought to be relevant.

Later researchers asked similar questions. David Hay (1987, p. 114), later to be Director of RERU, rephrased the question to become: “Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday world?”

This particular phraseology is usually accepted as being the “Alister Hardy Question”.

2.2.2.2 The Common Experience

By the time he published “*The Spiritual Nature of Man*” (1979), Hardy had collected and classified over 3000 records of limit experience. He had added to the knowledge gained via his original request in *The Observer* through a number of means. Perhaps the most significant of these was a survey of 1865 people coordinated by National Opinion Polls Ltd. The survey, devised in consultation with David Hay and Ann Morisy of RERU included a number of questions on religious experience. Analysis of the survey results gave some fascinating information, which has bearing on the results of this research:

- Around 34.6% of those surveyed (41% of women and 31% of men) claimed to have had a religious experience.
- The higher the level of education the more likely that there was a positive response to the question. (56% of those completing education at age 20+ claimed such an experience compared to 37% and 29% of those completing education at 14 years or 15 years respectively)

- The older people were the more likely to claim such an experience (43% and 47% of the 55-64 and 65+ age groups respectively, compared to a 29% response rate from those in the 16-24 age group.)
- Lower social class groups were less responsive than those in higher social classes in the British context.
- Respondents with a high level of psychological well-being were more likely to respond positively than those with a lower level. Hay and Morisy, as cited in Hay (1987), had used the Bradburn Balanced Affect Scale to measure this element among their respondents. They found that 54% of those scoring high on the Bradburn scale gave a positive report. In contrast, only 46% of those with a low score responded positively.

This research will not measure psychological well-being per se. However, it will seek information on home background, stability of relationship and level of personal happiness both at home and at school. A number of researchers, among them Moos (1987), Hallahan (1992) and Hetherington, Stanley-Hagen and Anderson (1989) have noted the strong link between these factors and psychological well-being.

By 1971, according to Morgan (1998), Hardy's Annual Report for RERU mentions over 2700 accounts being received but states that about 5000 are needed for some conclusions to be drawn. Well in excess of that number of reports now reside at RERU and have been the subject of further research and classification.

2.2.2.3 Hay's Studies

David Hay began work at RERU in 1974 and followed Edward Robinson as the third Director. Hay (1987) expanded upon Hardy's research by the use of a national survey and follow up interviews with respondents. Accepting the early work of Hardy, he proceeded to expand upon this knowledge base. He believes that there is clear evidence

accumulating that religious awareness made its impact on humanity from very early on in history. This is in accord with the Hardy (1978) hypothesis that religion has been preserved for so long precisely because of its usefulness for survival of the species.

If this is accepted, however, it seems natural to question the reasons for the decline of formal religion this century. To this Hay (1987) answers that the very essence of religion is its inwardness. You can't conclude that religion isn't there just because it can't be seen. Hay believes it can now be seen clearly via reports of religious experience.

Recognised or not, Hay's (1987) work seems to have revealed that, in the British context, the experience of the sacred is still significant. Church attendance may have declined dramatically, but, given the opportunity to respond, surprisingly large numbers claim such an awareness of the sacred as their own.

Hay (1987) extrapolates from the Gallup poll in 1985 to calculate a possible figure of 15 million Britons who could say that at least once or twice in their lives they have, "been aware of or influenced by a presence or power", whether they call it God or not, which is different from the everyday world. The results, if true over the whole population, would indicate that nearly half the adult population of Britain have had a religious or transcendental experience – a "limit" experience in the context of this research.

In later work (*The Tablet*, June 24, 2000) Hay and Hunt were quite surprised to find that a telephone survey gave a 76% response rate for those who would witness to having had some type of spiritual or religious experience. In hardly more than a decade, according to Hay and Hunt, there had been a 59% rise in the response rate. Hay and Hunt (2000, p. 846) contrasted the figures with those for church attendance in Britain. These, similar to Australian figures, had fallen 20% in the same time span. They draw the conclusion that, although "these gloomy figures have been used by some to predict the total disappearance of Christianity in Britain...the figures on spiritual experience might suggest that ..we are in the midst of an explosive spiritual upsurge not unlike the Methodist revival of the

eighteenth century”. On the other hand, they found that people had only the “vaguest remnants” of religious language with which to express the experience.

2.2.3 Summary

One aim of this research is to validate the earlier work of Hardy (1978, 1997) and Hay (1987) by determining the extent and reality of “limit” experiences among senior high school students. For this research, a **limit experience is defined as an experience that reveals a reality of life beyond the self, beyond the here and now**. It may be recognition of our own fragility and vulnerability as much as a joyous awareness of a reality beyond our normal encounter with life.

There is sufficient academic evidence to suggest that such “limit” experience may indeed be the common experience of humankind. Maslow (1964) suggests that those who have such experiences are not only psychologically stable, but that there may be a case for believing them to be the norm. Hay (1987) confirms the psychological stability of those reporting these experiences. Anywhere from 34% to 76%, on Hay’s (1987) and Hay and Hunt’s (2000) figures, might be able to attest to having had such experiences.

This research follows the foundational work of Hardy (1978, 1997) in applying the scientific method to investigation of “limit” experience. He intended his research to concentrate on the external evidence of the experiences and sought to understand and classify these in much the same way as he had worked in his first field of expertise, zoology. Hence, this research will collect, collate and analyze experiences with no attempt to interpret them beyond the type of language individuals may use to describe them.

Where it is necessary to interpret experiences as religious, the research will restrict interpretations to the Hay (1987 p. 166) suggestion that these are the types of experience that are “commonly given a religious interpretation.”

2.3 *The Experience of the Holy – when is experience religious?*

Tracy (1975), Shea (1989) and Schillebeeckx (1977) all emphasize experience as the foundation of religion. Religious faith is the *particular way* in which religious people *experience* and *interpret* events.

2.3.1 Defining “Religion”

In exploring this question Morgan (1998) cites Smart who saw seven dimensions as being common to all formal religion. First, religions have a **belief structure**, giving a shared doctrinal, philosophical and cognitive base to the religion. All have some form of **ritual**, the practical expression of belief and experience, giving affective and emotional expression to belief. Next, Smart believes there is **shared myth**, the narrative story-telling that preserves the defining experience. Coming from this myth and shared belief will be **expression** in art, and a **community** that lives according to an **ethical base** that provides the **moral and legal foundation** for living together. For Smart, religion is the expression of experience.

Greeley (1996) has a similar approach. For him, (p. 23) religion begins in “*experiences* that renew hope, is encoded ... in *symbols*, shared with others in *stories*, which are told to and constitute the story-telling community, which enacts the stories in community *rituals*.” Although this is a linear representation, Greeley proposes that it might be better viewed as a circle with five points around the circumference. Lines of influence run between each of the points, since experiences are (p. 24) “in real life shaped by the religious heritage of the person who undergoes the experience... a heritage that includes ...symbols, stories community culture and rituals.” For Greeley, every experience contains its own interpretation.

Thus a person might interpret a “limit” experience as “religious” if he or she is part of a community that endorses the rituals, stories and symbols of religion as their own. If not,

the interpretation might be very different. However, the reality of the experience will not be lost if, indeed, such experiences are part of the common human condition. The purpose of this research is to identify how much of the consciousness of the boundaries and horizons to existence, the experience of “limit” there may be among our students. Hence the survey instrument is designed for this task. While it will ask about religious affiliation and religious practice it will do so to identify if the respondent does affiliate formally with a story telling, ritual community and to compare the results with earlier research.

2.3.2 Defining “Religious Experience”

The point at which a “limit” experience becomes “religious” is a matter of such conjecture that it seems no fixed definition is possible. Maslow (1964), for instance, looks to his “peak” experiences as providing an entrée into religion and revelatory experiences. He proposes a hypothesis that all such experiences are essentially the same and have always been so. From this he draws the conclusion that all religions are the same in their essence and have always been the same. Understanding the psychology of such experiences, for Maslow, would provide a reason for all religions to assume a common approach to teaching what is, in reality, common to all of them.

It seems that the concept of a “limit” experience, or that of a “peak” or “transcendent” experience is often used interchangeably by various researchers and writers. For the sake of clarity, this research uses the term “limit” experience, while realizing that others have used different terms. It is more complicated when we attempt to define the concept of “religious” experience.

For James (1902/1985), an experience is religious if the person believes it to be so. This provides some, albeit unsatisfactory, way forward. For if this is the answer we need only seek to ask a respondent for their personal interpretation of the experience.

Morgan (1998) cites Carolyn Franks Davis who believes a brief definition of religious experience is not possible since there are so many religious traditions and different

experiences within them. She defines religious experiences as experiences that either the subjects themselves describe in religious terms or which are intrinsically religious. In *Interpretative* experience, people already have a framework of belief and interpret events in the light of this. For instance, my interpretation of being cured of serious illness would be that it was in answer to prayer rather than simply the skill of the physician. Other experiences do not require faith as a pre-requisite. It is these in which this research has particular interest.

Quasi-sensory experience has as its primary element a physical sensation, such as hearing, touch or smell. *Revelatory* experiences are characterised by sudden convictions, inspiration or enlightenment. *Regenerative* experiences Franks Davis sees as the most frequent type. They have the effect of renewing the subject's faith. *Numinous* experiences, first so called by Rudolph Otto (1950), are the feeling of being in the presence of someone sacred or holy. *Mystical* experiences may have four characteristics: the subject may apprehend an ultimate reality; feel free of time and space; have a sense of oneness or experience bliss or serenity. The analysis of the research results will use the numinous and mystical classifications when looking at the experience items of the survey.

Morgan (1998) believes there are numerous difficulties with approaches relying on personal interpretation. First, Interpretations may change with time and culture. Ahern (1990) found that there had been considerable change in what was reported as an experience of the "numinous" over the past three-quarters of a century. Otto (1950) saw that an experience of the "numinous" involved a feeling of being in the presence of someone or something sacred or holy. This may be accompanied by a feeling of awe or wonder and equally by a feeling of fear or dread. Ahern found only a few unambiguous examples of highly numinous awe, dread or terror among the accounts at RERU. He states (p. 62) that the experience of the numinous, "in the most terrible sense" is infrequent in modern Britain. We could expect this to be so in similar western societies.

Secondly, such experiences may be illusory. This research will depend on personal identification and reporting of experience. It is difficult to validate an individual report. However, the overwhelming evidence for the commonness of such reports of “limit” experiences would seem to be verification of their existence. There seems no ready path beyond this. Either we accept the overwhelming evidence of the commonness of “limit” experience or we reject it as illusory. If we accept the reality of “limit” experience, allowing its interpretation as “religious” seems to be a matter of definition.

Two possible ways forward are to accept the James (1902/1985) direction of allowing the individual to make the judgment or proceed as does Ahern (1990) to classify a report in terms of the words used. Either way, we are really in the hands of the person to whom the experience belongs. We rely totally on their description of it. In doing so we need to be aware that we have a blunt instrument, as description itself requires a person having the words and skills to be able to describe it appropriately. This leads to the third problem. The experience may be indescribable, due either to the inadequacy of language or a personal reticence to share innermost thoughts.

Ahern’s (1990) analysis identified about one third of subjects who stated explicitly that their experience was in some way ineffable. He believed it was also implicit in the words of those who did not say so. For Ahern (p. 38), “each experience is composed of two notionally distinct sections. There is that which is expressed. And there is what cannot be expressed, or put into words”.

Perhaps a fourth problem for the researcher is that these experiences are hardly the stuff of everyday conversation. Hay (1987) found that most of his respondents had never spoken of their experience to anyone else.

The definition of Religious Experience to be used in this research has been developed in consideration of all of the discussion above. For this research, “religious” experience is defined as a part of the mystery of our common human, lived experience. It lies within the reality of a “limit” experience and refers to the interpretation of that experience. It

recognises that many reports exist in which the “limit” experience is interpreted in terms of contact with a power beyond the self or some type of “life force” as part of the common experience. For the written accounts within this research, the approach of Ahern (1990, see section 2.6.6, p.69) will be followed. That is, reports will be classified as “religious” if the description uses the key words and phrases identified in the Ahern analysis.

2.3.3 Classifying Experience

2.3.3.1 Hay’s Categories of Religious Experience

Hay (1987) developed his categories as a result of extensive interviews in Nottingham following the Gallup poll. They have the advantage of concentrating on the affective domain, focusing on what happened for the cognitive awareness of the person rather than the physical or mental manifestation of the experience. In essence they concentrate on the “awareness” aspect of the experience without emphasising other details, such as whether it was auditory or visual. He had found a 48% positive report rate to his questions. Hay’s categories for reports of religious experience are given below as Table 2.2 below.

Table 2.2 Response rates for Hay

Total positive response – 48%

Types of experience:	Response Rate
Patterning of events	29%
Awareness of the presence of God	27%
Awareness of receiving help in prayer	25%
Awareness of a guiding presence not called God	22%
Awareness of the presence of the dead	18%
Awareness of a sacred presence in nature	16%
Awareness of an evil presence	12%
Experience that all things are “one”	5%

(Source: Hay, 1987, p. 152)

Because these categories have proven their usefulness in this way, this research has in turn framed the items in the survey to reflect the Hay classification method.

Hay (1987) concluded (p. 166):

On the basis of what people have said to us, then, I feel that ‘religious experience’ is not quite the right term for what we have been describing. It would be more correct to say that it is a type of experience which is commonly given a religious interpretation.

Much the same could be said, perhaps more strongly, of his later findings.

2.3.4 Triggers for Experience

It seems that limit experiences are special moments, but what might cause them? Maxwell and Tschudin (1996) believe they can identify certain elements that, for many,

have preceded the experience. It is not possible to go further and to say that a particular piece of music or a particular event actually caused the experience. However, the person is conscious of having listened to the music or been part of the event immediately prior to the limit experience. While the experience itself is internal, there appears to be, usually, an external event, a “trigger” that the person can associate with the beginning of the experience.

Hardy (1997) has a more extensive list of twenty-four such triggers, including drugs. However, they could all be placed within a condensed list proposed by Maxwell and Tschudin (1996):

- Nature – the majority of the documented experiences seem to be related to out of doors experiences or associated with natural things, such as plants. According to Argyle (1997) traditional writing on mysticism has often mentioned mountains and deserts as sources of such experiences (for example the Desert Fathers). However, Argyle cites Altman and Wohlwill’s finding from environmental psychology that the most pleasing environments are those with water, greenness, depth of vision and sun. They suggest this shows an evolutionary explanation for “nature” experiences.
- Prayer – the experience took place while the person was engaged in prayer. Argyle (1997) quotes a factor analysis by Poloma and Pendleton of four kinds of prayer (colloquial – conversations with God, meditative, petitionary and ritual or set prayer). They found that meditative prayer led most often to religious experience. Argyle sees the main goal of meditation in most religious traditions as being to obtain some form of religious experience.
- Music – references to music as the trigger occur a number of times in the RERU archives. There seems to be (Argyle 1997, p. 9) quite a close connection between these experiences and some states induced by music. Both mental states depend on right brain hemispheric activity.

- Heightened awareness – this involves a train of thought being improved in quality; eg, the colours become more vibrant and clear, to merge into the experience itself. Thus it becomes unclear where the experience begins and ends.

2.3.4.1 Other Possible Causes

Argyle (1997) maintains that accounts of the effects of psychedelic drugs have a number of similarities with limit experiences. Such feelings as timelessness, de-personalisation, being in touch with basic reality and vivid sensations are common. However, the naturally induced limit or religious experiences do not include the horrors and terror sometimes reported with the use of drugs.

Ultimately, the James (1902/1985) test of seeing the “fruits” of the experience may be the best one. Under this test, if the result of the experience is ultimately positive for future life then it is seen as coming from God. This parallels traditional Christian spirituality, such as the Ignatian “discernment of spirits” in testing whether an experience is of God or not.

2.3.5 Summary

This research project is designed to examine the extent and frequency of “limit” experience among senior high school students. It has already been pointed out that such “limit” experiences are so common that their reality seems undeniable. The research questions parallel the categories of Hay (1987) by framing questions that focus attention on the various types of experiences that Hay identified in his own work: patterning of events, awareness of the presence of God, awareness of receiving help in prayer, awareness of a guiding presence not called God, awareness of the presence of the dead, awareness of a sacred presence in nature, awareness of an evil presence and the experience that all things are “one”.

Analysis of the smaller number of personal, written, accounts of experience follow a different set of categories developed by Ahern (1990) and use his word analysis to identify and classify the experiences. This will be further explained in section 2.6.6 of this chapter.

Only where students accept the invitation to write a personal account can the triggers for experience be identified. Where this is possible, the four Maxwell and Tschudin (1996) classifications – nature, prayer, music and heightened awareness can be utilised.

The question of the religious nature of particular experiences is not directly relevant to the research. This research is intended to look objectively at the reality of the experience and will leave interpretation to the individual. Where written accounts require analysis in this way the Ahern (1990) (see section 2.6.6, p. 69) categories will allow classification of an experience as religious if certain words and phrases are used to describe it. Although this is akin to the James' (1902/1985) suggestion that an experience is religious if the individual interprets it that way, it also raises the issue of language in describing experiences.

Students in Catholic schools could be advantaged in having a background of language with which to describe their experience of “limit” in religious terms. If such experiences are frequent among these groups it may also raise the question of the type of religious education that should best be offered to these students. The approach advocated by Flynn (1985, p. 147), would focus on “the formal teaching of Religious Education in the classroom while not excluding moments of faith and class liturgies” but with the emphasis firmly on “the **educational** perspective” while engaging “in an **educational exploration of religion and faith**”. In contrast to this approach, Hammond et al. (1990) advocate for classrooms that create an awareness of personal experience in addition to formal teaching about the institution of church.

It will be for others to take this debate forward. This work will identify and classify the reality of student experience.

2.4 The Approach of the Psychologists

This section will examine the contribution of major figures in psychology to the understanding of this phenomenon of “limit” experience and its interface with religion.

2.4.1 William James

William James (1902/1985) focussed his Gifford Lectures on the topic of Religious Experience when he was invited to present them in 1901. Adam Lord Gifford, a Senator of the College of Justice, who died in 1887, had endowed the lectureship. Its purpose, as stated by the University of Edinburgh, is to promote and diffuse the study of Natural Theology in the widest sense of the term - in other words, the knowledge of God.

From the perspective of this research the work of William James (1902/1985) is seminal. It provides, in embryonic form and with a range of qualitative examples, the theoretical basis for many of the later ideas of Hardy and others.

James' (1902/1985) time saw religion under siege from science, philosophy and psychology. In the century preceding his Gifford lectures classical physics was almost convinced that there was little else left to discover after the full development of Newtonian laws. Taylor (1989) outlines the times. Feuerbach had published *The Essence of Christianity* and thus turned the classical notion of man as an idea in the mind of God on its ear, stating that God was an idea in the mind of man. Marx and Engels had put forward their famous opium of the people assessment of religion. Meanwhile the direction and climate of the relatively new discipline of psychology made it ready to accept Freud's first attack on religion. This was to come only five years after James' Gifford Lectures.

Against this background, James (1902/1985) came to his series of lectures with two main aims: to defend religion against the prevailing philosophy of his time and to make the

hearer believe that religion (stripped of specific “church”) is mankind’s most important function. This second aim was later picked up in a similar way by Hardy’s (1978, 1997) proposal that religion is biologically natural and has remained throughout the process of natural selection because it has survival value for the individual.

James (1902/1985) tended to concentrate, however, on the “special” cases and his data is qualitative only. His key themes are that of conversion, the moral fruits of this conversion (saintliness) and mysticism. Although interested in personal religious feelings as the key to religious life, he appears to accept that those who report them are often the more extraordinary, even neurotic people. He believes that some human beings have moments of sentimental and mystical experience that carry an enormous sense of inner authority and illumination when they occur. In contrast to the research of Hay (1987) and Hay and Hunt (2000) among others, he believes that they come seldom and not to everyone. The rest of life often may make no connection with them, or tend to contradict more than confirm them.

James (1902/1985) proposed that humans may indeed have a realm of consciousness which facilitates some form of spiritual awareness: “it is logically conceivable that if there be higher spiritual agencies that can directly touch us, the psychological condition of their doing so might be our possession of a subconscious region which alone should yield access to them.” (p. 242). He lists feelings that may be part of the conversion experience. These focus on the mystical and are not as comprehensive as the later Hardy (1978) or Hay (1987) concepts and the concept of “limit” around which this study is built. For James, the feelings that fill the “hour” of conversion experience include:

1. Sense of higher control - State of assurance – loss of worry, sense of well-being despite outside conditions
2. Sense of perceiving truths not known before
3. Sense that the world has undergone objective change
4. Sensory automatism – hallucinatory or pseudo-hallucinatory luminous phenomena (James terms these ‘photisms’)

5. Ultimate feeling of ecstasy and happiness

James (1902/1985) gave four characteristic marks of a “mystical” experience. First, was its “noetic” quality, the strong sense of significance and increased knowledge associated with the experience. Secondly, such experiences are “ineffable” defying expression. Ahern (1990, see section 2.6.6, p.68) believes that some part of all such experiences defies expression and terms this the “manifoldness” of the experience.

These two qualities, the “noetic” and the “ineffable” James (1902/1985) saw as central to any mystical experience. Two other qualities were usually present: first, the experience was generally transient and memory faded quickly, although some memory always remained; secondly, it was passive. Even though many people actively study and/or practice techniques to produce mystical states of consciousness, once it occurs the experience seems to happen without being willed.

2.4.2 Freud and Jung

The idea that the God concept is a myth that stems from relationships in childhood seems to colour all of Freud’s judgments. Strachey (1971), for instance tells of a letter to Freud from an American doctor. It tells of the doctor’s religious experience on seeing a “sweet-faced dear old woman about to go to the dissecting room.” The doctor undergoes an on-going conversion experience as a result. Freud regards the explanation as obvious, for “the weakness of the judgement displayed by the young doctor is to be accounted for by the emotion roused in him by the memory of his mother” (p. 245). His explanation continues: “His ideas of ‘Father’ and ‘God’ had not yet become widely separated ... this in turn leads to a hallucinatory psychosis where inner voices utter warnings against resistance to God.”

However, there were experiences that Freud admits he does not understand and with which his psychological approach fails to cope. In *Civilization and Its Discontents* (1961) Freud refers to correspondence from a “friend” which outlines a “peculiar feeling”. The

writer believes it may be present in millions of people. It is (p. 12) a “feeling of ‘eternity’, a feeling of something limitless, unbounded – as it were, ‘oceanic’”. Freud comments: “I could not convince myself of the primary nature of such a feeling. But this gives me no right to deny that it does in fact occur in other people.” (p. 12) He further mentions that he is “inclined to acknowledge that the ‘oceanic’ feeling exists in many people, and we are inclined to trace it back to an early phase of ego-feeling.” (p. 19) He goes on to say (p. 19): “Let me admit once more that it is very difficult for me to work with these almost intangible qualities.”

Jung was a student of Freud’s and became the first voice of opposition to the Freudian emphasis on childhood as the sole formative agent for psychological health. Jung (1971, 1980) was also the first theorist to suggest a Lifespan approach to psychology. Petersen (1989) traces expansion of this theory by Erikson in his stages of development and Kohlberg in stages of moral development. Fowler (1980), in his theories of faith development, approached the lifespan concept from a spiritual perspective.

Importantly for this research, Jung (1971, 1980) affirms the existence and importance of an inner subjective world. Unlike Freud, he seeks to understand this world. Jung would not reject the “oceanic” feeling as outside his scope of enquiry. Indeed he sees the development of this inner world as crucial to full human development. He noted that the first half of life usually focused on the external world. The second half, beyond fifty years of age, must then be devoted to the inner, subjective world that had been previously neglected.

Of particular importance to this research is that Jung (1971, 1980) recognises the reality of experiences that might be interpreted as religious. Although he does not attempt himself to interpret them, neither does he dismiss them. For instance in *Psychology and Religion* Jung (1971) calls on psychologists to assume a scientific attitude and to disregard the claim of every creed to be the unique and eternal truth. The psychologist “... must keep his eye on the human side of the religious problem, in that he is concerned with the religious experience, quite apart from what the creeds have made of it.” (p. 184).

Jung believes that creeds are codified and dogmatised forms of original religious experience.

Perhaps with a backward swipe at Freud's seeming inability to comprehend the concept of "limit" experiences, in *Psychology and Alchemy* (1980) Jung states that "in religious matters it is a well known fact that we cannot understand a thing until we have experienced it inwardly" (p. 37). Personal experience is the key.

This research will explore the experiences of senior high school students and examine their personal religious belief and the religious background of their homes. Thus the theoretical base provided by Jung is of value in validating the approach and its results. Whether we affirm a belief in God as reality or not, Jung allows us to focus on the reality of the concept for normal human beings rather than regard it, in Freudian terms, as a problem to be overcome.

2.4.3 Wholeness – the Integrated Person

Two psychologists significant for this research, Maslow (1964) and Frankl (1975, 1989) have developed psychological frameworks around the reality of this experience of "limit". The frameworks look from different perspectives at what characteristics might be true of a spiritually stable person but do not relate this to a lifespan model of development. The self-actualisation of Maslow (1964) and the self-transcendence of Frankl (1975, 1989) may be present at any stage of life in any person. The intensity or degree of this spiritual maturity may differ and persons may experience the intensity of it at different times of life.

Schultz (1977) outlines Maslow's approach as one of studying psychologically healthy individuals. All human beings, for Maslow, are born with *instinctoid needs*. These universal needs motivate us to grow and develop, to actualise ourselves, to become all we are capable of becoming. Maslow's pre-requisite for achieving self-actualisation is to fulfil the needs that stand lower in this hierarchy of needs. At the base are physiological

needs and then safety needs. Without fulfilment of these, the next two levels, the need for belonging and love and the need for self-esteem cannot be fulfilled. Hence the questions in this research that ask about home background and sense of personal fulfilment at home and school can be seen to have direct bearing, in the Maslow model, on the potential for self-actualisation and “peak” experience.

Maslow’s (1964) “peak” experiences relate to self-actualisation. These experiences of ecstasy or transcendence are times when self-actualising persons experience intense and overwhelming bliss, ecstasy, and awe, akin to deep religious experiences. Maslow recognised two types of “peakers”: those who have many peaks of strong intensity and those who have fewer and milder peaks. The frequency of reporting such experiences led him to believe that they are to be expected from all normal human beings. His final link was between “peak” experience and religion. He believes that all “mystical” or “peak” experiences are the same in their essence and have always been the same. This leads him to conclude that all religions are the same in their essence and have always been the same. He refers to this common way as the “core-religious” or “transcendent” experience.

Practically everything that happened in the “peak” experiences, Maslow (1964) believed, could also be listed under the heading of religious happenings. The different types he recognised (p. 357) are:

the whole universe to be seen as an integrated and unified whole

tremendous concentration of a kind which does not normally occur...we become more detached, more objective and more able to perceive the world as if it were independent not only of the perceiver but of human beings in general

there is a very characteristic dis-orientation of time and space, or even a lack of consciousness of time and space

the world is seen only as beautiful, good, desirable, worthwhile, etc. and is never experienced as evil or undesirable

There is a similarity between these and the Hay (1987) categories that underpin this research (see Table 2.2 p. 37).

Maslow (1964) saw organized religion as an effort to communicate peak-experiences to non-peakers, to teach them to be in touch with them and then to apply the teaching. However, there is a note of caution, for (p. 355) “often, to make it more difficult, this job falls into the hands of non-peakers”

Frankl (1989) sees deficiencies in Maslow’s model of a needs hierarchy. For Frankl, human beings are more in control of their own destiny and do not necessarily have to have lower needs fulfilled before finding this self-actualisation at the peak of the Maslow pyramid. Frankl stresses the importance for psychological health of the *will to meaning*.

For individuals, meaning may exist, perhaps, only at certain times. In contrast to Maslow (1964), Frankl (1989) argues that even a single peak moment of experiential value can fill an individual life with meaning. What matters seems to be not how many peaks we have nor how long they are but the intensity of the ones we do have.

The ultimate criterion for a healthy personality is the immersion of self in some person or thing beyond ourselves. For Frankl (1989), there are three ways to give meaning to life: 1.) by what we give to the world in terms of some creation; 2.) by what we take from the world in experience; 3.) by the attitude we take towards suffering. In this framework, the meaningfulness of life is judged by its quality, not its longevity. It is less important that the work of life be finished than that it be begun and continued on a high level. Those who find meaning in life reach the state of *self-transcendence*, the ultimate state of being for the healthy personality.

Frankl's (1989) model gives a theoretical base to questions in this research (such as Q56 and Q 59) that ask about the meaningfulness of life for individuals. On Frankl's model it might be inferred that those with a positive meaning for their day-to-day existence could report a higher occurrence of "limit" experience.

2.4.4 Summary

The psychology of Religious Experience is a core element of this research. It provides some of the theoretical base underlying the items in the research survey. In particular it validates, from a psychological perspective, the process of asking adolescents about the reality of their "limit" experience in the first place.

The early work of James (1902/1985) identified a range of such experiences that were often intense although usually transient. These experiences seemed to happen without being consciously willed, although he admitted that there were techniques in the religious traditions that allowed individuals to consciously seek them.

Those who followed continued to attest to the reality of this type of experience. Freud (1946, 1961 and 1964), although regarding "God" as a naïve childhood concept and a complex in need of resolution, also admitted to the reality of "oceanic" type experiences and stated that he simply did not understand them. Jung (1971, 1980) challenges the Freudian approach and recognises the reality of experiences that might be interpreted as religious.

In later work, Maslow (1964) also attests to the reality of such experiences, but sees that the lower needs in his hierarchy must be fulfilled before such experiences can be had or recognised. Once these conditions are fulfilled he would expect that almost all would have what he termed "peak" experience. Frankl (1989) on the other hand sees personal meaning for life as the essential element guiding the individual and that fulfilment of the lower order needs of Maslow (1964) is an unnecessary condition for self-transcendence.

This section outlines how there is much in modern psychology that validates asking questions about “limit” experience and its occurrence. It also provides a theoretical basis for later comparisons to be made between its occurrence and home background, personal contentment and personal meaning.

2.5 *The Influence of Society*

Schillebeeckx (1977) believes that individual experience is always interpreted experience. We identify and classify in terms of already known models. The individual who experiences is also part of existing society, not an abstract individual. Hence, to examine “limit” experience among today’s adolescents requires an analysis of the type of society in which they have been formed.

2.5.1 The Origins of Modern Secularism

Hay and Nye (1998) believe that there seems to have been a shift in the way theologians thought about religion following the Reformation. Instead of reflecting directly on their spiritual experience as the major source of their convictions, they began to call on the methods of natural philosophy (physics) to defend their belief in God. They believe there may have been another motive for this; perhaps mainstream theologians were also dismayed at the chaos created by what they refer to as the somewhat crazy fideism of the Radical Reformers of the seventeenth century, emerging from a fractured Christianity. Thus numerous mainstream theologians lost morale and no longer believed they had the means to establish their own cognitive claims. Newton, Descartes and others filled the breach.

An excellent analysis of this period and the making of the modern self is given by Taylor (1989). Taylor sees that by the end of the 18th Century something akin to the modern self

is in process of evolution. This modern self is based on an individualism that is central to the modern identity.

That there has been a marked decline in religious practice today is undoubted (see Bentley and Hughes (1998)). It might be attributed to both large-scale institutional change and the spread of science and education, according to Hay and Nye (1998). However, they see the crucial change as being that people no longer feel the spiritual dimension of their lives is incomprehensible if we suppose there is no God. What matters is that masses of people can sense moral sources of a different kind, ones that don't necessarily suppose a God. They see that the defense of religious belief offered by the established church to these challenges continued to rely on what it had taught before; primarily an appeal to the argument by design, working from the premise that God created the world. All else followed from there.

Other approaches to the interface between theology, spirituality and scientific analysis were possible. This research, for instance, centers on the Alister Hardy approach of using scientific methods to collect and analyse data on the occurrence of spiritual ("limit") experiences, to show, in fact, the relevance of the spiritual by unequivocally proving its reality. In more recent times the ground has shifted again. Honner (1999) and Blaike (1999) outline ways in which scientists and particularly physicists and theologians are coming closer together in their view of the world. Honner believes that quantum physics and theology often share similar language and similar concepts.

Given the development of modern society and its focus on both science and individualism, it is only to be expected that this research will be affected in some way. It is based on adolescent experience. Hence it might expect to find a youth that has, at times, a quite profound spiritual experience but sees no need to express this in terms of a faith in a creator God nor to affiliate through a church community to this God.

2.5.2 The Decline of Religious Practice

Religious practice as such is a variable measure that is prone to change with social mores. Bentley and Hughes (1998) document the major changes in social structure, religious belief and church affiliation over the past ten years in Australia. Angelico's (1997) work also documents this disaffection with the institutional church. Flynn's (1993) research over a twenty-five year period also highlights this real decline in active participation in church.

There has been a marked decline in religious practice, around 26% in Britain and 12 % in Australia (Christian Research Association, 2000b, p. 4) since 1979. Coupled with this is the disaffection for church of many young people in both countries. The age profile of church attenders in both countries is very similar. In Australia (p. 9) only 11.7% (U.K. 11.8%) of 20 to 29 olds make up the attending population, with the highest attendance among those over 65 at a little over 31% (U.K. 33.3%).

Lest all of this be seen as negative, a more positive perspective is provided by Hay (1987). He quotes evidence stretching back through Christian Europe that strong religious imagery can co-exist with such attitudes as anti-clericalism and violent unbelief. He quotes in more recent times an 1851 survey of British church attenders that showed only one in ten of the working class attended. Similarly Hay cites the Italian experience which shows that percentages of actual church attenders were, surprisingly, much lower than actual percentages of monks among the population from the Renaissance through to the eighteenth century.

Sociologist Peter Berger (1979, 1999) believes that, although churches might assume that the real fight is against "secularization", this may not be the case. He suggests that what churches have been doing throughout the past hundred years or more was providing comfort in a time of rapid social change, at the expense of "real" religion. That is, a religion that goes more deeply into the experiential dimension of peoples' lives.

While we may be tempted to believe that the decline in institutions is symbolic of decline in religion, perhaps there is a sacred dimension to human experience that is prior to all symbols. Berger (1999, p. 13) believes that the “religious impulse” has “been a perennial feature of humanity” and that “it would require something close to a mutation of the species to extinguish this impulse for good.” This research focuses on this fundamental “limit” experience and not on formal religious affiliation or practice. Research which measures religious affiliation against other indicators will be reliable and valid only in so far as it aims to document the level of actual practice or compare the changes (in this case a decline) in this aspect over time. It cannot draw the conclusion that this implies a decline in experience of the phenomena that believers may call “religious”.

2.5.3 Is there a Secular Spirituality?

The decline in religious practice and the rise of movements such as New Age, coupled with a growing awareness of an environmental spirituality among the general population points to the growth of a secular form of spirituality.

Meanwhile there is a search, often with unsatisfactory results, for meaning. Fox (1996, p. 6) states that our (western) society has reached a state of “psychological, intellectual and spiritual anomie”. He believes that many currently seek, by various means, a solid foundation for understanding themselves and the world. Although many have abandoned the traditional path of church their search for a personal spirituality continues unabated and with more or less satisfaction depending on the answer generated.

In both Britain and Australia, the level of belief in a soul (Heald, 2000) or in life after death (Bentley & Hughes 1998) has remained steady for over 50 years at above 50%. Meanwhile, the search for spiritual satisfaction has taken on numerous new forms that could be interpreted as a post-modern move towards a secular spirituality.

Harvey (1997) sees the eco-activist or green movement as one expression of religious experience today. Harvey believes all religions have a continuum with activism and passivism at the extremes and relates the activist model of demonstrating to preserve the environment as one expression of a deeper spiritual experience. This he sees as essentially pagan in its practice. It is often related to “speaking with” and “hearing” trees and things other than human. Australians share this concern for the environment with between 50% and 85% (Bentley & Hughes, 1998, p. 104) expressing concern on a range of issues including cleanliness of waterways, pollution from cars and disposal of nuclear waste. Harvey suggests that the contemporary religious experience of many people listens to voices within and believes that what they hear validates their spirituality.

Whaling (1996) outlines the different spiritual perspectives of the New Age movement. There are so many varieties of New Age thought that it would be impossible to simply summarise in a few lines the many directions of this approach to the spiritual. For Whaling, however, there are significant directional bridges among the major themes of New Age and Christianity. There is a focus on ecology and feminine values, which has its parallel in the creation theology of Fox (1991). There is also a unity expressed between the body and the total inner state of the human being, so that healing the body is seen as only one part of healing the total personality.

From the perspective of “limit” experience, there is a belief in human potential. New Age takes up Maslow’s (1964) opinion that “peak” experiences are available to all who will actively seek them. They express belief that, for those with a will to seek, the potential within human beings is greater than we suppose and is there to be claimed. Whaling (1996) believes that they take this further in recognising the power of the inner voice. Meditation of one kind or another is a pervading aspect of New Age and spiritual experience is central to it.

Others relate this searching of the modern age to our fascination with science fiction. In particular, Fox (1996) sees a program such as the “X-Files” as attempting to bring depth and transcendence to an audience that might not otherwise engage with these things. For

Fox, science fiction may be providing the myths of belief, hope and redemption that are currently lacking for many who have lost their foundation of Christian belief.

Other substitutes for the unity of purpose of religious affiliation are to be found in such things as football fanaticism, according to Eyre (1997). Eyre takes Stark and Glock's dimensions of religious commitment and relates these to individual commitment to the "team" or "club". Religious practice, consisting of regular worship, ritual and devotion find their substitutes in attendance at games and sitting with the dedicated fans.

These varied interpretations of the modern search for the spiritual highlight the complicated background of this research. It is to be expected that the results will identify the spiritual experience of young people searching for their own depth and meaning in life. The "background noise" of differing answers to the search might be reflected in low commitment to formal church. On the other hand, the search for and experience of, the spiritual dimension could be expected to be apparent.

2.5.4 Summary

The development of the modern psyche, according to Hay and Nye (1998), has been such that people in western society no longer feel that the spiritual is incomprehensible if there is no God. The fact that 76% of the British public (Hay & Hunt, 2000) can affirm having had a spiritual or religious experience at the same time as we see falling church attendance and allegiance supports the concept that there may be a secular form of spirituality in our society. It may well be expected that a significant number will be able to relate to the concept of "limit" experience without having any regular or tangible church affiliation.

2.6 *Researching Religious Experience*

2.6.1 Researching “Religiosity”

Although the number of papers in the field is not large, there has been a reasonable amount of research that attempts to understand what constitutes a “religious” person. In particular much of this has focused on the “religiosity” of people. “Religiosity” in this context is the external expression of a person's belief structure as evidenced by such things as church attendance, number of prayers said or professed affiliation with some particular church group. The advantage these studies have is that their subject matter is eminently measurable. Such quantitative measures have provided the basis for comparison of “religiosity” with numerous other social factors.

Mullen and Francis (1995) studied it in relation to attitude to soft and hard drugs among Dutch adolescents. They divided their measure of religiosity into five categories, all focused on level of church attendance. They concluded that religiosity is an important predictor of attitude to drug use.

Beutel and Marini (1995) have explored the relationship between religiosity and gender values. They looked at data from comprehensive cross-sectional surveys of U.S. High School seniors at five-year intervals over a twenty-year period. They measured values on a three-point construct of: compassion - concern for others; materialism - concern for own well-being (economic); and meaning - concern to find purpose in life. Religiosity was gauged from two questions: (1) “how important is religion in your life?” and (2) “how often do you attend religious services?” Once again, religious attendance was a prime measure although the first question has been interpreted in other studies as touching on the realm of “religious experience.” They concluded that religiosity had a statistically significant effect on all three of their value constructs.

Donahue and Benson (1995) undertook a review of the literature on adolescent religiosity and its relation to perceived well-being. They focussed on three questions on religiosity in a wider 152 item survey: hours per week at “services, groups or programs at church”; frequency of attending “services at a church”; “how important is religion in your life?”. Their conclusions were that religiosity is associated with positive developmental outcomes, although the mechanisms underpinning this development are unclear.

Francis and Wilcox (1993) researched personality, prayer and church attendance among adolescent girls in England. Their study tested the girls on the EPQA-R (Eysenck's scale) for extroversion, neuroticism and psychoticism. The questions on church attendance and personal prayer were answered on a five-point Likert scale. They found a significant but low negative correlation between psychoticism and religiosity and a positive correlation between church attendance and prayer. However, significantly for this research, they concluded that the relatively low result confirmed that church attendance and prayer did not “tap the same dimension” (p.246).

2.6.2 Flynn – Adolescent Faith Development

Flynn (1975, 1985, 1993) conducted three major research projects among students, staff and parents of Catholic High schools in New South Wales and the Australian Capital Territory. His early work in 1972 and 1982 had a disproportionate number of males as respondents, due to a deliberate decision to study only single sex boys' schools and co-educational schools. Studies involving single sex girls' schools had already been undertaken by others in both 1970 and 1981, so the decision was taken to limit the scope of the Flynn research.

The 1990 survey, replicating the work done in both 1972 and 1982, was evenly balanced for gender. The sample population had grown from 2041 students and 25 schools in 1982 to 5932 students and 50 schools in 1990. Flynn's (1993) stated aim for the 1990 survey was to explore the integration of faith within the culture and life of the schools. He also

intended to explore points of contact with the earlier research and to examine trends in the data over the period from 1972 to 1990.

Of particular comparative interest for this research is the use Flynn (1985, 1993) makes of Fowler's (1980) stages of faith in proposing his own model of the life journey of faith (1985, p. 259; 1993, p. 333) for Year 12 students in the cultural setting of an Australian Catholic school and Australian church culture.

Fowler (1980) attempted to look beyond the religious dimension of faith to the fundamental desire of people to find meaning. For Fowler faith is the way people know and understand their experience in order to make sense of their lives. Such faith is not necessarily religious in its content. Fowler proposes six stages of faith development. These run parallel to the Erikson stages of psychological development outlined by Petersen (1989). Fowler sees a distinction between the *structures* of faith, which relate to his six stages of faith development and the *content* of that faith. **Content** is comprised of a number of dimensions: the *centres of value* - what is worshipped and what is of worth; the *images of power* - the powers with which we align in the midst of life's contingencies; and the *master stories* - the stories we tell ourselves and by which we interpret and respond to the world. He postulates two significant kinds of change of faith – *stage change* and *conversion*, each can be had separately to the other. Conversion is seen by Fowler as a change in the content of faith. Conversion is a significant re-centering of one's previous conscious or unconscious images of value and power, and the conscious adoption of a new set of master stories as part of a commitment to reshape one's life in a new community of interpretation and action.

Fowler (1980) uses Mary's pilgrimage as an example of his stages of faith development. It is interesting to look at the key points of conversion in her life, each of them is based on one of Hay's (1987) categories for Religious Experience:

I had a really exceptional experience on LSD. It was revealed to me in such a real way That our only purpose on earth is to worship and glorify the Lord (p. 220)

Awareness of the presence of God.

After all these futile attempts ... I prayed: 'Lord, will you please show me if this group is for me or not?' So I went to a meeting and just felt such a heaviness over the whole meeting. I decided then and there that 'This is it. I'm not coming back.' (p. 229)

Awareness of receiving help in prayer

I remember sitting on a plane and feeling absolutely astonished to see the number of my flight was 777,.. it seemed a very auspicious sign. (p. 231)

Patterning of events

I had such a vision of the Kingdom of God on earth just being among my brothers and sisters and seeing the body of Christ being built up there. It was so real to me that I was part of the Kingdom of God... (p. 231)

Experience that all things are one

Flynn's (1985, 1993) use of Fowler's stages concentrates stage changes within religious faith rather than on content change or human faith development and the search for meaning. He analyses the stages of student faith development from what Year 12 students report about their religious faith in his survey. This is done by grouping sets of questions from the survey that can be related to Fowler's (1980) stages of religious faith development. For instance, the number of students reporting "Experienced Faith" (Flynn, 1993, p. 337) is assessed by questions reporting the tendency of students to base their life on the faith and values of parents.

"Conventional Faith" (Flynn, 1993, p. 339) is assessed via responses to questions on acceptance of church teaching as guide to life. "Questioning Faith" is quantified according to the level of response to items such as: "At times I question my belief in God". This question appears again in assessing "searching faith" (p. 343). It is augmented by responses to items such as: "I am disturbed at times by my lack of faith". Later stages,

“owned faith” and “personal faith in Jesus”, are also measured by items with a strong focus on the language of conventional religious faith.

Flynn (1985, 1993) concentrates on the external dimension of religion. He is describing “simply what Year 12 students report about aspects of their faith” (p. 325). He makes “no claim to explore the reality of the underlying mystery of God’s action in the lives of young people” (p. 325).

The real issue for this research is “limit” experience, which subsumes religious experience. It will not seek to examine in detail the stages of faith development. However, items in the survey replicate some of the Flynn (1985, 1993) items. This will enable comparisons between the Flynn cohorts and the respondents to this survey. Perhaps some who have internalised their religious belief have had little or no encounter with “limit” experience. It may also be possible that some who have no attachment to formal religion still report such experience.

2.6.3 Religious Experience and Childhood

Robinson (1977) studied over four thousand first person accounts of religious or limit experience from the archives of the Religious Experience Research Unit. Fifteen percent of correspondents went back to experiences of their earliest years. He concentrated his analysis on these experiences, recorded many years later in adulthood, which were in fact descriptions of a childhood experience still vivid in the memory.

Robinson (1977) acknowledges the dominant influence of Piaget in educational training of teachers. He believes Piaget’s theory is convincing since conclusions follow clearly from experimental work and that his ideas about what is important are in tune with our society. The starting point of Piaget’s thought is the incapacity of children to see the world as adults see it. Robinson believes there may be positive qualities in childhood that remain undetected by Piaget’s methods.

Robinson (1977) assumes that children have a natural capacity for insight, imagination, understanding and knowing that does not need to develop into some higher form. He says that children can and do have profound, mature religious experiences which only in later life can be named, described, explained or comprehended. He believes that (p. xiii) “we know about religion before we know what religion is about”. In so many reported experiences he found that the immediacy of the experience made it real for the person involved. For instance: “It was as if something said to me ‘Don’t ever allow yourself to question this’.”(p.21) and “If it was hallucination why do I remember it as the most real and living experience I have ever had?” (p.22)

Robinson (1977) sees the religious experience of childhood as having the advantage of being experienced for the first time and believes this lends authenticity to the experience. Throughout his analysis his purpose is to suggest that religious experience is indeed quite ordinary, commonplace in fact. Robinson worked with adults to research experience that often had occurred in childhood. In contrast to this approach is the significant recent research with children themselves. An overview, quoted by Hay and Nye (1998), of the more recent research on this topic includes the work of Gote Klinberg among 630 swedish children who were asked to write compositions beginning “Once when I thought about God...”. Klinberg classified the situations described into four types (in order of frequency):

- a) situations of distress
- b) experiences in nature
- c) moral experiences
- d) formal worship experiences

Hay and Nye (1998) also refer to the Elkind’s investigations in which they found that as children move into puberty there is a growth in spiritual or religious experience. They also cite Maria Bindl who examined children’s drawings as a way to detect spirituality. She suggested four developmental phases, ending with late adolescence where in some cases there was a return to a consciously striven-for relation to transcendence. Bindl

thought that, perhaps in an appropriate environment, late adolescence can be a time when there is an attempt to recover what has been lost in childhood. This re-discovery in late adolescence might indicate potentially high response rates for “limit” experience among the senior high school students taking part in this investigation.

Hay and Nye (1998) believe that the plausibility of cognitive psychology as a means to gaining self-understanding has meant that developmental theories of religion have tended to follow rather tamely in its wake. To explore alternative directions they began to test childhood experience directly through work with children themselves. Their initial work was done in an Anglican Primary school near Nottingham. Conversations were held with children aged from six to seven and from ten to eleven, all selected at random. Twenty-eight of the thirty-eight subjects were classified as having no religious affiliation. The children came predominantly from a lower middle class background. Hence their results could, potentially, inform this research in which the sample is from a similar socio-economic circumstance.

The first section of their interview was loosely structured chat, often inviting them to do a drawing. The second section explored what they suggested might be three interrelated categories or themes providing a framework for spiritual sensitivity: *awareness sensing*, *mystery sensing*, and *value sensing*. The children were invited to talk about a set of photographs. There was no overt mention of religion unless the child brought up the subject. These three categories of spiritual sensitivity are explored in the final results of this research. Within each category they also identify examples or sub-sets of the types of experiences typical of the descriptor.

Table 2.3 Categories of Spiritual Sensitivity

Category	Examples
<i>Awareness sensing</i>	Here and now Tuning Flow Focusing
<i>Mystery Sensing</i>	Wonder and awe Imagination
<i>Value sensing</i>	Delight and despair Ultimate goodness Meaning

(From: Hay & Nye, 1998, p. 59)

Awareness sensing is defined as being attentive to one's attention or 'being aware of one's awareness'. In the "Here and Now" the person is transfixed in appreciation of the intensity of the present moment. Both Buddhist and Christian spiritualities have used this concentration on the immediate as a pathway to spiritual awareness. "Tuning" is the type of heightened awareness that takes place in such experiences as the intense aesthetic pleasure of listening to music or feeling at one with nature. "Flow" is an experience of being involved in something so intense that other concurrent experiences become background or peripheral. The experience of professional sportsmen and women, where skills become second nature for a time during an important event, are an example of the "flow". "Focusing" is being in touch with our bodily feelings in a holistic way; it includes awareness, rather than suppression, of our whole bodily response in particular circumstances.

Mystery Sensing is an awareness of aspects of our life experience that are in principle incomprehensible. “Wonder and Awe” can encompass Otto’s (1950) experience of the mystery of the sacred, or the awareness and wonder of seeing the sun rise or set or perhaps the awed fascination of a particular scientific truth. “Imagination” allows an awareness of story, symbol or metaphor to represent those experiences of our world which are otherwise indescribable.

Value sensing is part of a progression from self-centred emotion to an experience of value that transcends personal concerns, and is perhaps implied in the ecstatic experience of the religious contemplatives. Value sensing is experienced as emotion. In this context, “delight and despair” are self-explanatory. The feeling of “ultimate goodness” allows a sense of the trust in the goodness and purpose of life itself. “Meaning” is something experienced at a deeper level than the cognitive. It is a deeply sensed feeling of oneness with the whole of creation. Hay and Nye (1998, p. 74) believe that the profound questions of existence such as “Who am I?” and “What is my purpose?” are secondary products of deeper spiritual stirrings found in awareness-sensing, mystery sensing and value sensing.

The children in Hay and Nye’s (1998) sample were often ready to draw on religious concepts in trying to give meaning to experience, despite having no background in formal religion. Often, however, those who had spoken of their experience to adults had been ridiculed or corrected, backing up the notion that such experience is unacceptable in the adult world. Telling others about the experience was discouraged from an early age.

2.6.4 Relational Consciousness

Hay and Nye (1998) suggested that the category which drew together all the different kinds of seemingly relevant data from their work with children was a compound property which they termed “relational consciousness”. This they saw as a type of consciousness underlying ordinary conscious activity. It enabled an individual to be receptive to and understand their religious or “limit” experience. They further suggest that there has been a social destruction of the recognition of spirituality and such consciousness can tend to

go largely unrecognized in today's society. Their work centred on children because their belief was that children might have been least affected by this social destruction and hence more attuned to the reality of their experiences.

Relational consciousness is suggested by Hay and Nye (1998) as the core category that can "tell the story" of the phenomenon of children's spiritual experience. They saw this revealed first in those passages where there was an unusual level of consciousness or perceptiveness relative to other parts of the conversation. Secondly, the conversation was expressed in a context of how the child related to the material world, themselves, other people and God. "Consciousness" as used here, is more than alertness or mental attentiveness, it is discrete moments of unusual awareness. It is a distinctly reflective consciousness akin to meta-cognition in developmental psychology.

The contexts within which the core category of relational consciousness appears are:

Child – God consciousness

Child – People consciousness

Child – World consciousness

Child – Self consciousness

Child-God consciousness is a traditional way of interpreting the world. The child's spirituality is reflected in their feelings and thoughts about their relationship with God. Child-People consciousness refers to relationships with others in their world. These can form a bridge to and from the child-God context. In Child-World consciousness, spirituality is experienced through the child's relationship to the natural world. Finally, Child-Self consciousness was experienced in the context of the child's sense of relationship with its own identity and mental life. There was often talk of the mystery of death in this last context.

The circumstances in which the core category is expressed are characterised by different "languages" in which children articulate spirituality. These languages are learned means of communication that the children use to describe their world.

First among these was religious language. In particular the language of Christianity was often resorted to, without the child necessarily having any faith background and simply because the child seems to have struggled to find any other way of expressing this consciousness. Other children, familiar with religious language from the classroom, tended to use it as a means to detach themselves from their experience. They would discourse by using phrases and facts about religion they had learned in class without having come to a personal consciousness of their experience.

Children also used the language of fiction or play and games to describe their experience. When this was used it was seen as a personalised expression of the child's ideas and feelings. The researchers felt they could then be more confident that the expression was a genuine response. Occasionally the researchers found children influenced by other types of language such as the science fiction of television, while others used the language of science and technology. This was interpreted as being synonymous with expressing wonder and awe.

Hay and Nye (1998, p. 144) believe that what they have identified as "relational consciousness" is "an entirely natural and universal human predisposition." They quote recent psychological investigations into children's understanding of social situations indicating relational intuitions at a very early age. For example, pre-verbal toddlers are able to take part in teasing games requiring insight into what it means for another person to be given something or deprived of something. There is an all-pervasive, pre-verbal awareness that Hay and Nye believe is (p. 144) "our indissoluble link with the seamless robe of reality." They believe that, in principle, relational consciousness would underlie not merely teasing but also its opposite, care and concern. For them, "relational consciousness" is an interchangeable term with "religious experience". From the point of view of this research, the concept of "relational consciousness" may underlie "limit" experience. Awareness of such experiences requires the development, recognition and use of an individual's relational consciousness.

The conclusions they draw from their framework have importance for this research. First, they believe that their work supports the Alister Hardy (1978, 1997) hypothesis that religious experience was positively selected in the biological evolution of the human species simply because it had survival value for the individual. They then suggest a social or cultural component in relational consciousness that has allowed some groups to survive because of their cohesiveness and mutual support. Finally, they suggest that because the evolution of the human species is imperceptibly slow, relational consciousness has remained stable for most of the history of *homo sapiens*.

If they are correct, what are the implications for this study? Perhaps first is their idea of the social destruction of spirituality. Spiritual experience can go largely unrecognised and unreported. Three factors contribute to this. First, the language of spirituality in our society is overwhelmingly Christian in origin. Second, because of the dominance of Christian language, spirituality is usually linked in children's heads with religion, and hence church. Finally, following Taylor's (1989) analysis, Hay and Nye (1998, p.156) see that "popular culture spouses extreme forms of individualism and consumerism which pervert the communal and environmental values that grow out of spiritual awareness." The result is that, while most people know they have a spiritual life, they are usually embarrassed to talk about it or to admit to it in any public forum.

2.6.5 Adolescent Experience - Robinson and Jackson

Robinson and Jackson (1987) undertook a major survey of 3189 boys and 3387 girls from a diverse range of schools across the UK and Ireland. Their stated purpose (p. 1) was to "find some way of studying the religious ideas, feelings and experiences among those in the 16-19 year old age group" and "to relate these to the broader field of the values, priorities and goals in life" of the group. Hence their research has a different basis to this research project. The purpose of this research is simply to investigate the occurrence and recognition of "limit" experience among senior high school students, hence the survey instrument contains more direct items on this topic than the Robinson and Jackson survey. While acknowledging this difference, however, the Robinson and

Jackson research, a study that did directly address “limit” experience, does have direct bearing on the design and analysis of this research.

In essence, Robinson and Jackson (1987) believed that the capacity for religious or spiritual experience is universal in the human species. This capacity needs to be activated and might otherwise remain dormant, however, activation is not the final answer. Expressing the results of this activation requires that a person has learned some mode of expression, a language that will allow them to articulate the experience. From this basis, they theorised that the modes of expression for such experiences, once activated in some way, might not be limited to the verbal. Such mediums as music, art, drama and dance may be as effective as words in expressing this reality. The means of expression may be intellectual, aesthetic or practical. Harvey (1997), for instance, suggests that one practical expression is the environmental spirituality common today.

Thus Robinson and Jackson (1987) reasoned that schools or teachers that encouraged students to be in touch with spiritual reality via art, music, drama or even the wonder of science or mathematics may provide the basis for better spiritual awareness among their students. Participation in some form of group activity, community service for example, might also stir the imagination and enable recognition of religious experience. They suggest that some students (divergers) will respond to a variety of such means of expression, others (convergers) may respond to few or only one. Their research was geared to try to identify those particular features of school life and teaching that might best enable this response.

Robinson and Jackson (1987) surmised that the religious education program on its own may not achieve recognition of the reality of “limit” or religious experiences. They saw a major function of religious education as being to offer as wide a range of “languages” as possible to allow articulation of experience. Flynn’s (1985) finding that the informal curriculum of a school had major impact on attitudes to religion is a similar finding from a different perspective.

The Robinson and Jackson (1987) research instrument was analysed using factor analysis to produce 10 factors accounting for 25.5% of the variance in survey results. Of particular interest are their “explicit” (EXPREL) and “implicit” (IMPREL) religious scales and their experience scales, “numinous” (NUMEX) and “mystical” (MYSTEX).

The “explicit religion” scale was designed to measure respondents’ attitudes to “the conventional beliefs and practices of traditionally established forms of religion” (p. 16). The “implicit religion” scale measured “a considerably wider range of thought and feeling and one for which no precisely agreed definition will probably ever be possible”. (p. 17). This research survey uses one question from the Robinson and Jackson (1987) “explicit” religion scale (q. 26, p. 11) appearing as item 31 of this survey. It also uses four of their “implicit” religion questions (q. 23, 30, 31, 33, p. 10–11) as items 51, 35, 36 and 33 of this research instrument.

The “numinous” and “mystical” experience scales are centred on two descriptive passages and five direct questions. This survey used one of the passages only, (39(b), p. 12) as item 63. The technique of using a passage describing a particular type of experience and seeking a response graded from “definitely – yes..” to “never..” has been used a little more extensively in this research as has that of asking direct questions on types of experience. However, the questions have been derived to cover all of the Hay (1987) categories of religious experience (see Table 2.2, p. 37). The Robinson and Jackson (1987) questions have been included in this way to allow some comparisons to be made with their research study.

Robinson and Jackson (1987) also hoped to link school subjects with the enabling of spiritual experience. Their questions asked which school subjects had made students feel deeply about life. Similar questions will be asked in this research survey. They found that those who were influenced by their experience of English or Art scored much higher on the implicit religion scale than those who chose Religious Education. Less than a third of all pupils felt Religious Education had improved their understanding of life. Of those whose implicit religion scale scores were above average, 47% did not see Religious

Education as improving understanding of life. They believed that there were aspects of their data that would not bring “comfort to those who are concerned with the health of RE in our schools today.” (p. 55).

2.6.6 Categories for Analysis of Written Accounts – Ahern

Ahern (1990) undertook a consultancy on behalf of RERU to examine the written records and develop a method to classify them. Ahern classified in detail approximately sixty randomly selected reports from over five hundred reports collected by the centre in 1984 and 1985. The random selection was refined further by the application of a quota for what Ahern classed as largely psychic reports of experience. These differed from those of “religious” experience proper. In the terms used in this research, Ahern restricted the number of general reports of “limit” experiences in his sample so that he could concentrate his efforts more clearly on those that had been interpreted by the subject as being “religious”. Ahern also recognised the limitations of the collection of written testimonies. The archive selection is certainly not random. It is comprised of voluntary contributions from those who claim a limit experience and hence it is unlikely that this is a reasonable sample of the general population.

Ahern (1990) first addressed the question, similar to the Maslow (1964) hypothesis, of whether religious experiences have ultimate sameness. That is, is there a universal transcendent reality to which, in different ways, each religion is pointing? He concludes that there are characteristic differences between British society and what he terms relatively undifferentiated societies. The idea of religious experience, he believes, is a predominately Western one, centred in the main on post-protestant society. In Western culture such experience is in the private domain and its discussion is largely taboo. The world of other cultures, the major example he uses is India, may regard such private experience as alien, since it suggests that the spiritual can be cut off from ordinary life. The West has been largely secularised and people tend to block out the experience. Ahern refers to this as our level of “impermeability”.

Of the experiences examined, 40 % took place alone. It seemed from the descriptions that written accounts are more likely to be forthcoming where people had religious faith as children and this developed a language of expression that they used later on in life. He found that teenagers reported more psychic experience and over 65's reported more spiritual / religious experiences. This has relevance for this work with senior high school students. It might be expected that there would be a predominance of the psychic among the samples and that a religious interpretation would be less frequent.

Ahern (1990) saw the accounts held at the Religious Experience Research Unit as falling along two continuums that defined the experience. First was the spiritual / religious continuum. The spiritual / religious nature of an experience was defined as the experience of an ultimate, what Otto (1950) described as the experience of the numinous, a factor Ahern also recognises as at one boundary of what he terms "transcendence". He suggested that the descriptions he reviewed lay along a "continuum of transcendence" running from being not at all spiritual / religious to being completely spiritual / religious.

Some experiences related to the spiritual / religious while not being of themselves spiritual / religious. Among these were experiences that saw a negative to positive change in life. Many subjects saw their experience as a turning point. James (1902/1985) had regarded these as classic religious experiences. However, Ahern (1990) identified a type of experience remarkably similar to a spiritual / religious experience, with a clear change of direction as the outcome, yet not seen by the subject as relating to the spiritual / religious.

Near death experiences bore a similar relation to the spiritual / religious. When recalled they were usually positive and had a distinct spiritual / religious pattern, without necessarily being interpreted as such. Out of the body experiences elicited a similar comment. They were not necessarily of the spiritual / religious type but Ahern (1990) believes they may lead into them.

To have such an experience in modern society, Ahern (1990) surmised, it is necessary for a person to rise above impermeability and to have access to some type of bridge to the experience. Perhaps the immanence of death or an experience of such impact that it elicits a change of life might provide such a bridge. Religion may also provide the bridge for some. Relevant to this research is the idea that the culture and the religious education provided by Catholic schools might provide such a bridge for students.

The second continuum Ahern (1990) proposed concerns the individual's ability to describe the experience. He believes that each experience is composed of two parts: that which can be expressed and that which cannot be put into words. The inexpressible seems to be at the very centre or the heart of every experience. There always seems to be a part of the experience where the subject is simply lost for words. The most widespread positive outcome is remembrance. It seems that in some way it is always so powerful that it lives on in memory. Ahern termed this continuum the "manifoldness" of the experience. Manifoldness is the relative sum of expressible and inexpressible parts and the inter-penetration between them.

Interwoven with these two continuums were what Ahern (1990) referred to as the "threads" or "themes" in experiences. These were of two types, positive profound feelings and quasi-sensory awareness.

Positive profound feelings include love, feeling unselfish or altruistic, peace, awe, holiness, grace, contentment, faith, trust, hope, bliss or joy and positive feelings towards the self. Ahern (1990) believed that at least one of the aspects above was present in every experience. Quasi-sensory awareness involves some of the five senses. Such sensations as illumination, auditory experiences and smells fall into this category. It also includes such things as feeling pressure or lightness, warmth/coldness, movement, power, force and sensing a presence or atmosphere. He concluded that positive profound feelings seem to have the better case for being regarded as the principle spiritual / religious thread since they were present in just about all experiences, while many of the quasi-sensory sensations were "special" and also not necessarily related to the spiritual / religious.

Part of the data collected in this research included hand – written accounts of personal experiences from students. Analysis of this data follows the directions set by Ahern (1990) in examining the selected accounts. When he uses the term “transcendent” experience, he divides the experiences into “unitive” experiences, a feeling that “all things are one”, or “oneness with the universe”, and “numinous” experiences, the presence of a powerful other. In his pilot study words especially associated with reports coded for unitiveness included “love”, “life”, “religion / ous”, “field”, “landscape”, “garden”, “valley”, “river”, “universe”, “sun”. There is an apparent link with nature mysticism and some types of unitive experience. These key words have been used in classifying the descriptions of experience in this research.

Ahern (1990) found that unitive and numinous experiences co-occurred together very much less than he had expected. Unitive and numinous experiences seem to be strongly and significantly polarised. The reports coded for spiritual / religious experience other than unitive had words such as “church”, “pray/er” “lord”, “father”, “holy”, “spirit”, “Christ”. These key words have been used in identifying the numinous among the written accounts of this research.

Some spiritual / religious words, as contrasted with words used in other transcendent experiences, which seemed more evenly distributed between both unitive and other spiritual / religious experiences were: “God”, “good”, “Jesus”, “death”. These themes are basic to Western and other cultures and were also included within both the unitive and numinous descriptors when they occurred in the written accounts of this research.

2.7 *Summary*

The literature demonstrates the reality of the concept of “limit” experience, whether interpreted as religious or not. It also provides direction for the design of the research methodology and the way in which it attempts to uncover the reality of such experiences among senior high school students.

The following chapter discusses the methodology of this research study, showing how those theoretical issues from the literature were translated into a practical research focus to look at the occurrence of “limit” experience among the sample population.

Chapter 3

The Design of the Research

3.1 Introduction

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit” experience and “religious” experience among some Catholic High School students in Brisbane secondary colleges. As has already been pointed out “limit” experience subsumes the term “religious”. The questions in the survey instrument are based on types of “limit” experience rather than targeting specifically “religious” experience as such. This is intended to minimise the possible confounding variable of a negative attitude to “religion” or “church”. The interpretation of an experience as “religious” will be inferred from the types of experience reported and the language in which they are described.

This chapter documents the methodology used to conduct the research. Details are given about the sample of students, the questionnaire used, the administration of the questionnaire and the data analysis procedures used.

3.2 Research Orientation

The core of the research is the survey instrument administered to 213 senior high school students in four Brisbane secondary colleges. Hence, it is *ex post facto* research. *Ex post facto* research is a systematic and empirical enquiry in which the independent variables have already occurred and are inherently non-manipulable by the researcher. “Variables are studied in retrospect in search of possible relationships and effects.” (Wiersma, 1991, p. 165).

The data in this research are based on life experience of the subjects. It could be regarded as unethical to devise experimental techniques to manipulate these experiences among

students even if it were possible to do so. Hence the method chosen to collect data utilises a cross-sectional design, in which, ideally, data is collected at a single point in time from a single sample using a particular survey instrument.

There are practical limitations involved with actually collecting data at a single point in time from a number of different school sites. First, school programs tend to vary and may not allow for such collection. Second, to ensure that the data from different sites is collected, as nearly as possible, under conditions which are the same for all students, it was deemed necessary for the researcher to be present whenever the survey was administered. This ensured that staff were instructed to introduce the survey in the same way and to answer any student questions in a consistent fashion.

Given the above constraints, the survey could more correctly be referred to as *quasi*-cross-sectional in nature. Data was collected from each of the sites on different days in order to fit school timetables and convenience. Although the aim was to collect all data within a few weeks during the early part of the first school term of nine weeks, two schools were unable to meet this timeline. One collected data in the first weeks of the second term and the final school collected data only towards the end of an eleven week second term.

This raises the issue of possible confounding variables being introduced to the data. The personal experience of the author is that senior high school students go through numerous changes of mood during their final year of high school. Hence data collected in one part of the year may differ from that collected in another. In this research data was collected as early as possible in the year and all of it in the first twenty week semester of the school year.

Such confounding variables may include a number of factors in the life of a school. “Critical incidents”, such as the serious illness or even death of a fellow student, can bring a different spiritual dimension to the lives of students. Flynn (1985) found that the retreat program within the schools he studied had a very significant effect on student

approach to religious issues. So the programming of a retreat before or after the survey could possibly affect results at a school site. On the other hand, the event may not be special in any way but part of a normal school program or day-to-day life. Changes of teachers and the proximity of school vacation are both beyond control as are a range of other seemingly simple issues of day-to-day school life. These are all possible confounding variables once the date and time of administration of such a survey is varied between schools.

Care was taken during the data gathering to seek the advice of the Principal on whether there may have been any extraordinary event in the recent life of the school that may affect results. There was also awareness by the researcher that events in wider society had potential to influence results. For instance, news of a “religious” event in the media or reports of a major scandal involving the church would both have potential to influence results. As far as could be ascertained during the research process, there were no such significant events that would have had a clear and measurable effect on the results.

Ex post facto research, by its nature and design, does not provide incontrovertible evidence for the conclusions drawn. However, it does attempt to draw cause-effect relationships and make comparisons based on an analysis using relatively objective statistical techniques. In essence the technique looks at the effect, in this case “limit” experience, and then seeks a possible cause by comparing differences between groups.

3.3 *The Sample*

The student sample was chosen from among four secondary Brisbane Archdiocesan Colleges (BAC’s) conducted by Brisbane Catholic Education in the greater Brisbane metropolitan area, including Ipswich. Brisbane Catholic Education began founding such secondary colleges in the early seventies to respond to a need for regional secondary education. The older and more established secondary colleges had been founded by religious teaching orders and were increasingly unable to cope with demand. Those

belonging to parishes were also usually staffed by religious, but by the seventies, with a growing urban population, increasing demand on shrinking parish finances and fewer religious teachers, the parish schools began to be progressively handed over to central administration.

The aim of Brisbane Catholic Education was to provide affordable secondary schooling and to continue to expand its provision through sharing the resources of all secondary colleges. The effect of this was to enhance what could be provided to those in less well-off circumstance and to fund the building of new secondary colleges. The BAC's tended to cater for outer areas of the city and their clientele tended to have less financial resources at their disposal.

The socio-economic circumstances of the secondary colleges chosen were very similar and were average to below average as measured by the Commonwealth Department of Education Training and Youth Affairs (1998). The SES model was developed by the Commonwealth to provide an "independent, transparent and reliable measure of socio-economic data" (p. 5). It was based on data supplied from the schools themselves and the National Census of Population and Housing ("The Census").

The process of measurement involved collection of student addresses and their linking to Census Collection Districts (CD's) by a process of mapping known as geocoding. CD's are the smallest units used for census data collection. On average they contain about 200 dwellings, roughly equivalent to a small group of suburban blocks in urban areas. A school community is then described in terms of the CD's from which students are drawn and weighted by the population from each CD. When this information is combined with a range of family census data such as income, level of parent education and type of employment, each school is then assigned an SES score.

The SES scores nationally are organised around a mean of 100. The mean for all of the 128 schools within Brisbane Catholic Education is 100.86. When it is considered that the SES scores of the four secondary colleges from which this sample was drawn ranged

from 103.3 to 89.9, it can be seen that the survey sample was drawn from a population with, at best, average and often below average socio-economic circumstances.

A total of 213 usable questionnaires was received, that is, questionnaires from students whose parents had consented via the “Parent Consent Form” to the data being used. A larger number of females (121 - 73% return) than males (92 - 68% return) completed the survey and forwarded consent forms from parents to allow the data to be used.

One all girls secondary college, one all boys and two co-educational secondary colleges were chosen to provide the sample. Table (3.1) summarises the SES score for each college, the male and female respondents included in the samples, the enrolment of the full year 12 cohort at the college and the percentage response rates.

Table 3.1 Questionnaire Distribution and return rates

Socio-Economic Score and Sample Data

		Sample Numbers		Enrolment Numbers		% Survey Return		
College	SES	Males	Females	Males	Females	Males	Females	Total
All girls	103.3		61		66		92%	92%
All boys	101.0	53		67		79%		79%
Coed. 1	91.6	17	24	32	44	53%	55%	54%
Coed. 2	89.9	22	36	37	56	59%	64%	62%
Total		92 43%	21 57%	136 45%	166 55%	68%	73%	71%

Source: Brisbane Catholic Education Centre. (2000a)

The first step in data collection was to obtain ethical clearance from the Australian Catholic University ethics committee. After this clearance was obtained, Brisbane Catholic Education consented to approaches being made directly to the principals of selected secondary colleges to seek participation of the college Year 12 class in the survey. In the participating colleges, consent was sought from the parents of all students for the use of the data from the questionnaire survey. Letters endorsed by the university were sent home to all families asking them to give consent via an attached "Parent Consent Form" which was to be returned to the secondary college by the student.

The mode of data collection for most students was that the whole cohort first completed the questionnaire. The secondary colleges each suggested this as the best mode of organisation from their perspective, on the understanding that only those with valid consent forms could actually have data included in the final results. Those students who had returned consent forms from parents then handed in their questionnaires for processing. Students were not identified in any way and the questionnaires returned were totally anonymous.

Those students who had not submitted consent forms had their questionnaires retained by the secondary college and were supplied with another letter and a Parent Consent Form. They were asked to make a personal but anonymous distinguishing mark on the front of their paper and then to hand it in to representatives of the college. They were invited to return the consent form in the future and then to identify their personal work so that it could be included in the sample if they wished. Approximately fifteen extra returns were collected from each secondary college in this way.

A third factor in some secondary colleges was the larger ethnic population from a non-english speaking background (NESB). It was notable that the highest rate of return came from the secondary college with the lowest rate of NESB students. The next highest came from an all boys school in which about 50% of the NESB students were actually assessed as having no language problem for English. The other two secondary colleges had most

of their NESB students assessed as having language problems with English. The actual occurrence of NESB students and the return rates are shown as Table 3.2:

Table 3.2 NESB students and survey return rates per school

	NESB No Language Problem		NESB with Language Problem				% NESB with Language Problem	
College	Males	Females	Males	Females	Total NESB	Year 12 Enrolment		% Survey return
All girls		2		3	5	66	5%	92%
All boys	13		17		30	67	25%	79%
Coed. 1	0	0	14	15	29	76	38%	54%
Coed. 2	1	2	12	18	33	93	32%	62%

Source: Brisbane Catholic data base – March 2000 Census Collection

The return rates for all secondary colleges were acceptable (Cohen & Manion, 1994, p. 98). The methodology of this research could have been improved to allow more valid generalisations from the results (Kerlinger, 1973, p. 414) if those not responding had been followed up by interview to control for whatever bias they may have had in not returning the Parent Consent Form (Cohen & Manion, 1994, p. 101).

3.4 Ethical Considerations

Ethical considerations are an important issue in research with school students. The information given in section 3.3 above on the sample and the approach adopted to data gathering indicates that the external mechanisms put in place guarantee an appropriate level of ethical behaviour.

There clearly was informed consent, the “bedrock of ethical procedure” (Cohen & Manion, 1994, p. 349) on the part of the parents whose students participated in the research. Full privacy, anonymity and confidentiality were guaranteed. While all students in the cohorts completed the questionnaire, no duress was applied or implied in seeking their cooperation. Those surveys collected without a valid consent form remained at the school and were destroyed after two weeks unless a consent form was lodged in the meantime.

3.5 The Instrument

The survey instrument had been designed around discrete sets of questions designed to examine different aspects of student life. The way in which the survey questions addressed different aspects of student life is given as Table 3.3.

Table 3.3 – Student Life as addressed in the Survey Questions

Aspects of Student Life	Relevant Survey Questions	Coding for Data Analysis
Background information	1 to 4	“B”
Family Details	5 to 16	“F”
School Life	17 to 29	“S”
Values and Attitudes	30 to 51	“V”
Experiences in Living	52 to 62	“E”
Personal Experiences	63 to 67	“P”

Thus the “Values” and attitudes items (nos. 30 to 51), prefaced by a “V” in the data analyses using the Statistical Package for the Social Sciences (SPSS Release 10.0, 2000), formed a different set to the “School Life” items, questions 18 to 29 - “S” in the SPSS data. Also, those on family, 1 to 17 - “F”, and those on religious and “limit” experience, 52 to 67 – “E” or “P”, formed a separate group again. “E” items were single sentences and could be answered on a five-point scale from “Certainly False” to “Certainly True”. “P” items consisted of short paragraphs and asked if students had ever had an experience like the one described and were answered on a similar scale. They were potentially biased towards better students since they relied on a level of literacy and interpretive skills that may not have been equal among all respondents. Answers were scaled on a four-point scale, from “Never – no I have never had an experience like this”, to “Definitely – yes, I have had a similar experience”.

The core of the survey, then, was designed to be the Values (“V”) and Experience (“E” and “P”) type items. In particular, the Experience items, relating directly to “limit” experience, were at the heart of the survey instrument. Some of Values items were based on the research work of Flynn (1985) in Australian schools and some experience items on that of Robinson and Jackson (1987) in Great Britain and Ireland.

Flynn’s (1985) study of the effectiveness of Catholic Schools used a number of extensive questionnaires distributed among 2,041 year 12 students, 1,377 parents and 717 staff members in 25 Catholic high schools in New South Wales and the Australian Capital Territory. Flynn’s work examined the home background, school life and climate, values, religious practices and religious knowledge of the students via two questionnaires of one hundred and fifty questions each. This research was less ambitious, but included some of the themes of Flynn’s work.

Flynn (1985) was interested in the relative influence of the schools in promoting what he termed the full development of their students. The outcomes of Catholic schools he categorised under the headings of Religious Development, Faith Journey and Academic Achievement.

Religious Development he found to be influenced primarily by the example and lives of parents, the effects of retreat and camp experiences and the religious education program. Hence these issues are treated specifically in the questionnaire instrument for this research. Use of some of the Flynn (1985) questions enhances the validity of the questionnaire and provides a possible comparative link to some of his findings.

Overall, Flynn (1985) equated religious development with practice and religious knowledge. He based his conclusions about faith development on the theoretical framework of Fowler’s (1980) stages of development and on responses to statements such as “I believe in God” and “My faith means a lot to me in my life”. Again, some of the belief questions have been included to provide comparisons with Flynn’s earlier results in an Australian setting.

The purpose of this research was to go beyond the Flynn (1985) interpretation and to examine awareness of “limit” experience. Robinson and Jackson (1987, p. 5) believed it was simplistic to define religious awareness in terms of belief and practice, thus excluding “a wide, indeed infinite, range of thought, feeling and intuition which constitute the very *raison d’être* of religion itself”. Hence, much of the flavour and the techniques used in this research reflect the Robinson and Jackson approach.

The Robinson and Jackson (1987) research focused on 6,576 high school students aged from 15 to 17 across eleven regions of Great Britain and Ireland. The survey instrument consisted of 61 statements with responses recorded on varying types of Likert scale and two open ended questions at the end for written response. For the purposes of this research some of the questions were chosen for use in the values and attitudes section. In particular, those from their Scepticism and Implicit religion scales were used. To attest that one does not believe in God does not preclude an implicit religious faith via responses to the Robinson and Jackson (p. 11) statements that “some of the most important things in life can never be proved” and that “some of the most valuable experiences we have are the ones we find hardest to put into words.” Some of the Robinson and Jackson (1987) items formed the basis of the values section of this research instrument.

A most interesting technique employed by Robinson and Jackson (1987, p. 12) was to use two longer descriptions of specific experiences, one of feeling “at one” with nature and the other of finding help in prayer. Students were asked if they had ever had an experience like this themselves. This descriptive technique was used in the “experience” sections of the research instrument.

“Limit” experience items formed the key section of the survey. Here the descriptive technique was expanded to cover five different types of experience. The items comprising specific statements, coupled with the descriptive passages, were chosen so as to have at least one item in the experiences section that related directly to Hay’s (1987) classifications of religious experience in Britain. The Personal Experience, “P” type,

descriptive passages were also framed to serve as a model should respondents accept an invitation to write of personal experience at the end of the survey. They paralleled some of the Experience (“E”) questions by addressing the same Hay category. It was also felt that reading and completing answers to more than five written passages might be time-consuming and hence off-putting as a lead-in. This may not have encouraged the later personal written response. Hence not all of the Hay category questions were repeated for both “E” and “P” sections of the survey. The repeated “P” items were also expected to provide supplementary data to the “E” items.

Hay’s categories are given as Table 3.4.

Table 3.4 Hay’s Categories of Religious Experience

Patterning of events

Awareness of the presence of God

Awareness of receiving help in prayer

Awareness of a guiding presence not called God

Awareness of the presence of the dead

Awareness of a sacred presence in nature

Awareness of an evil presence

Experience that all things are “one”

(Source: Hay, 1987, p. 152)

A further complication arose with asking directly about one aspect of the Hay (1987) categories. It was difficult to frame a question for students along the lines of “Have you ever experienced that ‘all things are one’?”, and be sure that this would have any meaning for the students. To explore this particular part of the Hay (1987) categories it seemed reasonable to include it as a descriptive passage and seek a response to the question “have you ever had an experience like this?” The question on receiving help in prayer (P01)

could, in hindsight, have perhaps been included as both a passage and a direct question, but it was left as a descriptive passage only.

Use of questions from other, more extensive research provides both a means of comparison with these different approaches and these results and points to the validity of the survey questionnaire.

On the other hand, the research instrument has certain limitations. There are limitations that are inherent in questionnaire data gathering in general, particularly with instruments that use a Likert-type scale. The five-point Likert-type response scales force a choice from among a limited range. The possibility therefore exists for respondents to make an “easy” choice by marking the mid-point of the scale.

There are also some untested assumptions that underlie the structure and use of the instrument. One is that the respondents have a similar understanding of the terminology used and the concepts being reviewed. It can be suggested from the extensive use of many of the questions in other work that the content validity of this survey is high. However, this may not apply to the additional questions, particularly those in the experience section.

3.6 Data Preparation

The questionnaires returned from students were subject to the usual checks such as completeness, provision of personal data and clarity of marking on the Likert-type scales. At the point of data entry each questionnaire was subject to a visual check for any long runs of the same response to each item. This may have implied that an individual respondent had not answered the items seriously. No such responses were detected during checking. The data was then numerically coded for transfer to SPSS (Release 10.0). Once entered, the questionnaires were then filed in numerical code order.

3.7 *Data Analysis*

All analyses were undertaken using SPSS for Windows Release 10.0 (2000).

First, descriptive data, including the means and standard deviations for each survey item were calculated. This included a word frequency analysis of the written accounts following the methods used by Ahern (1990) outlined in Chapter 2 (p. 68).

Initial analysis of the level of reports of “limit” experience were then undertaken by examining the number of reports at level 4, “probably true”, or 5, “certainly true” on the direct response items (“E”) and level 3, “yes – I think I have had a similar experience”, or 4, “definitely – yes, I had a similar experience” on the descriptive passages (“P”). The criteria were later strengthened to include only the highest-level response (5 for “E” and 4 for “P”) on each item. A variable LIMTOT, giving the number of responses at this highest level out of eleven items that directly addressed “limit” experience, was then generated for later comparison.

Using these more stringent criteria comparisons were then made between the Hay (1987) response rates for categories for religious experience and the response rates for each of the categories of “limit” experience addressed in the survey. Where the survey included more than one item that addressed a specific Hay category, cross-tabs between the two items and Pearson chi-square tests were used to determine the appropriate way to compare the results with the Hay categories.

Next, a further variable, LIMBIN, was generated from LIMTOT. LIMBIN defined a zero result for LIMTOT as “no” for the purposes of reporting of “limit” experience. Any result of one or more on LIMTOT was defined as “yes”, a positive responses to one or more “limit” experiences. This binary variable was first used to address hypothesis one of this research, on the frequency of reporting of “limit” experience among the survey group.

LIMBIN was then used in further analysis by means of one and two way ANOVA and t-tests with appropriate sections of the survey data. Each of the hypotheses was framed to

allow comparison of some factors of student life to be explored for their possible influence on level of reporting of “limit” experience among the group. ANOVA’s and t-tests on LIMBIN and the background information questions (“B”) on gender and school attended addressed hypothesis two. Similar analysis of LIMBIN with the school life section (“S”) addressed hypotheses three and four concerning the influence of school subjects and level of involvement at school. Hypothesis five, concerning the influence of religious affiliation, was addressed by analysis of LIMBIN with appropriate family (“F”) items on the survey, while hypothesis six, on personal happiness used some of both the “F”, family, and “S”, school, items in conjunction with LIMBIN.

Principal Component Analysis was then used for initial exploratory analysis of the attitudes and opinion scale data. The initial analysis included both orthogonal and non-orthogonal models. However, since the type of data collected was believed to have numerous correlations between components, the non-orthogonal Promax rotation with Kaiser normalisation was selected as most appropriate in these circumstances.

On the basis of several exploratory factor analyses, it was determined that the most appropriate means of analysis was to consider the Values (“V”) items and Experience (“E”) items separately. This method of analysis produced seven factor scales. These gave an acceptable four factor solution for the Values (“V”) items and a three factor solution for the experience (“E”) items. Correlations were explored between each of these scale factors and reports of one or more “limit” experiences (LIMTOT). Analyses using one and two way ANOVA’s and t-tests were then undertaken between the four value factors and the data in the background and family sections of the survey used in analysing the hypotheses. This was designed to examine the possible predictive value of student background and home life (“B” and “F”) items and the school life (“S”) items on any of the scales.

Multiple regression analysis was then used to analyse the relationship value between the four values factor scales and level of reporting of “limit” experience (LIMTOT). Finally

multiple regression analysis was utilised to analyse relationships between each of the sections (“B”, “F”, “S”) of the survey and LIMTOT.

3.8 *Summary*

It was decided to use a survey instrument that mirrored in some ways the approaches and items of instruments already used by Flynn (1985) and Robinson and Jackson (1987). However, the core of the survey, the items on religious and limit experience, were framed in accord with Hay’s (1987) categories for such experience. The design was intended to break new ground by using the Hay categories with Australian students while being able to relate directly to some characteristics of the earlier work of Flynn along with the work of Robinson and Jackson.

The conclusions that are able to be drawn from the research are limited in part by the necessary brevity of the instrument and the focus on only four schools in a limited area of the nation. One possible outcome of the research would be to determine whether the occurrence of “limit” experience is potentially enhanced by particular factors within individual Catholic schools. This was seen to be a valuable contribution to the Australian literature on the outcomes of Catholic Secondary schooling.

Chapter 4

The Results of the Research

4.1 Introduction

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit” experience and “religious” experience among some Catholic High School students in Brisbane secondary colleges. As has already been pointed out “limit” experience subsumes the term “religious”. The questions in the survey instrument are based on types of “limit” experience rather than targeting specifically “religious” experience as such. This is intended to minimise the possible confounding variable of a negative attitude to “religion” or “church”. The interpretation of an experience as “religious” will be inferred from the types of experience reported and the language in which they are described.

This chapter presents details of the various analyses undertaken as part of this research. The reporting of the results is organised into six sections.

Section 4.2 of this chapter gives details of the sample of student respondents to the survey ($N = 213$). The particular student characteristics examined include cultural background, relationship of parents and religious affiliation, family attitudes to religion and personal background of students (for example, personal happiness at home and school).

Section 4.3 presents data about the individual items from the survey instrument. This section presents the details of many of the individual responses in tabulated form, including actual means and standard deviations. Where appropriate, items have been grouped together to provide a visual representation, for instance family attitudes to religion, to better show the trends and features of response patterns. At this level of data

presentation and reporting, no claims are made about the statistical significance of the data. The use of mean and standard deviations is for descriptive purposes only.

Section 4.4 first examines the sample characteristics on the sixteen “experience” (“E” and “P”) items of the survey instrument and classifies them according to Hay’s (1987) categories of analysis for responses to his survey on religious experience. As outlined in Chapter 3, this research instrument modelled the experience section on the Hay analysis so that such a comparison could be made. Next, it examines in turn those sections of the survey instrument which have direct bearing on the hypotheses presented in Chapter 1.

Section 4.5 presents an exploratory analysis of the data intended to present new directions beyond the Hay categories and the original hypotheses. It begins by outlining the results of a factor analysis of the survey responses and the analyses undertaken to incorporate the individual items into psychometrically acceptable scales. This process reduced the total of 127 separate survey items to seven meaningful variables. The scales used to further explore the relationships among the data are presented in this section.

Finally, section 4.5 explores the relationships between the scales developed from factor analysis and the survey data. The multiple regression analyses undertaken explore the extent to which sets of predictors (e.g. attitude scales, values, school experience) serve as predictors of “limit” experience.

Section 4.6 gives a brief analysis of the written accounts of individual experience.

Section 4.7 summarises the results of the research reported in Chapter four.

4.2 *Sample Characteristics*

The sample was limited by definition to students enrolled in Year 12 at four secondary colleges administered by Brisbane Catholic Education.

Two hundred and thirteen (213) completed surveys were received, that is, 213 completed survey forms with the corresponding ethical clearance form signed by the parents of each student. This represented a return rate of 71% of the student cohort. The remainder did not return the parent consent form and hence their results could not be collated as part of the data. No returned forms were excluded from the analysis for other reasons.

Students were asked to indicate a number of demographic and personal characteristics. These are summarised below as Table 4.1, together with the percentage of respondents in each category. The items on “cultural background” asked students to classify the “level of influence of cultural traditions” in the family background. Hence the results for “medium” and “strong” influence in Table 4.1 do not add to 100%.

Table 4.1 Respondent Demographic Characteristics (as a percentage, N = 213)**Characteristic**

	Male	Female	Total
Gender	42.7%	57.3%	100.0%

Religious Affiliation	Uniting	Catholic	Anglican	No Religion	Other	Total
	3.8%	70.0%	3.3%	10.3%	12.7%	100%

Cultural Background (% of respondents stating Medium or Strong cultural influence from each nationality)

	Australian	Other English	European	Asian	Pacific Island	South American	Other
Medium Influence	40.8%	16.0%	12.7%	7.5%	2.3%	6.1%	35.0%
Very Strong Influence	23.0%	8.5%	3.8%	6.6%	3.8%	3.3%	22.5%

Relationship of Parents (% of respondents stating particular relationship of principal caregivers in the home)

	Biological Mother & Father	Biological Mother & Male Guardian	Biological Father & Female Guardian	Mother Single Parent	Father Single Parent	Other	Total
	70.4%	6.6%	2.3%	13.1%	2.8%	4.7%	100%

The characteristic of “personal happiness” was assessed on two survey items. Respondents were asked to assess their personal happiness at home, with responses given on a five point scale with 1 being “very unhappy” to 5 being “very happy”. Happiness at school was assessed by asking for a response to the statement “On the whole I am happy at school”. This was also scored on a five-point scale from 1 being “certainly false” to 5 being “certainly true”. The results are recorded in table 4.2.

Table 4.2 Respondent Personal Happiness

F12 Your Personal Happiness at Home

	Frequency	Percent
1. Very unhappy	10	4.7
2. Unhappy	23	10.8
3. Satisfied	55	25.8
4. Happy	88	41.3
5. Very Happy	37	17.4
Total	213	100.0

S14 On the whole, I am happy at this school

	Frequency	Percent
1. False	12	5.6
2. Prob. False	11	5.2
3. Uncertain	38	17.8
4. Prob. True	99	46.5
5. True	52	24.4
Total	212	99.5
Missing	1	.5
Total	213	100.0

Respondents were also asked which academic subject formed their religious instruction course in year 12. Three secondary colleges offered a choice of “Study of Religion” a formal academic course approved by the Board of Studies for assessment as part of the student’s senior studies. All offered “Religious Education”, a non-accredited subject. One or the other was compulsory for all students. Of the 213 respondents, 52.1% were enrolled in “Study of Religion” and 47.9% in “Religious Education”.

The attitude of family members to “Religion” was assessed for each member on a six point scale from 1 = “Very anti-religion” to 5 = “Very religious” and 6 = “Not known for this person.” Regularity of church attendance was assessed similarly on a seven point scale from 1 = “Never”, 2 = “Rarely”, 3 = “On family occasions only”, 4 = “About once a year”, 5 = “About once a month”, 6 = “About weekly” and 7 = “Every week at least”.

The results are tabulated as percentages of respondents in Table 4.3.

Table 4.3 Respondent Personal Characteristics (as a percentage, N = 213)**Religious subject chosen S01 1 Study of Religion 2 Religious Education**

	Percent		Percent		
	52.1%		47.9%		100%
Attitudes to Religion at home	FO2 Mother/ Female Guardian	FO3 Father/ Male Guardian	FO4 Self	FO5 Older Sibling	FO6 Younger Sibling
Very anti religion	3.8%	4.2%	5.2%	2.8%	2.8%
Somewhat anti religion	5.2%	5.6%	8.5%	6.1%	2.8%
Neutral	37.6%	42.7%	50.2%	32.9%	34.3%
Quite religious	35.7%	25.8%	26.3%	14.6%	17.8%
Very religious	15.5%	14.6%	9.4%	1.9%	2.8%
Not Answered or Unknown	2.3%	7.0%	0.5%	41.8%	39.4%
Total	100%	100%	100%	100%	100%

Frequency of church attendance at home	FO7 Mother/ Female Guardian	FO8 Father/ Male Guardian	FO9 Self	F10 Older Sibling	F11 Younger Sibling
Never	17.8%	21.6%	15.5%	13.1%	11.7%
Rarely	12.2%	12.7%	19.7%	12.7%	9.4%
On family occasions only	19.7%	20.7%	16.4%	11.3%	10.8%
About once a year	11.7%	9.4%	10.8%	8.0%	5.6%
About once a month	9.9%	4.7%	14.1%	4.2%	6.6%
About weekly	11.7%	10.3%	9.9%	4.2%	8.9%
Every week at least	15.0%	13.1%	13.1%	8.5%	10.8%
Not Answered or Unknown	1.9%	7.5%	0.5%	38.0%	36.2%
Total	100%	100%	100%	100%	100%

4.3 Results of Individual Items – Values and Attitudes

A full set of the results of responses to all survey items is found in Appendix B (p.244).

The “values” section of the survey (items 30 to 51) gives interesting insights into the attitudes of these Year 12 students to life and the institutions that were part of their lives at that time. In this section they were asked to respond on a five point scale, from 1 = “Certainly False” to 5 = “Certainly True”, to a series of questions.

In Figures 4.1 to 4.4, groups of items are presented by means of a “whisker” plot. The “whiskers”, indicated by the line on the diagram above each item, extend above and below the mean value (on a five point scale) for all respondents, with the length of the “whisker” indicating the spread of responses. In each case the spread shown is one standard deviation above and below the mean. This range would include approximately 68% of respondents. In some cases the actual value of one standard deviation above the mean is greater or smaller than the maximum or minimum value possible for the response. The diagrams show only values as far as the maximum or minimum value of responses for that item.

Their values are clear and strong with the results strongly skewed towards Christian morality and there is a strong personal faith as well, albeit one that is searching for truth. Flynn (1985) found that both religious practice and moral values are formed primarily in the home, with the Religious Education Curriculum having a secondary effect, while personal faith was formed first by the RE Curriculum with home having a secondary effect.

The group responded very negatively (Mean = 1.69, sd = 0.88) to the suggestion (V08) that “it is alright to do something if everyone else is doing it” (Majority rules). On the other hand they were very concerned for the poor in our society (V11, Mean = 4.06, sd = 0.98) and even more so for hunger and malnutrition in the world (V16, Mean = 4.46, sd = 0.83).

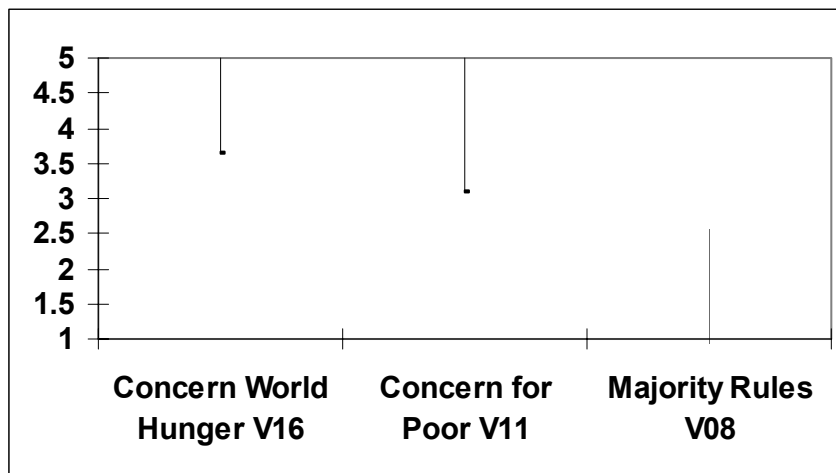


Figure 4.1 Extent of agreement with three moral values items (N = 213)

Their personal faith was also strong. Most (V20, mean = 3.96, sd = .9) felt that there is a “pattern and purpose” to life. Belief in God was strong (V13, mean = 3.93, sd = 1.29) with the spread of responses a little wider than the other questions above. Slightly fewer (V15, mean = 3.66, sd = 1.23) believed this God loved them individually. Perhaps this reflects both some evidence of low self esteem among some and the “searching faith” that Flynn (1988) found in his own sample of adolescents. Although belief was strong, most (V18, mean = 3.48, sd = 1.46) had times when they “felt uncertain about whether God exists”.

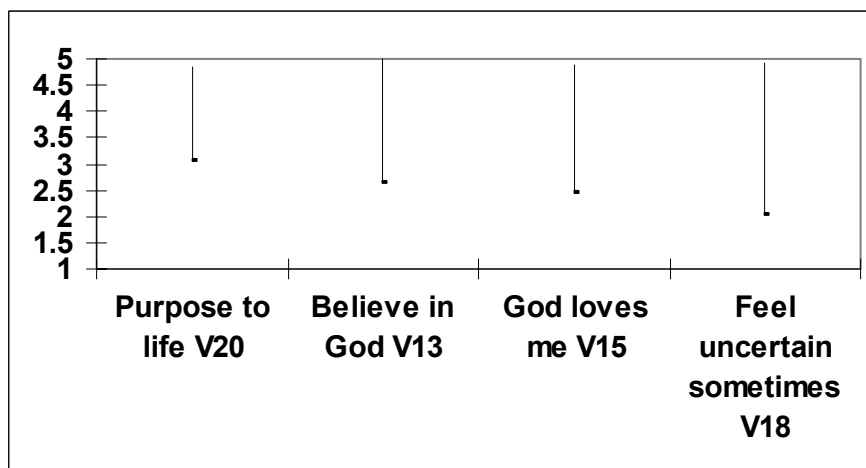


Figure 4.2 Personal faith items (N = 213)

The faith of the group seems to be a very personal issue, unrelated to institutional religion as such (see Figure 4.3 below). Although such strong, perhaps even surprising, results were obtained for questions on personal faith, these did not translate into an allegiance to “religion” or “church”. There was less agreement (mean = 2.99, sd = 1.26) that (V08) “religion helps me answer real questions about life” and a feeling that “religion” as such was irrelevant (V21) and had “nothing to say about the important issues of life” (mean = 2.63, sd = 1.11). The respondents felt strongly that (V22) “you can be religious without belonging to any religious organisation (mean = 3.92, sd = 1.2) and that it was not necessary to (V10) “go to church to live a good and meaningful life” (mean = 4.11, sd = 1.18), although many believed (V11) that they “based .. life on Christian values” (mean = 3.0, sd = 1.34). Of relevance to the description of their religious experiences, was the opinion that (V02) religious talk “does not mean much” (mean = 2.9, sd = 1.20).

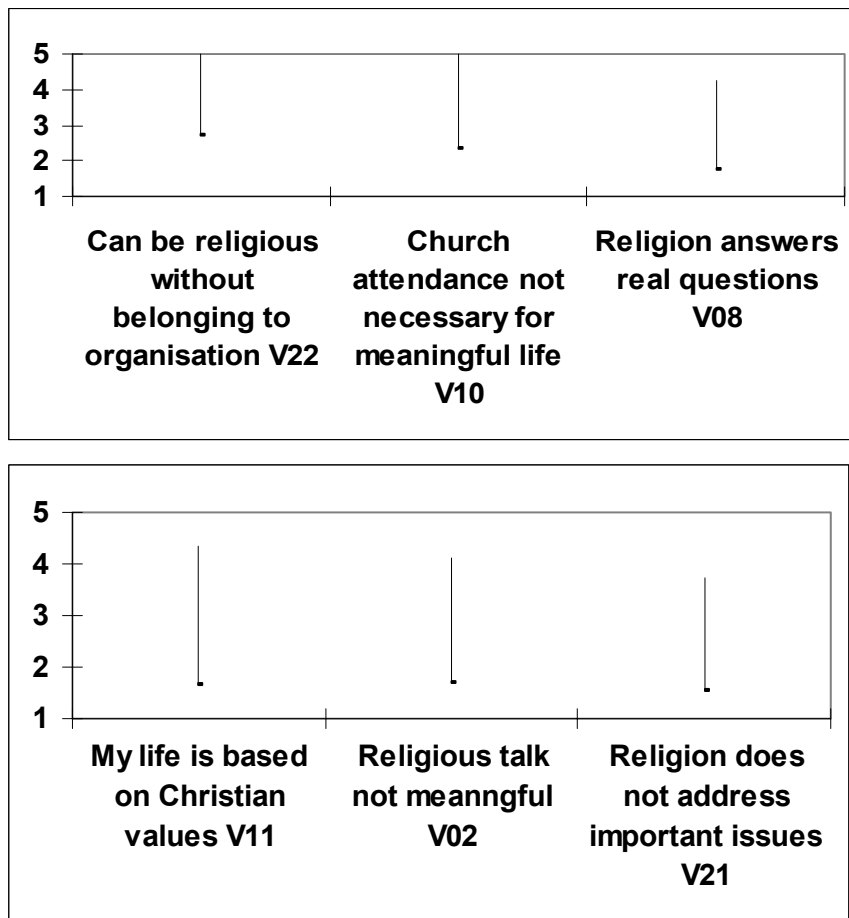


Figure 4.3 Relevance of formal religion

In contrast to an overall negative attitude to formal church allegiance, many enjoyed their religious education classes. (V01, mean = 3.06, sd = 1.14). When asked to respond on a three point scale (1 = “very little”, 2 = “slightly”, 3 = “very much”) to the extent to which various subjects made them “feel deeply about life”, the religious education classes had the most positive response overall. Results are given as Figure 4.4, using the “whisker” plot method of the Figures 4.1 to 4.3.

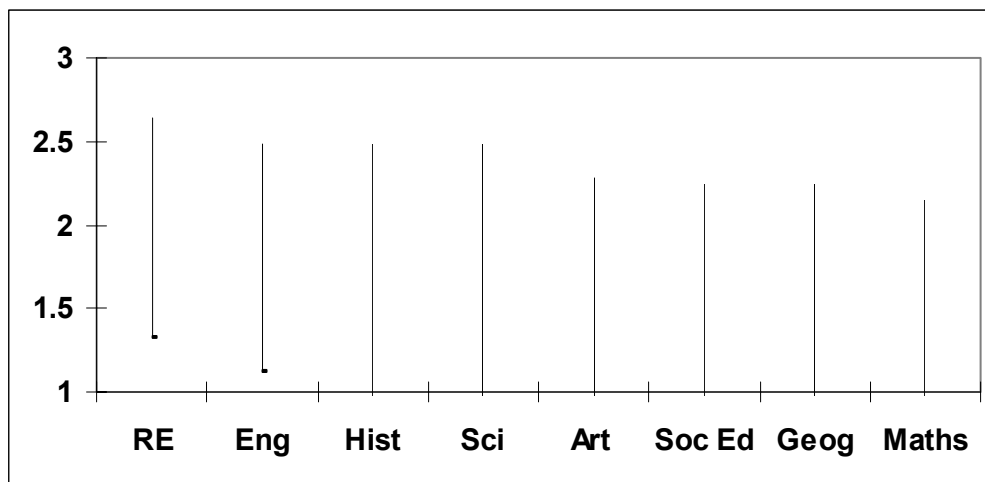


Figure 4.4 Extent to which 8 Subjects make you “feel deeply about life”

4.4 Confirmatory Analyses

Chapter one outlined six hypotheses, based on earlier research, which would form the basic questions to be addressed in this research project. The hypotheses, except for the first, were framed in the null form. It was expected, on the basis of previous research, that hypotheses 2 through 6 might be disproved by the survey results.

Chapter three outlined the way in which the survey design was guided by the earlier work of Hay (1987). In particular, Hay’s categories, proposed as a result of extensive survey work in Britain, informed the experiential questions in the survey instrument.

This section will first outline the survey for the “experience” (“E” and “P”) questions and analyse them using the Hay categories. It will then address in turn each of the Hypotheses framed in chapter one.

Hay’s Categories for Religious Experience

Hay’s (1987) categories for occurrence of religious experience relate directly to eleven of the fourteen items from E01 to P05 of the survey instrument. Questions E5, E8 and E11 did not refer to “limit experience” as such. In particular, the following questions related directly to the Hay categories:

Table 4.4 Hay Categories Compared to the Experience Items

Hay Category	Experience Item
Patterning of events	E06 and P05
Awareness of the presence of God	E07 and P04
Awareness of receiving help in prayer	P01
Awareness of a guiding presence not called God	E04
Awareness of the presence of the dead	E09
Awareness of a sacred presence in nature	E10 and P03
Awareness of an evil presence	E03
Experience that all things are “one”	P04

Although E04 was framed to resemble the words of the “Alister Hardy Question”, Hay interprets all of the experiences above to be examples of the experience of “a presence or power which seems to be beyond and different to my everyday self”. It has been noted in the previous section that E04 received a very high level of positive response among the experience questions, so it might be expected that this level of response would be mirrored in responses to the whole set of experience items.

To examine the Hay categories, the number of responses of “4”, “probably true” or “5”, “certainly true” for items E04, E05, E06, E07, E09 and E10 were taken in the first instance. The variable ETOT (Total for “Experiences in Living” section) was generated and the results are given as Table 4.5.

Table 4.5 ETOT – Number of positive responses of “4” or “5” to six Experience Questions

ETOT

Value	Freq.	Pct.	Cum. Pct
0	17	8.0	8.0
1	29	13.6	21.6
2	39	18.3	39.9
3	45	21.1	61.0
4	40	18.8	79.8
5	27	12.7	92.5
6	16	7.5	100.0
Total	213	100.0	

(Ranges from 0 to the maximum possible with 92% reporting 1 or more)

Only 17 respondents (8%) of the sample did not attest to having experienced at least one of the phenomena outlined in the six religious experience questions. A further 29 (13.6%) responded only once that the statement was “Probably True” or “Certainly True”, 39 (18.3%) responded that this was the case for two or more of the questions while 16 responded strongly to all six questions. Overall, 92% of the sample agreed strongly to at least one question.

However, the five point scale for these questions did not cover the full extent of the Hay (1987) categories. The narrative questions, questions 63 to 67 (P01 to P05) with responses based on a four-point response scale, were analysed to complete the initial

exploration. A variable PTOT (Personal Experiences Total) was generated to give the number of respondents answering “3” (“Yes, I think I have had a similar experience”) or “4” (“Definitely, yes I have had a similar experience”). The results are given as Table 4.6.

Table 4.6 PTOT – Number of responses of “3” or “4” to Personal Experience Narratives (P01 to P05)

Value	Freq.	Pct.	Cum. Pct
0	41	19	19.2
1	70	32.9	52.1
2	52	24.4	76.5
3	34	16.0	92.5
4	13	6.1	98.6
5	3	1.4	100.0
Total	213	100.0	

(Ranges from 0 to the maximum – with 81% reporting 1 or more)

The responses show 41 (19.2%) of the sample did not respond positively to any of the five written scenarios of the survey. They were either unsure or certain that they had not had such an experience. On the other hand, 3 respondents claimed to have had experiences corresponding to all five of the items.

Because the “experience” (“E”) questions and the narrative accounts (“P”) were constructed together to parallel the Hay (1987) categories, the total who responded positively (rating 4 or 5 on “E” or 3 or 4 on “P”) to any one of the “E” or “P” type questions was taken by combining the two variables into a single variable LIMITOT. The results are given as Table 4.7.

Table 4.7 LIMITOT – Number of positive responses to the eleven “Experience” questions (“E” or “P”)

Value	Freq.	Pct.	Cum. Pct
0	9	4.2	4.2
1	18	8.5	12.7
2	20	9.4	22.1
3	38	7.8	39.9
4	25	11.7	51.6
5	23	10.8	62.4
6	31	14.6	77.0
7	18	8.5	85.4
8	12	5.6	91.1
9	11	5.2	96.2
10	6	2.8	99.1
11	2	0.9	100.0
Total	213	100.0	

(Combining the two types, ranges from 0 to the maximum 96% reporting one or more)

Only 9 respondents, 4.2% of the total, did not respond positively to at least one of the questions or written statements on “limit” experience. The remaining 95.8% reported having had at least one such experience.

Having had such a high response rate to the first run of the data, it was determined to strengthen the criterion for a positive response further and to accept only those with a response of 5 (“Certainly True”) on the “Experience of living” (“E”) items and only a response of 4 (“Definitely, yes, I had a similar experience”) on the “Personal Experience” (“P”) scenarios.

A new variable, ETOT5 was generated for this with results given as Table 4.8:

Table 4.8 ETOT5 – Number of “5” responses to six Experience (“E”) Questions

Value	Freq.	Pct.	Cum. Pct
0	72	33.8	33.8
1	58	27.2	61.0
2	42	19.7	80.8
3	16	7.5	88.3
4	12	5.6	93.9
5	9	4.2	98.1
6	4	1.9	100.0
Total	213	100.0	

On these items 72 (33.8%) of the sample had no response as high as 5 to any of the experiences. However, 141 (66.2%) had at least one response of 5 and four (1.9%) responded at this very positive level to all experiences.

Similarly PTOT4 gives the positive responses of “4”, “definitely, yes I have had a similar experience”, to the written scenarios in the descriptive passages section in Table 4.9.

Table 4.9 PTOT4 – Number of “4” Responses to Narrative Questions P01 to P05

Value	Freq.	Pct.	Cum. Pct
0	111	52.1	52.1
1	65	30.5	82.6
2	27	12.7	95.3
3	8	3.8	99.1
4	1	.5	99.5
5	1	.5	100.0
Total	213	100.0	

One hundred and eleven (111) or 52.1% of the sample did not respond 4 to any scenarios, but the remaining 47.9% affirmed at least one as being similar to their own experience.

The variable LIMTOT, now based on these more stringent criteria, showed that 24.4% of respondents did not respond at the top level (5 or 4 for “E” and “P” respectively). Thus the positive response rate to one or more such “limit” experiences was 75.6%. It is worthy of comment that over 50% of respondents affirmed more than one of the “limit” experience questions as applicable to them, while 32.9% responded strongly to three or more of the questions. The results are shown as Table 4.10.

Table 4.10 LIMTOT – Number of maximum positive responses to the eleven “limit” experience questions (“E” and “P”)

Value	Freq.	Pct.	Cum. Pct
0	52	24.4	24.4
1	54	25.4	49.8
2	37	17.4	67.1
3	19	8.9	76.1
4	19	8.9	85.0
5	14	6.6	91.5
6	8	3.8	95.3
7	4	1.9	97.2
8	4	1.9	99.1
9	0	0	99.1
10	2	.9	100.0
Total	213	100.0	

Analysis of the individual response items as they parallel the Hay categories is complicated by the use of some of the category areas more than once across the “E” and “P” questions. The written, “P” type, responses were framed also to lead into an invitation to write of personal experience if students wished to do so. They repeated, in different format, some of the “E” items on the Hay categories. The rationale behind this has been explained in Chapter 3 (p. 74).

Given all of the above, presenting the results and comparing them to the Hay categories is no simple matter. All but one of the categories is covered by an “E” item, one is covered by a descriptive passage only, while three are paralleled by a descriptive passage.

It might be assumed that a positive response to question E07 “At times I have felt a very close awareness of God in my life” would merit a similar level of response from an individual as the response to the passage of P02. A similar presumption could be made for the other pairs (Questions E06 and P05) plus questions E10 and P03. On the other hand, perhaps the description in the passage conjured a different image from the mental image of the straight “E” item. Certainly, it seems, there was a possibility of variable interpretations between the direct question and a passage intended to be but one example of a particular experience.

Cross-tabulations done on each pair of questions showed some relationship between the “pattern to events” items, E06 and P05 (Linear chi-square (1 d.f., 213) = 8.03, $p < .005$). A stronger relationship occurred between the “sacredness in nature” items, E10 and P03 (Linear chi-square (1 d.f., 213) = 25.63, $p < .0005$)

The conundrum was the “presence of God” item. While 44 respondents indicated that they definitely (response 5) had a “close awareness of the presence of God sometimes”, only 3 of these responded to the passage by affirming that they had definitely had a similar experience (response 4). Yet the relationship between E07 and P02 was strong (Linear chi-square (1 d.f., 213) = 16.61, $p < .0005$).

For the sake of comparison, the percentages quoted below are based only on the “E” item (with the “P” equivalent given for reference only) except where the experience had only a passage as reference (“help in prayer” – P01 and “all things are one” – P04). Hence the results are indicative only. To be consistent with the interpretation of LIMTOT only responses of 5 are recorded (4 for P01 and P04) as a positive result.

Using the Hay categories as a base, the response rates obtained in the survey as described above are given below as Table 4.11.

Table 4.11 Response Rates Using Hay's Categories of Religious Experience

Type of Experience	Survey Questions	Analysis Coding	Survey Response Rate
Patterning of events	57 & 67	EO6 & PO5	28%
Awareness of the presence of God	58 & 64	EO7 & PO2	20%
Awareness of receiving help in prayer	63	PO1	11%
Awareness of a guiding presence not called God	55	EO4	22%
Awareness of the presence of the dead	60	EO9	21%
Awareness of a sacred presence in nature	61 & 65	E10 & PO3	14%
Awareness of an evil presence	54	EO3	19%
Experience that all things are "one"	66	PO4	5%
Total Positive Response			76%

4.4.2 Hypothesis 1

The first hypothesis to be addressed by this research was framed as:

That a significant number, in excess of 30%, of students have had a 'limit' experience and are able to recognise it as such

The previous section outlined work with the questions on the Hay categories posed as either statements in the "Experiences in Living" ("E") section or written scenarios in the descriptive passages ("P") section.

To allow a full comparison of the survey response to the Hay (1987) and the Hay and Hunt (2000) results, the two results were combined as a variable "LIMBIN" which has a

value of 0 (“No”) for those 52 respondents who reported no "limit" experience at all (i.e. no response of 5 for any of the six “E” items and no response of 4 for any of the five “P” items). Everyone else has a value of 1, (“Yes”) for all those who reported one or more such experiences by having a 5 (“E”) or 4 (“P”) response. The results for this binary variable are shown as Table 4.12:

Table 4.12 LIMBIN – Positive responses to at least one limit experience

		Frequency	Percent	Cumulative Percent
Valid	No	52	24.4	24.4
	Yes	161	75.6	100.0
	Total	213	100.0	

Table 4.12 shows that one hundred and sixty-one (161) or 75.6% of respondents affirmed having had a “limit” experience similar to those described in the survey instrument. Hence Hypothesis 1 is confirmed by the survey results.

4.4.3 Hypothesis 2

The second hypothesis for this research concerned the gender difference and difference of school type both of which might have bearing on the results. It read:

That there will be no significant difference in the number of reports from different types of schools: all-girls schools, co-educational schools and all-boys schools

In addressing this and future hypotheses only the more rigorous variables, comprising maximum positive responses, ETOT5 and PTOT4 and the combined result, LIMTOT, were considered. The means and standard deviations of these variables are shown below for each school as Table 4.13:

Table 4.13 Means and Standard Deviations of Responses to “Experiences in Living” (ETOT5) and “Personal Experience” (PTOT4), by school.

(1 = All girls, 2 = all boys, 3 & 4 = Co-educational)

	School	N	Mean	Std. Deviation
ETOT5 Number of “5” responses to 6 “E” items	1	61	1.62	1.58
	2	52	1.15	1.11
	3	42	1.48	1.47
	4	58	1.48	1.78
	Total	213	1.44	1.52
PTOT4 Number of “4” responses to 5 “P” items	1	61	.84	.92
	2	52	.79	.85
	3	42	.52	.67
	4	58	.66	1.10
	Total	213	.71	.92
LIMTOT Number of Full Agreement responses to 11 items (E and P)	1	61	2.46	2.13
	2	52	1.94	1.59
	3	42	2.00	1.99
	4	58	2.14	2.67
	Total	213	2.15	2.15

The all-boys school had both the lowest mean on the “experiences of living” section and the overall reporting. School four (4), a co-educational school, had the lowest level of reporting on the written “personal experience” items. It has already been noted (Table

3.2) that this school had the highest percentage population of students with English language difficulties and this may have contributed to the lower response on these items.

One way ANOVA's on these three measures showed that there was no statistically significant difference between the groups. Contrasts between pairs of schools were then the subject of t-tests. These also showed no significant differences between schools when considered pairwise. The full results of these tests are given in Appendix B (p. 276).

Next, the variable LIMBIN, (Table 4.12) was cross-tabulated against School Type, all-girls school, co-educational school and all-boys school. These are presented as Table 4.14. The first group of results in the table shows the actual number of "yes" and "no" responses from each type of school and the second section gives percentage responses for each type of school.

Table 4.14 Cross-tabulation of Yes and No responses to limit experience by school type.

			LIMBIN		Total
			No	Yes	
Count	STYPE	1 Girls	10	51	61
	School Type	2 Co-Ed	31	69	100
		3 Boys	11	41	52
	Total		52	161	213
% within STYPE School	STYPE	1 Girls	16.4%	83.6%	100.0%
	School	2 Co-Ed	31.0%	69.0%	100.0%
	Type	3 Boys	21.2%	78.8%	100.0%
	Total		24.4%	75.6%	100.0%

There was no significant relationship (Chi-square (4 d.f., $n = 213$) = 4.77, $p < .09$) between the type of school attended and the reporting of a limit experience. As a further check, a cross-tabulation of the two co-educational schools by gender showed that they were very similar in enrolment patterns, with 38% and 41% males included in the survey. This cross-tabulation appears in Appendix B (p. 277)

Thus hypothesis 2 is confirmed by these results.

4.4.4 Hypothesis 3

The third hypothesis, again given in the null form, related to the influence of individual subjects on the recognition of limit experience.

That students whose instruction in a particular subject area has stirred deep questions about life will be no more likely to be open to limit experiences than other students

To address this hypothesis, the “yes” and “no” responses generated as LIMBIN were cross-tabulated against all of the elements of question 18: “The extent to which each subject has made you feel deeply about life is...”. Responses were recorded on a three point scale from 1 = “very little” to 3 = “very much”. It has already been noted (p. 100) that the response for Religious Education (Mean = 1.98 and sd. = 0.66) was the highest of the specific responses. (“Other” subject was higher at Mean = 2.20, but could not be meaningfully cross-tabulated as a response because it potentially represents a wide range of different subjects.)

In contrast to the hypothesis, there was a significant relationship between reporting of limit experience and influence of religious education as a subject. The cross-tabulation is given as Table 4.15.

Table 4.15 Reports of limit experience by Extent of Perceived Influence of Religious Education as a Subject

			SO2 Influential subject: RE			Total
			1 Very little	2 Slightly	3 Very much	
LIMBIN Limit Experience Binary Form	Count	No	13	37	1	51
		Yes	34	79	42	155
		Total	47	116	43	206
	% within LIMBIN Limit Experience Binary Form	No	25.5%	72.5%	2.0%	100.0%
		Yes	21.9%	51.0%	27.1%	100.0%
		Total	22.8%	56.3%	20.9%	100.0%

There was a significant relationship (Chi-square (2 d.f., 206) = 15.00, $p < .001$) between the reporting of limit experience and the influence of Religious Education as a subject.

Overall, those responding “yes” to one or more of the “limit” experience questions had an 87% response of “slightly” or “very much” to the positive influence of Religious Education on their lives while the “No” group had a 74% response rate for the same section.

There was one other subject, History (Chi-square (2 d.f., 134) = 10.55, $p < .005$), that related strongly to reporting of limit experience. Two others, Social Science (Chi-square (2 d.f., 134) = 6.25, $p < .04$) and Physics (Chi-square (2 d.f., 123) = 6.42, $p < .04$) that

could be claimed as significant if the alpha level had been set at .05 as an alternative to the setting of .01. A full set of data for the cross tabulations subject by subject is given as Appendix B (p. 278)

Given the above results, the hypothesis is supported with the exceptions being Religious Education and History. Of these Religious Education has the stronger statistical significance. It does appear that those for whom this subject has stirred deep feelings about life have an increased openness to “limit” experience.

4.4.5 Hypothesis 4

This hypothesis related to the programs run by individual schools that might influence school climate, what Flynn (1985, p. 165) calls the “hidden curriculum”. It could be surmised that a happy school environment with a range of both co-curricula and service activities might provide students with a range of challenges in self-knowledge and the ability to cope with different life situations. The question is, does this also enhance their openness to “limit” experience?

The hypothesis was framed in the null form:

That students actively involved in social responsibility programs and / or actively involved with school life will be no more likely than others to be open to limit experiences than those who are not.

A preliminary analysis of the “School Life”, (“S”) questions showed that most respondents (81.4%) regarded themselves as at least being involved in a retreat program on the basis of “occasional” to “regular” involvement, with about half of these reporting they had “often” been involved. All of the secondary colleges indicated in a separate data collection (Brisbane Catholic Education Centre, 2000b) through Brisbane Catholic Education that they had retreat or reflection type programs running annually for all

students across the school. Thus the different responses of “occasional” as opposed to “often” are probably a matter of individual interpretation.

There was far less positive response to any form of social involvement with the disabled, the aged, the poor or children. Respondents stated that this happened for them “never” or “rarely” as part of school life (83% with the disabled; 73% with the aged, 89% with the poor). Slightly more than half responded that they had more involvement than this with children (50.5% “occasionally” or more). Fundraising and Sport had the highest levels of involvement with school-organised events, scoring 63.5% “occasionally” or more often for fundraising and 64.6% for sport.

Table 4.16 compares the means and standard deviations for the six retreat and social responsibility questions (S15 to S20) and reporting of limit experience:

Table 4.16 Report of Limit Experience and Level of Social Responsibility / Retreat Involvement

LIMBIN		N	Mean	S.D.
S15 Involved in Retreats	No	51	3.82	1.21
	Yes	159	3.88	1.27
S16 Involved with Disabled	No	51	1.78	.99
	Yes	156	1.73	1.02
S17 Involved with Aged	No	51	1.96	1.02
	Yes	158	1.94	1.01
S18 Involved with Poor	No	50	1.50	.89
	Yes	157	1.48	.91
S19 Involved with Children	No	50	2.52	1.28
	Yes	158	2.49	1.37
S20 Involved with Fund-raising	No	50	3.08	1.23
	Yes	161	2.88	1.16

The significance of the difference between means for groups not involved or involved in each of the six activities was assessed using t-tests. The form of t-test (assuming equal variances or not) was selected on the basis of Levene's test for equality of variances.

The t-tests were done and results are given in Appendix B (p. 287). There were no significant differences between the level of reports for LIMBIN and the type of activity. There were, however, some differences among the school means for the items asking about student perceptions of their level of involvement in the various types of programs.

One-way ANOVA's (Appendix B, p. 288) were run for each type of activity to seek for differences between the school groups. These were significant only for the perceived level of retreat involvement. Given that a survey of all schools (Brisbane Catholic Education Centre, 2000b) indicated all had retreat programs in place, this may relate to the organisation or duration of the retreat program within individual schools. These did vary from "live-in" programs over two or more days to programs conducted on a single day and only within school hours.

The results for each school type are given as Table 4.17.

Table 4.17 School differences – Student perceptions of their level of participation in Retreat and Social involvement programs.

(College code: 1 = All girls, 2 = All boys, 3 & 4 = Co-Educational)

		N	Mean	S.D.
S15 Involved in Retreats	1	59	3.17	1.35
	2	52	3.88	1.28
	3	42	4.26	1.01
	4	57	4.28	.96
	Total	210	3.87	1.25
S16 Involved with Disabled	1	60	1.43	.83
	2	52	2.06	1.07
	3	40	1.90	1.13
	4	55	1.67	.96
	Total	207	1.74	1.01
S17 Involved with Aged	1	60	1.75	.95
	2	52	2.35	.95
	3	41	1.80	1.08
	4	56	1.88	1.01
	Total	209	1.94	1.01
S18 Involved with Poor	1	60	1.35	.95
	2	52	1.65	.90
	3	40	1.50	1.01
	4	55	1.47	.74
	Total	207	1.49	.90
S19 Involved with Children	1	60	2.40	1.38
	2	52	2.40	1.26
	3	41	2.41	1.38
	4	55	2.75	1.36
	Total	208	2.50	1.34
S20 Involved with Fund Raising	1	61	2.87	1.16
	2	52	3.00	1.19
	3	42	2.90	1.16
	4	56	2.95	1.23
	Total	211	2.93	1.18

As has been stated above, the differences in the means probably reflect the differing types of programs run by the secondary colleges. As stated above (Table 4.16) there was no significant difference in the reporting of “limit” experience which could be attributed to these programs per se.

The “involvement” questions, on sport, performance and “competitions” did produce some significant differences among the types of involvement and the levels of reporting for “limit” experience. For these questions Levene's test indicated that there were statistically significant differences for S21 ($p = .002$) and S22 ($p = .002$) in the variances between groups. When this happens, it is common practice to run a special form of the t-test to examine the equality of means, given the variance in standard deviations. This indicated a significant difference between the groups on S21, involvement with sport ($t(101 \text{ df.}) = 1.67, p < 0.098$), and S22, involvement in performance ($t(105 \text{ df.}) = -2.65, p < 0.009$).

The summary of these questions (S21 to S23) appears as Table 4.18.

Table 4.18 Limit Experience vs Involvement in Sport, Performance, Competitions

	Limit Experience Binary	N	Mean	S.D.
S21 Involved with Sport	No	51	3.55	1.30
	Yes	161	3.18	1.59
S22 Involved in Performance	No	51	1.88	1.11
	Yes	160	2.39	1.41
S23 Involved in Competitions	No	51	2.12	1.48
	Yes	158	2.32	1.47

There was no significant difference between the groups on S23 ($t(207 \text{ df.}) = -.84, p < 0.403$). The means for S21 and S22 indicate that those who report “limit” experience are less involved in sport (mean 3.18 on the 5 point scale) than those who do not report such an experience (mean 3.55). On the other hand, those involved in “performance” reported more “limit” experience (mean = 2.39) than those not involved (mean = 1.88).

Table 4.19 College differences – Sport, Performance and other competitions
(College code: 1 = All girls, 2 = All boys, 3 & 4 = Co-Educational)

		N	Mean	S.D.
S21 Involved with Sport	1	61	2.87	1.45
	2	52	4.13	1.24
	3	42	2.88	1.56
	4	57	3.19	1.55
	Total	212	3.27	1.53
S22 Involved In Performance	1	61	2.36	1.33
	2	52	1.83	1.04
	3	41	2.10	1.24
	4	57	2.68	1.58
	Total	211	2.27	1.35
S23 Involved in Competitions	1	61	2.18	1.45
	2	50	2.28	1.46
	3	41	1.80	1.03
	4	57	2.68	1.68
	Total	209	2.27	1.47

There were statistically significant differences among colleges on the items S21, involvement with sport ($F(3, 208) = 8.72, p < .0005$), and S22, involvement in

performance, ($F(3,207) = 4.12, p = .007$). A full set of test results for these questions is given in Appendix B (pp. 289-290).

The results given in this section support the hypothesis and hence it is accepted. The caveat to full acceptance is that involvement in performance has a small positive influence on the reporting of “limit” experience while involvement in sport has a small negative influence.

4.4.6 Hypothesis 5

That students who participate in organised religion will be no more likely to be open to limit experiences than those who do not.

The analysis for Hypothesis 1 (Table 4.12) showed 75.9% of respondents reported having a “limit” experience one or more times and 24.1% reported that they have never had such an experience. These proportions were compared to the response on items 11 to 15 of the survey to compare results for those who “never” attend church, “rarely” attend, attend on special family occasions or who were able to quantify their attendance in terms of the number of times in a year.

Results for each type of church attendance showed an overall similarity at each level to the relative incidence of reporting “limit” experience. At most levels, except for yearly attenders, the percentage of those reporting “limit” experience lay between 71% and 86%. Results are given as both raw scores and percentages as Table 4.20.

Table 4.20 Church Attendance by Reporting of Limit Experience
(Showing percentage of “limit” experience within each level of attendance)

			LIMBIN Limit Experience Binary Form		Total
			No	Yes	
F09 Church Attendance Self	Count	1 Never	12	21	33
		2 Rarely	7	35	42
		3 Fam. Occas	5	30	35
		4 Yearly	10	13	23
	Total	5 Monthly	5	25	30
		6 Weekly	6	15	21
		7 Weekly+	6	22	28
			51	161	212
F09 Church Attendance Self	% within	1 Never	36.4%	63.6%	100.0%
	F09	2 Rarely	16.7%	83.3%	100.0%
	Church	3 Fam. Occas	14.3%	85.7%	100.0%
	Attendance	4 Yearly	43.5%	56.5%	100.0%
	Self	5 Monthly	16.7%	83.3%	100.0%
		6 Weekly	28.6%	71.4%	100.0%
		7 Weekly+	21.4%	78.6%	100.0%
	Total		24.1%	75.9%	100.0%

Regularity of church attendance did not have a marked effect on the frequency of reports of “limit” experience. Comparing the frequency of reports (see Table 4.21 below) among those who attended monthly, weekly or more frequently, for the sake of this report classed as “regular”, showed that 33% of those not reporting “limit” experience were “regular” attenders. On the other hand 38.5% of those reporting “limit” experience attended regularly. Of those who attended weekly or more often, the split was more even

at 23.2% “no” and 23% “yes”. Table 4.21 extends Table 4.20 and gives a comparison of percentage of reports of “limit” experience and regularity of church attendance for the respondents.

Table 4.21 Percentage of Reports by Regularity of Church Attendance
(Showing level of attendance within the “No” and “Yes” “limit” experience groups)

			LIMBIN Limit Experience Binary Form		Total
			No	Yes	
F09 Church Attendance Self	% within	1 Never	23.5%	13.0%	15.6%
	LIMBIN	2 Rarely	13.7%	21.7%	19.8%
	Limit	3 Fam. Occas	9.8%	18.6%	16.5%
	Experience	4 Yearly	19.6%	8.1%	10.8%
	Binary	5 Monthly	9.8%	15.5%	14.2%
		6 Weekly	11.8%	9.3%	9.9%
		7 Weekly+	11.8%	13.7%	13.2%
	Total		100.0%	100.0%	100.0%

There was no significant relationship (chi-square (6 df., n = 212) = 11.806, $p < .066$) between patterns of individual church attendance and reporting of “limit” experience.

The results support hypothesis five and hence it is accepted that those who participate in organised religion are no more likely to report “limit” experience than those who do not.

4.4.6 Hypothesis 6

That students who experience a happy and stable home background are no more likely to be open to limit experiences than those who do not have such a home background.

The numbers of those reporting “limit” experience and those making no report of such experience were compared to the level of reported happiness at home in item F12 of the survey. Happiness, as assessed by the respondent was reported on a five point scale from “Very Unhappy” to “Very Happy”. All of those who were very unhappy with home life also reported having some form of “limit” experience. At all levels of satisfaction the number of reports of “limit” experience exceeded the number of respondents not reporting such experience.

It is interesting to note that of the thirty-three (33) respondents either “very unhappy” or “unhappy” at home, twenty-nine (87.9%) reported positively on their experience of “limit” while of those most satisfied with their home life only 64.9% did so. However, there was no statistical significance in the results (Chi-square (4 df., $n = 213$) = 6.49, $p = .165$). Results are given as Table 4.22.

Table 4.22 Happiness at Home vs Reports of “Limit” Experience

			LIMBIN Limit Experience Binary Form		Total
			No	Yes	
F12 Happiness Home	Count	1 Very unhappy	0	10	10
		2 Unhappy	4	19	23
		3 Satisfied	12	43	55
		4 Happy	23	65	88
		5 Very happy	13	24	37
	Total		52	161	213
F12 Happiness Home	% within F12 Happiness Home	1 Very unhappy	0.0%	100.0%	100.0%
		2 Unhappy	17.4%	82.6%	100.0%
		3 Satisfied	21.8%	78.2%	100.0%
		4 Happy	26.1%	73.9%	100.0%
		5 Very happy	35.1%	64.9%	100.0%
	Total		24.4%	75.6%	100.0%

Stability in the home was assessed using responses to item 5 of the survey. Respondents were asked to nominate the relationship of the care-givers in the home. These ranged from having both biological parents at home, to having a re-structured relationship with only one biological parent and another person, to single parent families. Although these categories were broadly based on an assumption that a home with both biological parents caring for children was inherently more “stable” than the other forms, it is recognised that this assumption may be more the result of personal bias or preference than a reality. In the final analysis, however, acceptance of some definition of “stability” matters little since the results show no significant difference (Chi-square (5 df., n = 213) = 3.29, p =

.655) in reporting from the different types of home background. Those whose biological parent had either established a new relationship or who lived as a single parent tended to report “limit” experience slightly more frequently than those with both biological parents living at home. However, the differences were not statistically significant. The results for home background and “limit” experience are given as Table 4.23.

Table 4.23 Home Background vs “Limit” Experience

			LIMBIN Limit Experience Binary Form		Total
			No	Yes	
F01	Count	1 Mum & Dad	40	110	150
		2 Mum & Gdn	2	12	14
		3 Dad & Gdn	1	4	5
		4 Sngl Mum	7	21	28
		5 Sngl Dad	0	6	6
		6 Other	2	8	10
	Total		52	161	213
F01	% within Parents	1 Mum & Dad	26.7%	73.3%	100.0%
		2 Mum & Gdn	14.3%	85.7%	100.0%
		3 Dad & Gdn	20.0%	80.0%	100.0%
		4 Sngl Mum	25.0%	75.0%	100.0%
		5 Sngl Dad	0.0%	100.0%	100.0%
		6 Other	20.0%	80.0%	100.0%
	Total		24.4%	75.6%	100.0%
F01	% within Limit Binary	1 Mum & Dad	76.9%	68.3%	70.4%
		2 Mum & Gdn	3.8%	7.5%	6.6%
		3 Dad & Gdn	1.9%	2.5%	2.3%
		4 Sngl Mum	13.5%	13.0%	13.1%
		5 Sngl Dad	0.0%	3.7%	2.8%
		6 Other	3.8%	5.0%	4.7%
	Total		100.0%	100.0%	100.0%

The results given above support hypothesis six and thus it is accepted that those with a happy and stable home background are no more likely to report “limit experience” than those who do not have such a background.

4.5 *Exploratory Analyses*

Further analysis of the data beyond that required in testing of the hypotheses was undertaken using factor analysis to explore the Experience and Values items and the relationship of the factors (scales) to “limit” experience.

4.5.1 **Factor Analysis and Data Reduction**

The principal components factor analyses reported in this section extracts as many underlying factors as exist with eigenvalues ≥ 1.00 . Since the type of data collected was expected to have numerous correlations between components the Promax rotation method, with Kappa = 4, was selected as the method of analysis. This produces a non-orthogonal rotation of the components.

The initial factor analysis of the 38 Values and Experience items produced 10 components which accounted for 59.19% of the variance. Examination of the initial components generated showed that the “Values” (“V” type) items tended to cluster within single components and that the “Experience” (“E” and “P” type) items did the same. The survey instrument had been designed around discrete sets of items designed to examine different aspects of student life. Thus the twenty-two (22) “Values and attitudes” items (nos. 30 to 51), prefaced by a “V” in the analysis, formed a different set to the sixteen (16) items on religious and “limit” experience (nos. 52 to 67), prefaced by “E” or “P”, and the other sections of the survey.

The core of the survey was considered to be the “V”, “E” and “P” items. The results showed that all of the components, from whatever run with whatever subset of data, consisted of only V,E and P type items. All of the “V”, “E” and “P” items appeared within the 10 components of this first pass. The structure of this solution strongly reflected the structure of the survey items and the two different groups of items. It was also clear that the components, when extracted this way, sorted themselves into groups composed largely of either “V” type or “E/P” type questions. Usually the component

consisted of one type or the other with some questions from the other category perhaps appearing in that part of the matrix.

Given these results, and the original survey design concept, it seemed reasonable to proceed with two analyses by separating the two types of questions, the “V” items and the “E/P” items.

4.5.1.1 The Values Scales

The data can thus be analysed in a reduced form by omitting some of the items from particular passes of a principal component analysis. The first analysis using the 21 Values items produced seven components accounting for 61.7% of the variance. Components 5 through 7, however, centred on only one item each, items V04, V06 and V18 respectively.

The major item in component 5 was V04 - “The laws of nature discovered by Science will never be changed”. Robinson and Jackson (1987) also used this question and found it did not fit any of their own scales in their analysis. Hence it was decided to omit this from future passes on the data. Component 6 included V18 - “I experience times when I am uncertain about whether God exists or not”. This was a one-off question in the survey borrowed from Flynn (1985) and inserted to explore any possible relationship to the “searching” faith concept used by Flynn. Hence its omission seemed justified, since it did not relate strongly to any of the other factors. Finally, Component 7 contained only V06 - “The most important thing we learn from science is how little we really understand the world”. This had also been used by Robinson and Jackson (1987), but was not included in their “Sceptics” scale, centred as it was on attitudes to science. They included it as a peripheral part of their implicit religiosity scale. Once again, omission of this question from future analysis seemed justified.

Exclusion of these three questions from the principal component analysis led to a run, using the remaining 19 Values items, that generated 4 components accounting for 52.75% of the variance. The results are given below as Table 4.24.

Table 4.24 Factor Analysis of the 19 Values and Attitudes items

Pattern Matrix (a)

	Component			
	1	2	3	4
V13 Believe in God	.78			
V11 Live Christian values	.74			
V15 God loves me	.71			
V19 Felt close to God at times	.58			.51
V02 Religious language lacks meaning	-.57			.32
V08 Religion answers questions	.58			
V21 Religion not relevant	-.57			
V10 Church unnecessary	-.51			
V14 Help lonely		.80		
V16 Concern for world poverty		.80		
V12 Concern for poor		.78		
V09 Majority rules		-.45		
V22 Church not relevant	-.39	.40	-.37	
V01 Enjoy RE		.36		
V03 Science will control world			.76	
V05 Believe with proof only			.69	
V07 Important things not proved			-.45	
V20 Pattern and purpose to life				.77
V17 Life not faith important		.44		-.49

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

It is of note that questions V19 and V02 are part of both component 1 and component 4 and that V22 occurs in all of components 1, 2 and 3. This possibly indicates a difference

in interpretation of the question among the respondents and will be referred to again when analysing the results in chapter five.

The four factor solution having been accepted for the Values scales they were then identified for further analysis by naming each with a short descriptor as follows:

Component 1:

These questions centred on a faith expressed through belief in God, church allegiance and a felt closeness to God and so the component was labelled **“Expressed Faith” (EXPFAITH)**.

Component 2:

These questions revolve around social awareness, a concern for others, the poor, the third world and a rejection of a “majority rules” morality and the component labelled **“Social Awareness”(SOCAWARE)**.

Component 3:

Questions V03 and V05 had been the base of the Robinson and Jackson (1987) SCEPTIC scale. The other questions fit well with this and the component was labelled **“Scepticism” (SCEPTIC)**.

Component 4:

Items in this component referred to a belief that there is a pattern and purpose to life, an experienced closeness to God and reject the idea that belief can be separated from morality. The items also question the relevance and meaning of religious language. The component was labelled **“Implicit Faith”. (IMPFAITH)**

4.5.1.2 The Experience Scales

Principal component analysis of the 16 Experience items (“E” and “P”) generated 4 components accounting for 56.7% of the variance. These are shown in Appendix B (p. 286). All of the “E” / “P” items were included in one or more of the components identified.

The preliminary analysis identified that E01, with a loading of 0.96, defined the fourth component. The significance of E01 in this component was so strong that it was decided to treat this measure as a single variable and to thus exclude it from the final pass of the principal component analysis.

This produced the three-factor scale below (Table 4.25), accounting for 51.8% of variance. Appendix B (p. 296) gives the full analysis.

Table 4.25 – Factor Analysis for “E” & “P” Questions (E01 omitted)

Pattern Matrix(a)

	Component		
	1	2	3
E05 Felt no purpose in life sometimes	.88		
E08 No meaning for life sometimes	.82		
E02 Experienced loneliness or depression	.66		
E11 Found joy and meaning for life	-.53	.44	
E06 Sometimes there is a pattern to events	.39		
P04 All things are one		.83	
P03 Sacredness in Nature		.66	
E09 Felt presence of deceased friend or relative		.60	
E10 Recognised a sacredness in nature		.59	
P05 Pattern to events		.46	
E07 Close awareness of God sometimes			.89
P01 Help in Prayer			.85
E03 Experienced evil presence	.51		.57
P02 Presence of God			.44
E04 Experienced powerful presence	.38		.41

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

A Rotation converged in 4 iterations.

E11, “I have discovered a joy and meaning for my own life now and am satisfied and at peace”, occurred in more than one component. The components themselves point to a contrasting experience of life among respondents with high scores on the components. Thus it appears to have been interpreted consistently by respondents as it has a positive

value in one and a negative value in the other. The other common items, E03 and E04, may be due to differing interpretations of what constitutes an “evil” or “powerful” presence and will be referred to again in chapter five.

The three-factor solution having been accepted for the experience scales they were then identified for further analysis by naming them with a short descriptor as follows:

Component 1:

The highest loading was on E05 – “At times I have felt there is no purpose or reason for living”. The other items, such as E11 - “I have discovered a joy and meaning for my own life now and am satisfied and at peace ” were phrased more positively but responded to in the negative. It seemed reasonable that this component be classified under the heading of **“Depression” (DEPRESS)**.

Component 2:

These items almost parallel Hay’s (1987) categories of experiences and, except for E11, the least weighting within this component, accord with what Robinson and Jackson (1987) describe as “Mystical” experiences. Although not completely a clean attribution, due to E11, which is an experience of the numinous, it could be argued that “mystical” and “numinous” experience are not mutually exclusive and individuals may respond to both questions. Hence this component was termed **“Mystical Experience” (MYSTICEX)**.

Component 3:

These items pick up the remainder of Hay’s (1987) categories, as well as the Alister Hardy question about experience of a presence or power beyond the self. The “evil” presence may also be included without inconsistency by referring to the earlier work of Otto (1950) who saw “awe and dread” as being characteristic of some numinous experiences. This question is the only one shared between the scales and was an element

of the “Elation / Depression” scale also. It seemed reasonable to refer to this component as “**Numinous Experience**” (**NUMINOUS**).

4.5.1.3 Correlations Between the Scales

Significant correlations were found among virtually all the “values” and “experience” scales.

Expressed Faith (**EXPFAITH**) correlated very strongly and significantly ($r = .98$, $p < .01$) with the Depression (**DEPRESS**) scale and less strongly but significantly ($r = .30$, $p < .01$) with Implied Faith (**IMPFAITH**). All other correlations for Expressed Faith were less strong and were not significant at either the .01 or the .05 levels.

The Social Awareness (**SOCWARE**) scale correlated very strongly and significantly with the Mystical Experience (**MYSTICEX**) scale ($r = .99$, $p < .01$). Less strong but significant correlations ($.42 \leq r \leq .51$, $p < .01$) were also reported with the Scepticism (**SCEPTIC**), Implied Faith (**IMPFAITH**) and Numinous Experience (**NUMINOUS**) scales. Correlations with the Expressed Faith (**EXPFAITH**) and Depression (**DEPRESS**) were weak ($.155 \leq r \leq .233$) but statistically significant ($p < .01$).

The scepticism (**SCEPTIC**) scale correlated very strongly and significantly with the Numinous Experience (**NUMINOUS**) scale ($r = 0.99$, $p < .01$). Less strong but significant correlations ($0.43 \leq r \leq 0.51$, $p < .01$) were also found with the Implied Faith (**IMPFAITH**) and Mystical Experience (**MYSTICEX**) scales. Correlations with the Expressed Faith (**EXPFAITH**) and Depression (**DEPRESS**) scales were weak ($.16 \leq r \leq .22$) but statistically significant ($p < .01$).

A full table of correlations between the scales appears below as Table 4.26.

Table 4.26 Correlations between “Values” and “Experience” Scales

	EXP- FAITH	SOC- AWARE	SCEPTIC	IMP- FAITH	DEP- RESS	MYST- ICEX	NUM- INOUS
Pearson Correlation							
EXPFAITH	1.00	.16 (*)	.16 (*)	.30 (**)	.98 (**)	.10	.12
SOCFAITH		1.00	.50 (**)	.42 (**)	.23 (**)	.99 (**)	.51 (**)
SCEPTIC			1.00	.42 (**)	.22 (**)	.51 (**)	.99 (**)
IMPFAITH				1.00	.48 (**)	.53 (**)	.51 (**)
DEPRESS					1.00	.20 (**)	.21 (**)
MYSTICEX						1.00	.54 (**)
NUMINOUS							1.00

* Correlation is significant at the .05 level (2-tailed).

** Correlation is significant at the .01 level (2-tailed).

4.5.2 Relationships between Scales and Data

Each of the seven factor scales generated above were compared in turn with the measures from the Family and School sections of the data to determine what were the significant relationships between the data and the factor scales.

The first set tested gender differences on the seven factor scores using t-tests. Two of the t-tests indicated a difference ($p < .05$) among males and females on “Expressed Faith” and “Depression”. For males, the mean for “expressed faith” (mean = -0.19, sd = 1.00) was lower than that for females (mean = 0.13, sd = 0.98) and a two-tailed t-test gave $p = .025$. For “depression” the male’s (mean = -0.21, sd = 1.01) was again below that for females (mean = 0.14, sd = 0.97) with $p = .015$.

The next set of tests looked for differences on the factors among individual schools. There was no statistically significant difference indicated by the ANOVA's run for the schools of a difference among the four schools.

Comparing the types of schools surveyed (two co-educational, one single sex girls and one single sex boys) with the factor scales also produced no statistically significant differences for the various types of schools. The full results are given in appendix B (pp. 298-302).

4.5.3 Multiple Regression Analysis

The fluctuations on any given series of results are seldom dependent upon a single factor. The measurement of the association between a series of results and several of the variables associated with the dependent variable is achieved by multiple regression analysis. This analysis consists of the measurement of the relationship or association between a dependent variable and two or more independent variables.

The method as used in this research first sets up a series of measures which could reasonably be expected to be related to LIMTOT, the reporting at the highest level of response only of one or more "limit" experiences (as measured by the eleven "E" and "P" type questions previously defined). Table 4.27 below shows the correlations among LIMTOT, taken as the independent variable, and the four values scales. Full results are given in Appendix B, p. 303.

Table 4.27 Correlations between four “values” scales and LIMTOT

Pearson Correlation	LIMTOT	EXPFAITH	SOCAWARE	SCEPTIC	IMPFAITH
LIMTOT	1.00	.35(**)	.71 (**)	.59 (**)	.57 (**)
EXPFAITH		1.00	.16 (*)	.16 (*)	.30 (**)
SOCAWARE			1.00	.50 (**)	.42 (**)
SCEPTIC				1.00	.43 (**)
IMPFAITH					1.00

*Significant at the .05 level

** Significant at the .01 level

Correlations among all four values scales above were all statistically significant (at the .05 level). EXPFAITH correlated weakly with the other Values scales while SOCAWARE had a stronger correlation with both SCEPTIC and IMPFAITH.

The technique next builds models that identify the strongest predictor first and then enter or remove predictors to and from the model according to their significance. All four scales were tested as predictors of LIMTOT. The multiple correlation of .815 was statistically significant ($F(4,195) = 96.23, p < .0005$).

The regression coefficients presented in Table 4.28 are calculated for the model to form a linear equation predicting the extent of “limit” experience, LIMTOT, from the four Values scales. The standardised beta coefficients showed that the SOCAWARE (Social Awareness) scale was the strongest predictor ($\beta = .480$) of “limit” experience. Two other factors, SCEPTIC and IMPFAITH were about equal ($\beta = .228$ and $.220$ respectively). EXPFAITH was the weakest predictor ($\beta = .175$). Full results are given in Appendix B, p. 304.

Table 4.28 Multiple regression predicting “limit” experience from Values Scales

Model		Unstandardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta	T	Sig.
4	(Constant)	2.195	.091		24.160	.000
	SOCA Social Awareness	1.052	.109	.480	9.649	.000
	IMPFAITH Implicit Faith	.483	.108	.220	4.487	.000
	SCEPTIC Scepticism	.500	.109	.228	4.580	.000
	EXPFAITH Exp. Faith	.384	.095	.175	4.024	.000

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

4.5.3.1 Home Background

The variables entered on home background were next examined as possible predictors of LIMTOT. A number of significant correlations among the individual variables were found from the initial examination. The attitude to religion of the mother has a small but significant correlation (in all cases $p < .0005$) with both attitudes to religion of the father and the respondent, as it does to actual church attendance among the family. There is no statistically significant correlation, however, between any of these variables and LIMTOT, with the exception of the attitude to religion of the respondent. This had a very low (.191) but significant ($p < .005$) correlation to LIMTOT.

Regression analysis excluded all variables except for “Attitude to Religion: self” as a predictor of LIMTOT. The correlation of 0.191 was significant at the .05 level ($F(1,190)$, $p \leq .008$). The attitude to religion and church attendance of other family members had no statistically significant relationship to LIMTOT. A full set of results are included in Appendix B (p. 305).

4.5.3.2 *Influence of School Subjects*

This had been analysed in other ways as part of the validation of hypothesis 3. The immediate problem with regression analysis of the results is that not all respondents actually do all of the subjects listed. There are insufficient results for some subjects to allow viable analysis and eventually it was limited to a little over half the sample (127 of 213) and the more common subjects of Religious Education (RE), Social Education (Soc Ed), English, Mathematics and Science.

Some interesting correlations among the subjects themselves were found. Those who believed RE had made them think deeply about life had a weak but significant correlation ($r = .224, p < .006$) with those who also regarded Soc Ed as influential and a still weaker and less significant correlation ($r = .207, p < .01$) with those who believed English was similarly influential. Science, where it was designated by respondents as a subject that invoked deeper thoughts about life, correlated more strongly and with statistical significance to similar designations for Soc Ed. ($r = .391$), English ($r = .366$) and Maths ($r = .492$), all at the .0005 level.

A strong correlation between those subjects that made students think deeply about their life and LIMTOT was limited to RE ($r = .428, p < .0005$). There were weaker but statistically significant correlations between LIMTOT and for Soc Ed ($r = .266, p < .001$) and Science ($r = .209, p < .009$).

When the five subjects were tested as predictors of LIMTOT, only RE and Science were included in the final model with other subjects excluded. The multiple correlation of .222 was statistically significant ($F(2,124) = 17.66, p < .0005$). Standardised coefficients gave beta values of .422 for RE and .197 for Science in developing a predictor for LIMTOT. Full results for school subjects are included in Appendix B (pp. 307-309).

4.5.3.3 *School Level Involvement*

The school involvement questions, S15 to S23, were analysed for the relationship to LIMTOT. Correlations showed that only “Involvement in Performance” ($r = .240$, $p < .0005$) and “Involvement with Sport” ($r = -.167$, $p < .008$) were significantly related to LIMTOT. Sport, however, had a weakly significant negative correlation to LIMTOT. There were a number of strong relationships among the various types of involvement themselves. Involvement in sport, for instance, correlated strongly with those involved in both “Fund-raising” and “Competitions”, while far less so with involvement in cultural performance. Involvement with the aged correlated strongly with other social service type involvements, such as working with the poor or with children.

Since the focus of this research is on “limit” experience as such, these inter-variable relationships are not analysed further as it was thought likely that they reflected the programs of individual schools rather than significant relationships as such. When all 9 school involvement variables were included in regression analysis, only S22 “Involvement in Performance” and S21 “Involvement in Sport” were included in the final model. As a predictor of LIMTOT, the model had a multiple correlation of .088 which was statistically significant ($F(2,200) = 9.594$, $p < .0005$). However, involvement in performance ($\beta = .244$) had a positive influence as a predictor of LIMTOT while involvement in sport ($\beta = -.17$) had a slightly negative effect. Full results of the analysis are given in Appendix B, pp. 309-312.

4.5.3.4 *The Experience Scales*

The extremely significant correlations between the three values scales (**EXPFAITH**, **SOCARE**, **SCEPTIC**) and the Experience scales (**DEPRESS**, **MYSTICEX**, **NUMINOUS**) has been presented in Table 4.27. The strong one-to-one correlation relationship among the three Experience scales above made further multiple regression

analysis using the Experience scales as such superfluous. Hence this avenue of investigation was pursued no further.

4.6 The Written Accounts

Students completing the questionnaire had been invited to write a brief account of their experience. An unexpectedly high number, 85 (40%) (35 males and 46 females) responded to this invitation and chose to write, often at some length, of the experience that had been brought to mind by the questionnaire.

Only a simple analysis of responses was attempted, using two different methods. The first was along the lines suggested by Ahern (1990) and described in Chapter 2 (p. 69). Ahern distinguished between experiences that were explicitly “spiritual / religious” in nature and those that he termed “unitive”. His analysis of written accounts from the Religious Experience Research Centre led him to conclude that certain words in the accounts were usually associated with unitive experience while others were directly associated with the spiritual / religious.

Words associated with unitive experience (“U”) were: “love”, “life”, “religion / ous”, “field”, landscape (such words as “beach and “nature” were also included here in this study), “garden”, “valley”, “river”, “universe”, “sun” (“sky” was also accepted for this study). Words to be associated with the spiritual / religious (“R”) were: “church”, “prayer”, “lord”, “Father”, “holy” and “Christ”. Ahern (1990) believed that a unitive experience could have aspects of the spiritual / religious and distinguished a third group of words (“T”): “god”, “good”, “Jesus”, “death” that could be characteristic of either type of experience.

For the purpose of analysis each occurrence of any of the above words was recorded and the results appear in appendix B (p. 245). Each occurrence of one of the Unitive (“U”) words, the spiritual / religious (“R”) words and the alternative “T” word responses was

recorded for each written account. Hence accounts often had two “hits” on the “U” scale and at times three or four. Accounts that had a “U” response recorded sometimes also had a “T” type word in them, but none had any “R” words in their account. This tends to support Ahern’s (1990) conclusion that the spiritual / religious is a separate entity. Of the “R” responses, each “hit” occurred only once, although two of the “R” type responses also used “T” words but never “U” words. A summary of responses appears below:

Table 4.29 Word Frequencies of the written accounts
Word Frequencies (after Ahern 1990)

Total number of written accounts	85
Number of Unitive words used (“U”)	31
Number of Spiritual/Religious words (“R”)	5
Number of “alternative” words used (“T”)	30
Unclassified responses	28

There are a number of difficulties associated with this method. First, it is based only on a pilot study. Ahern (1990) used only one hundred accounts to produce a preliminary means of classification of such records. Second, writers are coming from an Australian youth culture and are telling of their own experiences. They may not always use the words we expect them to use. Indeed twenty-eight of the written accounts used no words even close to those suggested by Ahern in the British context. Third, when they do use words as suggested, they will often use more than one of them, so the totals above include some cases several times.

The alternative method of classification was more successful. In this, an attempt was made to classify the type of experience (“X” type) using a matrix loosely based on Hay (1987, p. 152). To these were added some classifications based on the physical or psychical nature of the experience – such things as “touch” or and auditory perception or

a feeling of being in a strong light were not always able to be readily translated to a Hay category. The other difficulty was that a written account often seemed to need to be classified under more than one category. A feeling of being helped in prayer, for instance, might have been accompanied by a sense of a hand touching a person's shoulder.

A more rigorous classification could have been done by means of follow up interviews, but we had only the written accounts and had to make do with those. On the other hand, only one written account defied classification by this means, although there was still double counting as mentioned above. The results appear below as Table 4.30.

Table 4.30 Types of experiences in the 85 written accounts

Type of Experience		Frequency
X02	Patterning	29
X05	Awareness of God	24
X09	Sacredness in Nature	11
X07	Feeling of Peace	10
X10	Presence of other person	7
X01	Fearful presence	5
X08	Help in Prayer	5
X04	Touch	4
X03	Auditory	3
X06	Near death experience	3
X11	Experience of Light	2
X12	Inexpressible	2
Total		105

4.7 *Summary*

This chapter has presented the results of this research in five major groupings. Firstly, the sample characteristics are reported. Secondly the results are presented in full and selected individual items are reported and compared. Thirdly, the results are analysed first as they relate to the earlier work of Hay (1988) and then as they relate to the six hypotheses that form the basis of the research questions. Fourthly, data from factor analyses of the Values and Experience items are presented and scales developed to account for the relationships within the data. A range of t tests and ANOVAs are also reported to present data on the scales developed and the sample characteristics. Finally, the results of analysis of the written reports from individual respondents are reported.

The discussion in the following chapter proceeds to analyse the implications of the results presented in this chapter, with particular reference to the hypotheses forming the basis of the research.

Chapter 5

Interpretation and Discussion of the Results

5.1 Introduction

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit” experience and “religious” experience among some Catholic High School students in Brisbane secondary colleges. As has already been pointed out “limit” experience subsumes the term “religious”. The questions in the survey instrument are based on types of “limit” experience rather than targeting specifically “religious” experience as such. This is intended to minimise the possible confounding variable of a negative attitude to “religion” or “church”. The interpretation of an experience as “religious” will be inferred from the types of experience reported and the language in which they are described.

The results presented in chapter four provide information principally in three areas of interest. First, the characteristics of the sample and the results of the survey items were presented. Whilst descriptive in nature this data provides a valuable overview of the background, values and life experiences of the sample. It also enabled comparisons to be made with the earlier work of Flynn (1985,1993) with Australian schools.

Secondly, the results were analysed quantitatively to enable a comparison to be made between the results obtained in this sample and the categories of religious experience generated by Hay (1987). Each of the hypotheses was then examined in turn to determine the extent of empirical support for each hypothesis. This quantitative analysis also enabled some comparison between this survey result and the work of Robinson and Jackson (1987) with senior high school students in Britain.

Finally, having established clear similarities and contrasts with the findings of earlier research, chapter four outlines the results of exploratory analyses that develop

and extend the knowledge in the area. This is first done by generating a number of factor scales from the individual responses to key items of the survey instrument. Next, chapter four presents the results of multiple regression analyses. This examines the relationship between the scales and “limit” experience and their usefulness as predictors of such experience. Finally, the chapter looks at other sets of life circumstances as possible predictors of “limit” experience among members of this group.

This chapter will examine the key outcomes from all of these analyses and discuss them in the light of the literature reported in chapter two and in the context of the school communities and the Australian community. All of the results must be treated with some caution, since what is measured is not necessarily reality but what the respondents have interpreted as real for them. For instance, while 18% of respondents state that they have “never” or “rarely” been involved in school retreats (S16), all schools reported (Brisbane Catholic Education Survey, 2000) that they had retreat programs running for all students during the high school years. With this note of caution in mind this chapter will now proceed to discuss the results in the same order as they were presented in chapter four.

5.2 Descriptive Results Overview

During this overview there is often need to compare the results and the sample with the work of Flynn (1985, 1993). Flynn’s work spans more than twenty years of Catholic school education and is arguably the most significant and comprehensive set of comparative data about senior students in Australian Catholic schools. For all that, it is limited to some extent, having been generated largely in New South Wales, and, in the earlier work, with a strong sample bias towards males.

Flynn framed many of his questions on a five point scale, ranging from 1 = “Strongly disagree” through to 4 = “Agree” and 5 = “Strongly Agree”. In reporting his results Flynn (1985, p. 52) counted the top two scores (responses of “4” or “5”) as agreement with a particular issue or question. As was reported in chapter four, the analysis of limit

experience (see Table 4.10, p. 107) in this survey sets a more strict standard for agreement to the actual questions on “limit” experience and accepted only a response of “5” (or “4” on the four point scales) as being actual agreement with the question or issue involved. For the sake of consistency, when, in this chapter, comparisons are made with the Flynn results the less rigorous criteria for positive or negative responses will be used in presenting the survey results.

5.2.1 Gender Balance

There was a slightly higher proportion of girls answering the survey compared to boys (Table 4.1, p. 93). It needs to be remembered that students were only included in the analysis if they had returned the parental permission form. The author’s own experience as principal and teacher is that return of such forms by senior students is sometimes a frustrating exercise. Wiersma (1991, p. 181), while stating that non-response has the potential to introduce bias into survey data, gives 70% as a reasonable minimum response rate for survey populations as varied as professionals, parents and high school graduates. In the Australian context, a recent survey by the Australian Council for Educational Research (Ainley & Johnson, 2000), accepts a 58% response rate as the basis for a report on a cohort of 156,273 tertiary students nationally.

Hence the actual return rate of 68% of the possible sample of boys and 73% of the girls is regarded as acceptable. As the survey instrument was completed at a school, those returns that still required permission from parents were left with the school authorities and only forwarded on to the researcher once the permission note had been brought in. (see Chapter 3, p. 81, for details)

One qualitative indicator of the interest of many students in the topics broached by the survey was that a reasonable number of returns were sent in subsequent to the administration of the survey. Around a quarter of the returns came in the post from secondary colleges after the event.

The survey data reflects the gender balance of the total group of enrolled Year 12 students at the schools. (Table 3.1, p. 78) The sample (213 returns) of 43% female and 57% male students compares to an enrolment (302 total students) pattern across the schools of 45% female and 55% male.

The secondary colleges had differing numbers of students from a non-English speaking background (Table 3.2, p. 80). This may have influenced the return rate from particular schools. The percentage return rate was lower (54% and 62%) in those schools with a higher proportion of students from a non-English speaking (as a first language) background, when compared to the return rates from the other two secondary colleges (92% and 79%) and the overall response rate of 71%. Flynn's (1985, p.47) work required no parental permission form and he thus had access to virtually all data (response rate 88.9%) from all schools involved in his surveys. Of his cohort, he explains that 240 students were, apparently, absent from among the sample of 2,296 across all schools and that a further 15 responses were invalidated and withdrawn from the sample. However, as stated above the actual return rate from this survey was sufficient for analysis of the results. The voluntary nature of the returns in this study bears witness to the real interest in this topic among the students themselves.

5.2.2 Religious Background

The sample was 70% Catholic, according to their own responses (Table 4.1, p. 93). This is less than the general rate of 79% reported from those schools in annual census data for the Year 12 cohort (Brisbane Catholic Education Centre, 2000a). It may well be that a few of those enrolled as "Catholic" by their parents no longer regard themselves as such. It is of note that this census rate is also slightly below the rate for all year 12 students across all Brisbane Catholic Education secondary colleges (84%) and that across the whole Archdiocesan year 12 cohort (including secondary colleges administered by religious orders) at 90%.

By comparison, Flynn (1985) had found over 90% catholic in the 25 schools surveyed, while his 1990 survey showed 87% Catholic. So the results of this survey are taken from a group that certainly professes somewhat less formal Catholic religious affiliation than earlier cohorts or indeed the complete local population within the Archdiocese.

5.2.3 Home, School and Religious Practice

The sample group had more domestic stability (70% with both biological parents at home) (Table 4.1, p. 93) than is the norm in Australia today (65% in the 30 to 40 age group, as reported by Bentley & Hughes, 1998) but was lower in this aspect than the groups subject to earlier surveys by Flynn (1985, 1993) who found 87% and 84% “stable” homes of this type in 1983 and 1995 respectively.

Overall, they are satisfied with their lot at home and at school (Table 4.2, p.94) with a very positive response to these questions. Flynn’s (1985, 1993) survey groups had similar levels of satisfaction.

It could have been predicted, however, that the attitudes to religion in homes would have changed since Flynn’s (1975, 1985) early work. Flynn (1993) notes this change. His criterion for a “religious home” was one with weekly attendance at church services. He notes, (1993, p. 111) that the proportion of parents who expected that their children attend Sunday mass had fallen from 83% in 1972 to 66% in 1990. Recent figures indicate much sharper decline in the general population. Nationally, the numbers attending religious services weekly have fallen for all denominations to 13% (Bentley & Hughes, 1998, p. 117). The survey group was still above that average for parents, by the students’ own assessment, with 27% of female parents attending “about weekly” or “every week at least” and a slightly smaller number of male parents (23%) (Table 4.3, p. 96). The students themselves, however, tended more towards the national average, with about 13% attending church services “at least weekly”.

Since the Flynn (1985 and 1993) survey groups had far stronger formal church allegiance than this sample group it could be inferred that there might have been a similar contrast in the levels of “limit” experience reported, had this been measured in Flynn’s research. The positive response rate to “limit” experience of the sample group, 76%, was remarkable. The response rate of 93% using less rigorous criteria (Table 4.17, p. 118) was even more so. It seems that although church attendance has decreased, recognition and reporting of “limit” experience remains strong. Hay and Hunt (2000) found that it is increasing in Britain. Perhaps this is the case in Australia as well.

5.2.4 Social Justice Values

Questions 38, 41, 43 and 45 of the survey were modelled on questions asked by Flynn (1985, 1993). A comparison of the group’s responses to these questions is given below as Table 5.1.

Table 5.1 Comparison of Responses to Social Justice Values Questions**Survey response vs Flynn (1985) Response**

		Flynn	Survey
Flynn Question	It is alright to take something from a large department store if everyone else is doing it	Disagree 86.0%	
Survey Question – Q 38	It is alright to do something if everyone else is doing it		Disagree 81.6%
Flynn Question and Survey Question Q 41	I am concerned about justice to the poor and disadvantaged people in our society today	Agree 77.0%	Agree 76.8%
Flynn Question and Survey Question Q 45	It concerns me that a large part of the world suffers from hunger and malnutrition	Agree 77.0%	Agree 88.2%

The response rates from the year 2000 group are remarkably similar to those of the 1985 cohort. The slight difference in rates for the first question, colloquially phrased as “majority rules” could be accounted for by the slightly different phraseology. The increased concern for world hunger seems to be an increasing phenomenon among young people. Flynn’s later cohort (1993, p. 314) was asked the same question (survey question 45) and registered 81%, an increase over the 77% in 1985 but less than the sample group at 88%.

5.2.5 Personal Faith and Relevance of Formal Religion

Bentley and Hughes (1998, p. 110) found that only 30% of the Australian population in 1993 responded that they “know God really exists and... have no doubts about it.” A further 23% “have doubts”, but “feel that I do believe in God”. The survey cohort

registered well above the combined results of Bentley and Hughes (53%) with 64% who “believe in God.” (see Table 5.2 below). This could be regarded as evidence to support Flynn’s consistent (1972, 1985, 1993) conclusion that Catholic schools do make a difference. Those who clearly do not believe (appendix B, V13, p. 259) are in about the same proportion as Bentley and Hughes (1998, p. 110) had found for the general population (8.6%).

Given the level of affirmation of faith in God overall the fact that a lower number again affirm that “God loves me” is interesting. Some 54% of the sample responded positively to this question in contrast to the higher results of Flynn’s (1985, 1993) earlier work at 76% and 75%. However, both this survey and Flynn found this clear fall in numbers from those who “believe in God” to those who say “God loves me”.

These results are perhaps linked to the overall decline in religious practice in Australian society. Flynn (1985, 1993) distinguished between those from “religious” homes and those from “non-religious” homes. He defined religious homes as those where parents and children attended church as a family on a weekly basis. Flynn’s (1985) research found 59% of students from “religious homes” able to say “my faith means a lot to me”. Only 38% of those from “non-religious homes” reported this. Given that the weekly attendance among families has declined further since 1985 it could perhaps be expected that faith in God has also declined.

Beyond actual faith in God, there is clearly less assent among the survey group to the importance of Christian values in their lives (Appendix B, V11, p. 258, Table 4.5, p. 102). Given that social justice values as such are strong among the sample population, this could reflect a notional rejection of formal “religion”, and the associated value structure. Hay (1987) alluded to this as a confounding variable in his work in Britain. Hughes (1996) suggests that asking questions about formal religion may not produce optimum results when researching student religious experience.

Bentley and Hughes (1998, p. 123) believe that while Australians in general feel positively towards the churches, they do not see them as important or relevant. Less than 25% (p. 117) of Australians now claim to attend church at all. Given that regular attendance has declined so much, it could be expected that significantly fewer students would hold formal church allegiance in high regard in 2000. A very significant number of the survey group believe that church attendance is not necessary for a “good and meaningful life” and that it is “possible to be religious without belonging to any religious organisation”. (Figure 4.3, p. 99 and Table 5.2 below) These numbers have increased gradually since Flynn’s early work in 1985.

There seems however, to be a continued interest among Australians, and certainly among these students, in spirituality. In an Australian Community Survey, 1998 (Christian Research Association, 2000a) 67% saw spirituality as important or very important. Yet of these only 30% attended church on any regular basis.

It has already been mentioned (Ch. 2, p. 50) that Hay and Nye (1998) believe that people no longer feel the spiritual dimension of their lives is incomprehensible if we suppose there is no God. It appears however, that a spiritual hunger persists. The major finding of this research is that almost all of the survey group can attest to having a “limit” experience at some time in their lives. In fact, the positive response was so strong (> 93%) (Table 4.12, p. 110) that the final criterion was tightened to record only a fully positive response of 5 to the experience questions and 4 for the descriptive passages. The final result, at 76% positive, is in accord with Hay and Hunt’s (2000) most recent British result, but quite surprising nonetheless.

A comparison of the survey group responses to questions on personal faith and the relevance of formal religion appear below as Table 5.2. The survey modelled only some of its questions on Flynn (1985). Where the questions are the same, or substantially so, they are compared in the table. Note that for the purposes of this table the survey results given are scored with a response of 4 or 5 being regarded as a positive response, to provide a direct comparison with the earlier Flynn cohorts.

**Table 5.2 – Questions on Personal Faith and Formal Religion:
Survey results vs Flynn (1985 and 1993)**

		Positive Response (%)		
		Flynn 1985	Flynn 1993	Survey
42	"I believe in God"	85%	81%	64%
44	"God loves me very much" – (Flynn "God is a loving father who loves me very much")	76%	75%	52%
48	"I have experienced times in my life when I have felt close to God"	63%	63%	44%
40	"As far as I can, I tend to base my life on Christian values" – (Flynn "I intend to base my life on the teachings of Christ")	44%	37%	41%
37	"Religion helps me answer real questions about the meaning of life"	42%	41%	36%
39	"You don't need to go to church to live a good and meaningful life"	N/A	N/A	75%
51	"You can be religious without belonging to any religious organisation"	N/A	N/A	69%
49	"I believe there is a pattern and purpose to human existence"	N/A	N/A	68%
47	"I experience times when I am uncertain about whether God exists or not"	N/A	N/A	57%
31	"The way most religious people talk today does not mean much to me"	N/A	N/A	30%
50	"Religion today has nothing to say about the most important issues in life"	N/A	N/A	19%

It is clear there has been an overall gradual decline in both personal faith and perceived relevance of the church from the early Flynn report (1985) to the survey results. The ray

of hope is the student attitude that the religious message has relevance for the “important issues of life”. To have the statement of question 50 not accepted by 81% of the students is a positive result. The response did, however, include 38% of students who responded that they were “uncertain”.

It could be surmised that the response to question 50 (only 19% agreeing that religion has nothing to say about the most important issues in life) is related to the positive acceptance of Religious Education when compared to all other subjects in the curriculum. (see Table 4.15, p. 114). On the other hand, perhaps failure to reject the message of “religion” outright reflects the spiritual search of many of the respondents. Either way, the result may provide positive information for catholic educators.

5.2.6 Summary

The gender balance of the group reflects in broad terms the makeup of the secondary college population in colleges administered by the Archdiocese of Brisbane. Happiness at home and at school is similar to that for the larger populations surveyed by Flynn (1975, 1985, 1993). The social justice values of the group are arguably stronger than they were for the earlier Flynn cohorts and in some respects even stronger than those of Flynn’s 1993 group.

On the other hand, the respondents reflect the decline in religious practice since the seventies and particularly the decline in positive perception of institutional religion. This is balanced, however, by the refusal by the vast majority to accept that religion has no message for how to live one’s life in this world.

The proportion responding that their religion is “catholic” is below that of any of the Flynn cohorts and also below the Brisbane Archdiocesan average across both Archdiocesan Secondary Colleges and all schools. The socio-economic background of the respondent group was also below the average across the Archdiocese (Table 3.1, p.

78). Hay (1987) found that lower social class groups were less responsive to his questions on religious experience than those in higher social classes in the British context.

It might be expected, then, that any results reporting “limit” experience among the survey respondents would indeed be less pronounced than they may have been if a more “catholic” and economically better-off group had been surveyed. Confirmation of that might be the subject of further research. This research examined a sample with the characteristics above and so undertook to work with that and accept the results produced.

My hope as a researcher was that the strong interest in the spiritual which Bentley and Hughes (1998) believe to be part of the general Australian population would carry over to the survey group and produce results at least akin to those of Hay (1987). Although confident from my own qualitative experience as a teacher over many years that the results would be higher than anticipated in Hypothesis 1 (“in excess of 30%”), it was still very surprising that they reported a higher percentage of “limit” experience (at 76%) and one in accord with the Hay and Hunt (2000) results.

In summary, it is clear that, in many respects, the survey respondents could be regarded as a representative sample of young people in year 12 at Catholic schools at the beginning of the new millennium. The secondary colleges chosen for the survey, by way of size, type of school, socio-economic status of the clientele, could be broadly regarded as representative of the Australian Catholic school population. Certainly, there are enough factors of comparability, such as gender distribution, ethnicity and religious background of parents, to suggest that many of the characteristics of the respondents are at least shared across the Brisbane region. This, and the fact that the survey results are broadly in agreement with research trends in both Britain and Australia, might infer that the sample could be taken, with due caution, to be representative of the senior high school group in Catholic schools at the beginning of the new millennium.

5.3 *Hay's Categories for Religious Experience*

Chapter 2 (p. 25) has outlined how Hardy, after retiring from Oxford, founded the Religious Experience Research Unit (RERU) to house his collection of written testimonies and continue his research into religious experience. His research (1997, 1974, 1978) could be described as a collection of responses to what has become known as the “Alister Hardy Question” (although it was actually framed in these terms by his successor at RERU, David Hay, 1987, p. 118):

Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday world?

Hay's (1987) later work with Gallup Poll surveys gave interesting outcomes. He found that almost 50% of respondents responded positively to this question when suitably framed. A population in Britain, no less secular than our own in Australia, reported numerous cases of what could be loosely termed “religious” experiences. Hay's response categories classified such experiences as: a patterning of events, awareness of the presence of God, awareness of receiving help in prayer, awareness of a guiding presence not called God, awareness of the presence of the dead, awareness of a sacred presence in nature, awareness of an evil presence and the experience that all things are “one”.

Hay's (1987) categories of analysis for occurrence of religious experience relate directly to most of the questions from 52 to 67 of the survey instrument. Table 4.4, p. 101 outlined the specific questions in this survey that were based on each of the categories. In Table 5.3 below, Column 1, “Type of Experience” lists the Hay categories, while Column 2, “Survey Questions” gives the actual questions in this survey that were based on these categories.

Although question 55 (E04) was framed to resemble the words of the “Alister Hardy Question”, Hay interprets all of the experiences above to have been part of the experience

of “a presence or power which seems to be beyond and different to my everyday self” (survey question 55).

Comments have already been made in Chapter 4 (p.107) on the inclusion or otherwise of responses where more than one of the “E” and “P” type questions refer to a similar category of experience. Where there is a choice, the direct “E” question has been included on the assumption that the extended example format used in the “P” type questions may confound the issue since the passage might be interpreted differently to the direct question. A comparison of the survey responses and the Hay (1987) response rates are shown below as Table 5.3.

Table 5.3 Comparison of Hay (1987) categories with Survey Responses

Type of Experience	Survey Questions	Analysis Coding	Hay Response Rate	Survey Response Rate
Patterning of events	57 & 67	EO6 & PO5	29%	28%
Awareness of the presence of God	58 & 64	EO7 & PO2	27%	20%
Awareness of receiving help in prayer	63	PO1	25%	11%
Awareness of a guiding presence not called God	55	EO4	22%	22%
Awareness of the presence of the dead	60	EO9	18%	21%
Awareness of a sacred presence in nature	61 & 65	E10 & PO3	16%	14%
Awareness of an evil presence	54	EO3	12%	19%
Experience that all things are “one”	66	PO4	5%	5%
Total Positive Response			48%	76%

The overall response rate of 76% is much higher than Hay's (1987) work, but in accord with Hay and Hunt (2000). In both this survey and in Hay's (1987) Gallup poll respondents have often responded positively to more than one item. Only responses at the maximum level ("Certainly True" for "E" questions – or "Definitely – yes, I have had a similar experience" for "P" questions) were taken as positive. The more liberal criterion for recording "limit" experience (LIMITOT Chapter 4, p. 104) yielded such a high response that, as pointed out in chapter four, further analysis was largely precluded, since over 90% of the sample is included.

On the other hand, perhaps the higher figure is not unrealistic. Maslow (1964) found such experiences so common that he began to expect that any normal person would report the experience. So surprised was he to find some who failed to do so that he made note of any times he encountered what he terms "non-peakers". It is of interest to the outcomes of this dissertation that Maslow found that "precisely those persons who have the clearest and strongest identity" (p. 354) to be most likely to report experiences of such transcendence. "Non-peakers", by contrast, were characterized by a fear of emotion and often tended towards the compulsive-obsessive personality. The normality of those who experience "limit" is further confirmed by Hay and Morisy (1978, see Ch 2, p. 28). Limit experiences are normal, and the results of this research further confirm this.

It is clear from the above results that a lower percentage of respondents in this group associate their experience with the presence of God or with receiving help in prayer. Although belief in God (64%) is higher than the national average (53%, Bentley & Hughes 1998, p. 110), those who experience "limit" tend not to attribute the experience as being "religious" as frequently as those in Hay's (1987) sample. Many of the respondents could identify with "limit" experiences very strongly yet stopped short of interpreting them as "religious". Perhaps they see "religious" as synonymous with allowing a divine influence in the experience or perhaps that it is associated with "church".

There was a higher proportion (19%) of the survey respondents who interpreted their experience of “presence” as “evil” when compared to the Hay (1987) sample (12%). This is probably explained by the Hay (1987) hypothesis that older people will report more in religious terms because of their cultural experience in their youth when society was more affirming of religious practice. There was also a slightly higher proportion (21% compared to 18%) who experienced the presence of the dead.

These results can also be compared with British research conducted subsequent to the early Hay (1987) work by Robinson and Jackson (1987) with senior high school students in Britain. They found significant numbers of their sample able to identify certain types of “limit” experience. Robinson and Jackson used two passages similar to those in Questions 63 to 67 (P01 to P05) to stimulate imagination and response among the students. They then asked their questions on experience directly. For instance the question on nature (Q 41, p. 13) reads, “have you ever been uplifted by the beauty of nature?”. In the survey, the same question is asked using the extended example format of the “P” type questions.

In particular Robinson and Jackson (1987) found:

1. 30% claimed an experience “very like” feeling “somehow part of a mysterious whole”, while a further 49% claimed to have had an experience “fairly like” this
2. 33% felt that they had often been “uplifted by the beauty of nature”, while a further 33% believed this happened for them sometimes
3. 22% had often felt that in some strange way they were a “small part of everything around” them. A further 31% had sometimes experienced this
4. 19% had often experienced an “unseen power” to “turn to in times of difficulty or danger” and a further 21% had sometimes had this experience

Findings 1, 2 and 4 have direct parallels to the passages in questions 63 to 67. In particular, feeling “somehow part of a mysterious whole” can be related to question 66 (P04); being “uplifted by the beauty of nature” has its parallel in question 65 (P03) and an

“unseen power” to “turn to in times of difficulty or danger” is described in question 63 (P01).

A comparison appears below as Table 5.4.

Table 5.4 Comparison of agreement rates to three “limit” experiences in Robinson and Jackson (1987) and Survey

Type of Experience	Survey Questions	Analysis Coding	ROBINSON AND JACKSON RESPONSES	
			<i>Sometimes</i>	<i>Definitely</i>
Somehow part of a mysterious whole	Q. 66	PO4	30%	5%
Uplifted by the beauty of nature	Q. 65	PO3	33%	23%
Unseen power to turn to in difficulty/danger	Q. 63	PO1	19%	11%
			<i>Once or Twice</i>	<i>I think I have</i>
Somehow part of a mysterious whole	Q. 66	PO4	49%	11%
Uplifted by the beauty of nature	Q. 65	PO3	33%	27%
Unseen power to turn to in difficulty/danger	Q. 63	PO1	21%	21%

There appear to be both significant differences and similarities in the response rates for the various questions. These differences could have both cultural and historical causes, given that the Robinson and Jackson (1987) work precedes this research by some thirteen years. The greatest difference, as for the earlier comparison (Table 5.3, p. 159) with the Hay (1987) categories, is that the questions themselves are asked in different formats. Robinson and Jackson asked these questions in the direct form. For instance (Robinson and Jackson, 1987, p. 13) q. 43 asks: “Have you ever felt you were in some strange way just a small part of everything around you?”. In Table 5.4 the corresponding experience

of “being somehow part of a mysterious whole” is compared to P04 of the survey, which is a descriptive passage. The format of responses to the questions and passages are also different. The Robinson and Jackson response of “sometimes” to their direct question is being interpreted as equivalent to the survey response of “definitely, yes I have had a similar experience” in responding to a descriptive passage.

Thus the results make for an interesting comparison only. It could be inferred that the extraordinarily positive response of the survey group to “limit” experience as such is evidence of a different mix of experiences than those of earlier times. On the other hand, perhaps the way in which these young people view and interpret the experiences may have changed. Further research would be needed to pursue these questions.

In conclusion, it can be noted that the experience of “limit” overall seems to parallel the Hay and Hunt (2000) finding and that the rates of reporting for the various experiences are similar to the Hay (1987) category levels. The reason for the differences from both the Hay categories and the Robinson and Jackson (1987) findings is unclear. It can be concluded, however, that awareness of the spiritual when defined as “limit” experience is strong among this group.

5.4 *The Research Hypotheses*

Informed by previous research, six hypotheses were proposed for this research work. For all but the first, they were framed as null hypotheses with the expectation that the research results would disprove hypotheses 2 through 6 and confirm the first hypothesis.

5.4.1 Hypothesis 1

The first hypothesis to be addressed by this research was:

That a significant number, in excess of 30%, of students have had a ‘limit’ experience and are able to recognise it as such

In Chapter 1 (p. 4) a limit experience was defined as “**an experience that reveals a reality of life beyond the self, beyond the here and now.** It may be recognition of our own fragility and vulnerability as much as a joyous awareness of a reality beyond our normal encounter with life”.

As already outlined in section 5.3 on the Hay (1987) categories, the results gave an overall positive response rate, using only responses at the extreme end of the scale, of 76%. Chapter 4 (p. 110) reported that the binary variable LIMBIN gave a positive response of 161 (76%) of students of the 213 surveyed for recognition of some form of “limit” experience. This figure was arrived at using only the most rigorous interpretation of response rates. Chapter 4 (p. 104) outlines how the variable LIMITOT initially gave a positive response of 95.8% when weaker criteria were used, allowing responses of “probably true” and “yes – I think I have had a similar experience” to be counted.

To have a positive response of 75.6% using only responses of “certainly true” and “definitely – yes I have had a similar experience” is an important outcome of this research. The increased response rate over that of Hay (1987), at 48%, is in line with later Hay research (Hay and Hunt, 2000), where the rate among British adults surveyed was 76%.

Hence, the Hypothesis is accepted with response rates substantially higher than were projected.

These positive results for recognition of “limit” experience among the survey respondents contrasts with their attitude to formal religion. Some 69% of the group agreed (V22) that “you can be religious without belonging to any religious organization”. Only 13% attend church “every week at least” (F09), while most (63%) attended either never or on family occasions only.

Hay and Hunt (2000, p. 846) took an optimistic view in their comments when they compared their results for religious experience with church attendance in Britain. They drew the conclusion that, although “these gloomy figures have been used by some to predict the total disappearance of Christianity in Britain...the figures on spiritual experience might suggest that ..we are in the midst of an explosive spiritual upsurge not unlike the Methodist revival of the eighteenth century”.

5.4.2 Hypothesis 2

That there will be no significant difference in the number of reports from different types of schools: all-girls schools, co-educational schools and all-boys schools

The hypothesis was framed in the null form precisely because it was expected that there would be some difference in the level of reporting along gender lines. The question was prompted by the approaches outlined in Chapter 1 (p. 14) of Belenky, Clinchy, Goldberger and Tarule (1986) and Gilligan (1993) both of which provide bases for looking at possible gender differences in both the occurrence and type of limit experiences.

In other work, Beutel & Marini (1995) measured the attitudes of adolescents towards material success, compassion for others and meaning for living. They found gender to have a significant effect on all three value measures. Females are more likely to value compassion and meaning and less likely to value material success. Hay (1987) had also reported that females reported religious or spiritual experience more often than males. In fact, of the researchers summarised in Chapter 2, only Greeley (1975) had found a greater number of males reporting these experiences. All of this supported an expectation that this hypothesis would be rejected.

On the surface, the results showed some substantial, if surprising, differences. Table 3.1 (p.78) showed that the return rate of the survey had been marginally higher for females. Yet cross-tabulation of the reports of limit experience using the variable LIMBIN (Chapter 4, Table 4.14, p. 112) showed that while the all-girls school had the highest percentage of positive reports (84%), they were followed by the all-boys school (79%) and then the two co-educational schools (69%).

On the surface the result might indicate a preference for single sex schools if one is looking to facilitate recognition of “limit” experience among students. Statistically,

however, (Chapter 4, p. 113) there was no significant difference between the type of school attended and the levels of reporting of “limit” experience.

Hence, the null hypothesis is accepted. The results indicate that there is no significant difference in the number of reports among the various types of schools surveyed.

Flynn’s (1985, 1993) work in the Australian context had not really addressed the gender issue. It has already been noted that Flynn did not attempt to address the question of “limit” or “religious” experiences. However, he also does not at any stage differentiate on the basis of gender. His 1985 research sample was biased towards boys with only 15% of his 2041 students being girls. He had surveyed 14 boys-only schools and 7 co-educational schools. It was only to be expected that he did not comment on gender differences.

Flynn’s (1993) later work had a better distribution across types of schools since it attempted to mirror the actual distribution of Yr 12 students in Catholic schools in New South Wales. In this survey he used 15 boys schools, 14 girls schools and 21 co-educational schools to obtain a sample comprised of 51.4% boys and 48.6% girls. There was still no comment, however, on gender differences.

In conclusion, although the raw scores indicate some differences based on gender, there is no statistical significance in this difference. It appears that the gender-different ways of viewing the world that have been outlined by Gilligan (1993), Beutel and Martini (1995) and Belenky et al. (1986) do not translate, for these respondents, into significant differences in recognition of “limit” experience.

5.4.3 Hypothesis 3

That students whose instruction in a particular subject area has stirred deep questions about life will be no more likely to be open to limit experiences than other students

The extensive work of Robinson and Jackson (1987) in a major survey of 3189 boys and 3387 girls from a diverse range of schools across the UK and Ireland was outlined in Chapter 2 (p. 66). In essence, they believed that the capacity for religious or spiritual experience is universal in the human species. However, they believed that this capacity needs to be activated and may otherwise remain dormant. One of their objectives was to explore how this activation might be facilitated in schools.

Robinson and Jackson (1987) reasoned that schools or teachers that encouraged students to be in touch with spiritual reality through art, music, drama or even the wonder of science or mathematics may provide the basis for better spiritual awareness among their students. Following this line of reasoning they aimed their second hypothesis directly at Science teaching: “that young people whose science teaching has encouraged a spirit of curiosity and open inquiry will show more religious awareness than those for whom the subject has been dominated by history, i.e. the study of past discoveries or accepted laws” (p. 67).

Robinson and Jackson (1987) were disappointed with the result. They found little in their data to justify the hypothesis directly but stated on a more confident note (p. 67) that there was “nothing, however, that was contrary to it, and enough to suggest that further research may well confirm it”. Based on this optimism, this research investigated the recognition of “limit” experience across the range of subjects in which students might be involved in the senior school.

Cross tabulations across all subjects with the variable LIMBIN, that represents “limit” experience in binary (“yes” / “no”) form, (appendix B, p. 278 and Table 4.15 p. 114) gave the result for Religious Education (interpreted as both “Study of Religion” and “Religious Education”). Of the 155 who reported a “limit” experience of some type, 27% claimed that Religious Education had made them feel very deeply about life, while a further 51% said it had a slight effect on their depth of feeling about life. Another 22% believed it had very little effect. In contrast, only one respondent of those not reporting a “limit”

experience rated Religious Education as having a strong influence on how deeply they felt about life, but 26% responded that it had “very little” effect.

While these results are hardly overwhelming, they were statistically significant. They were also the only cross-tabulations that had both a full cohort of responses, since the subject is compulsory in these schools, and a significant relationship with LIMBIN. Chapter 4 (p.114) records that History, which is taken by a smaller proportion (134 of 213 respondents) of the survey sample, also had a statistically significant relationship to reporting of “limit” experience as recorded by LIMBIN.

Given all of the above, it seems clear that the null hypothesis, with the major exception of Religious Education and the possible exception of History, is accepted. This is a significant and very positive finding for Catholic Schools. In these schools the compulsory nature of the subject appears to have facilitated a better recognition of such experiences. While it lends validity to the current approach of the Brisbane Religious Education Guidelines where the approach to teaching is claimed to provide “one means by which students are assisted to develop their spiritual and moral capacities” (Brisbane Catholic Education, 1997, p. 7), another possible interpretation from a statistical viewpoint is that other subjects, for instance History, if made “compulsory” could have generated significant trends as large as that for Religious Education.

Flynn’s (1985) study had also confirmed the importance of Religious Education in Catholic schools. He found that the RE curriculum had what he terms “the principal unique effect” (p. 327) on the areas of personal faith, religious commitment, attitudes to church and religious knowledge. He claimed it to have the “secondary unique effect” on religious practice, moral values and justice values.

The survey results indicate that Religious Education is strongly related to the experience of “limit”. It supports the approach advocated by Hammond et al. (1990) who strongly advocate an experiential approach that allows students to become aware of and be able to recognise such experiences in their lives. There is also support in these results for the

approach of Robinson and Jackson (1987) who believe that one focus of the religious education program is to give students the language with which to express what Robinson and Jackson term “religious” experiences.

In summary, the findings have confirmed in general that students whose teaching in a particular subject area has stirred deep questions about life are no more likely to be open to limit experiences than other students. There are two exceptions, History and Religious Education. Of these two Religious Education has the stronger effect. The compulsory religious education program in the surveyed schools is strongly related to recognition of such experiences.

5.4.4 Hypothesis 4

That students actively involved in social responsibility programs and / or actively involved with school life will be no more likely to be open to limit experiences than those who are not.

This hypothesis related to the programs run by individual schools that might influence school climate, what Flynn (1985) calls the “hidden curriculum”. It is to be expected that a happy school environment with a range of both co-curricula and service activities would provide students with a range of challenges in knowing themselves and their ability to cope with life situations. The question is, does this also enhance their openness to “limit” experience?

The questions posed in the research instrument on happiness at home and school relate to personal integration in life. They also bear on relationships with peers, and ask about participation in retreat programs, sport and other school activities. These are intended to examine the first two Shea (1989) paths to “limit” experience (Chapter 1, p. 17) through either encounter with the temporary nature of existence (contingency) or by relating to others in our world (dialogue and communion). Does involvement in activities such as social work, sport and performance in the arts facilitate either of the two Shea paths to

recognition of “limit” experience? If so, there should be a quantitative connection that can be made between such activities and “limit” experience.

Robinson and Jackson (1987) had also reasoned that participation in some form of group activity, for instance community service, might stir the imagination and enable recognition of religious experience. Some students (divergers), they believed, might respond to a variety of such means of expression, while others (convergers) might respond to few or only one. Their research was geared to identify those particular features of school life and teaching that might best enable this response.

Robinson and Jackson (1987, p. 68) had a similar hypothesis: “that young people who have been involved in social responsibility programmes will show more religious awareness than those who have not”. However, they omitted involvement in general school activities such as sport, limiting their questions to social work type programs. They found the evidence in favour to be adequate but ‘hardly overwhelming’ (Robinson and Jackson, 1987, p. 68).

Chapter four (p. 119) has reported that the analysis of the data in this research did not identify any significant relationship between “limit” experience and any of the retreats and social responsibility programs. There were, however, significant differences between the schools in the means of the responses and this was taken to reflect the differences in the actual programs run by the schools.

The “involvement” questions, on sport and culture, did produce some significant differences among the types of involvement and the levels of reporting for ‘limit’ experience. Table 4.18 (p. 119) showed statistically significant differences among the groups involved with sporting and those involved with performance activities. Those involved with sport tend to report “limit” experience less frequently than those who are not. On the other hand, more of those involved with performance report “limit” experiences. This would endorse the earlier finding of Robinson and Jackson (1987, p.

62) that involvement in the expressive arts might facilitate an openness to religious experience.

In summary, the null hypothesis is accepted with the exception of student involvement in sport and in public performance. These significant exceptions may encourage Catholic schools educators to enhance the opportunities available to students in the areas of performance and the arts.

5.4.5 Hypothesis 5

That students who participate in organised religion will be no more likely to be open to limit experiences than those who do not.

About the same proportion of students (13%) as the overall national average for all ages (Bentley & Hughes, 1998, p. 117) reported attending church services at least weekly. Table 4.3 (p. 96) gives the actual figures for the group.

This result is significantly higher than the national average for 15 to 29 year olds, estimated to be (Bentley & Hughes, 1998, p. 117) only 6.3%. Those who attend monthly (14.1%) are slightly less than the national average for this age group (15.2%), while those who “never” attend, at 15.1% is well below the national average of 34.0%.

In summary, the level of church attendance of the survey cohort is above the national average for similar age groups in the general population. It could be surmised then that the level of “limit” experience, already reported to be above that of most of the earlier studies in the field, might bear some relationship to this higher than average church attendance. However, in contrast to what might have been expected, the analysis (Chapter 4, p. 121 ff., Tables 4.19 and 4.20) found no significant relationship between regularity of church attendance and reporting of limit experience.

Hence the null hypothesis is confirmed, students who participate in organised religion are no more likely to report limit experiences than those who do not.

The religious practice of this group is in sharp contrast to that of Flynn's (1985, 1993) cohorts. In 1985 he quotes (p. 209) a figure of 55% of his sample (taken in 1982) who attend "each Sunday at least". This had decreased from his quoted 1972 figure of 69%. By the time of Flynn's 1993 study he quotes (p. 96) 34% "practising Catholics" in the "sense of attending Sunday mass" but does not go into detail on whether this is every week.

The finding here is also in contrast with the Robinson & Jackson (1987) similar hypothesis: "that young people who participate in organised religion will have more *religious awareness* than those who do not" (*italics mine*). Overall their findings (p. 70) tended to confirm the hypothesis. However, religious awareness is not the equivalent of the "limit" experience dimension measured in this research.

Francis and Wilcox (1993) allude to this difference of dimension, in their study of the church attendance of two hundred and thirty 16 to 18 year old girls in England. They found a positive, but relatively low, correlation between church attendance and prayer. The relatively low result confirmed for them that church attendance and prayer did not "tap the same dimension" (p. 246). The experience of God in prayer was indeed potentially different to church attendance as such.

Hay (1987) confirmed this view. He found that church-going does not necessarily increase the likelihood of report of any religious experience. The experience of "limit" is not necessarily religious. For the students responding to this survey participation in organised religion has no bearing on the level of reporting of "limit" experience.

5.4.6 Hypothesis 6

That students who experience a happy and stable home background are no more likely to be open to limit experiences than those who do not have such a home background.

Chapter four (p. 125) has reported that respondents either “very unhappy” or “unhappy” at home had a higher level of positive reports for “limit” experience than respondents who were the most satisfied with their home life. However, Table 4.22 (p. 125) showed no statistical significance in the results. A happy and stable home made no significant difference to the level of positive reports. This result does not support Maslow’s (1964) theory of a hierarchy of needs outlined in chapter two (p. 45). Those who have happy and stable home backgrounds do not appear to be advantaged in their ability to experience and recognise “limit”.

Much has been written on the psychological effect on children of such factors as home background, single parent families and levels of conflict in the home. Moos (1987), for instance, believes the family setting is by the far the greatest challenge to educational outcomes. Hallahan (1992) attributes the increase in incidence of learning difficulties to changes in modern family circumstance. Hetherington et al. (1989) believe the increase in divorce and its potential influence on the young may be a significant factor educationally. On the other hand, Schickedanz, Schickedanz, Hansen and Forsyth (1993) temper the importance of family breakdown on psychological well being with other factors in psychological development. They believe (p. 373) that children from intact families with high levels of conflict can fare worse developmentally than those from divorced families with low levels of conflict.

All of the above gives reason to ask the questions in the survey on both happiness at home and type of parent relationship and then to relate them back to reports of “limit” experience. That there was no significant relationship between happiness at home and reports of “limit” experience was mentioned above. Chapter 4 (table 4.22, p. 125) give the results of analysis. Again, there was no significant relationship found between the

stability of relationship of the primary caregivers in the home and reporting of “limit” experience.

Hence the null hypothesis is accepted, students with a happy and stable home background are no more likely to be open to limit experiences than those who do not

5.4.7 Summary

This section analysed the survey results under the headings of each of the hypotheses proposed for investigation by the research.

The first hypothesis, that the level of reporting of “limit” experience would be above 30%, was affirmed and the level of reports far exceeded expectation, at 76%. There was a remarkable similarity noted between this response rate and the Hay and Hunt (2000) results with British adults. The response rates for different categories of experiences were also comparable, overall, to results obtained in Hay’s (1987) earlier research.

On the other hand, there were clearly fewer members of the survey cohort who identified their “limit” experience as being “awareness of God” or “receiving help in prayer”. The lower attribution to these two types of experience could reflect differences in the groups surveyed as much as it does generational attitudes.

It is perhaps significant that the survey cohort attributed a higher proportion of their experiences to being that of “an evil presence”. It had been expected that the decrease Hay (1987) had noted in this attribution since the early work of Otto (1950) would have been sustained. It may be one area that future research could address. Is this increase due to a spiritual search by the young and a certain alienation from traditional religious forms? On the other hand, is it due to the regular occurrence of themes of the occult in cinema, television and literature today?

Are there any other factors that could be discerned as directly influencing this increased level of awareness of “limit” experience? Hypotheses two to six were based largely on earlier research work and framed as one attempt to address this question. In essence, all of the null hypotheses, with two notable exceptions, were accepted.

The type of Catholic school, single-sex or co-educational, attended does not make any significant difference to the level of experience (see Table 4.13, p. 111 and Table 4.14, p. 112). It would be interesting to ask if there was any difference for other types of schools: government schools, other religious schools and non-denominational independent schools, for instance. This may provide a subject for future research.

It could be inferred, however, when those subjects considered to have deeply influenced respondents’ feelings about life are compared to occurrence of “limit” experience, that Catholic schools do make a difference. In general, there is no significant relationship between the subject choices made by students and their level of reporting of “limit” experience (see Table 4.15, p. 114). The notable exceptions are religious education and history. There is a significant link between religious education, still compulsory in all Catholic schools, and the recognition and reporting of “limit” experience.

It was anticipated that social responsibility programs, involvement with those with disabilities, the young or infirm, would heighten student awareness of their own vulnerability and lead them to ask deeper questions about life itself. Perhaps because of the different range of such programs across the schools and the tendency of schools to facilitate involvement of Years 10 and 11 in such programs rather than the senior year group, this relationship was not confirmed (see Table 4.16, p. 116 and Table 4.17, p. 118).

Involvement with other aspects of school life, such as sporting and cultural activities programs, was also regarded as a potential way to awaken recognition of personal experience of “limit”. With the notable exception of public performance this was found

not to be the case (Table 4.18, p. 119 and Table 4.19, p. 120). In fact, sporting involvement bore a negative relationship to reports of “limit”.

In brief, then, it appears that the key factors in these schools that can be confirmed as contributing to the recognition and reporting of “limit” are the religious education program and the cultural, performing arts program. Of these the religious education program has particular significance due to its strong relationship to “limit” experience.

Flynn (1985) related his research to faith in and practice of organised religion. However, his similar finding on the importance of religious education is very significant. Flynn had found (p.327) that the Home, followed by the Religious Education curriculum had what he terms the “primary” and “secondary” unique effects on church attendance. Personal faith was affected by the same two variables but in the reverse order. Religious Education as a subject was both the strongest predictor for personal faith in Flynn’s research and the only subject other than History that related significantly to experience of “limit” in this research.

The relationships between religious practice, happiness at home and personal faith will be further examined as part of the discussion of the scales derived from principal component analysis.

5.5 The Values and Experience Scales

From the set of 19 Values (“V”) items retained after exploratory analyses, a four factor solution that accounted for 53% in the variance in the items was accepted. Full details are given in Appendix B (p. 293 ff). From the set of 15 Experience (“E” and “P”) items a three factor solution accounting for 52% of the variance was accepted. In each analysis the facilities of SPSS Release 10.0 (2000) software were used to produce factor scores for

each person on the scale. These scores were generated in standardized form, that is, the mean was set to zero with a standard deviation of one.

This was accepted as being an effective result. The Robinson and Jackson (1987) factor analysis was done using a Varimax rotation and without separating the “values” and “experience” questions in their survey. It produced eight factors accounting for 25.5% of the variance. They considered their approach to have been “reasonably successful” (p.83). Both rotation methods preserve the “total variance explained” while choosing different methods of rotation to re-arrange loadings. The method chosen for this research, the non-orthogonal promax rotation, allows factors to be correlated. This inter-relation of factors is perhaps closer to the state of the real world.

Further analysis of the seven factor scales found significant correlations among the four individual “values” factors and the three individual “experience” factors (see Table 4.26, p.136). Because of the way they were generated (see section 4.5.1, p.128), the correlated factor scales generated from the “Values” (“V”) items on the one hand and the scales generated from “Experience” (“E” and “P”) questions on the other, had no individual survey items in common. On the other hand, the strength of pair-wise correlations between individual factors and the statistical significance of the relationship indicate a strong predictive relationship between pairs of factors. Hence they are best presented in their pairs. A full set of the results for the items making up each scale is given in Appendix B (p. 293 ff.)

The scales and their corresponding individual survey items in the comparisons that follow are listed in the order of magnitude of their loadings. A highlighted survey item indicates a negative loading on the factor. Percentage responses quoted are for the number of responses of “Probably True” or “Certainly True” on items with a positive factor loading and for responses of “False” or “Probably False” for items with a **negative factor loading (shown in bold)**.

The first pair identified were EXPFAITH and DEPRESS.

EXPFAITH: (Expressed Faith)	Survey questions 42, V13, “believe in God”	40, V11, “base life on Christian values”	44, V15, “God loves me”	48, V19, “felt close to God at times”	31, V02, “religious ‘talk’ not meaningful”
	37, V08, “religion answers important questions”	50, V21, “religion does not address important issues”	39, V10, “going to church unnecessary”	51 V22 “can be religious without church affiliation”	

The EXPFAITH scale is a grouping of individual “value” (V) item responses with a high score for respondents who believe in God (V13, 64%), live Christian values (V11, 49%), believe in a God who loves them (V15, 51%) and to whom they have felt close at times (V19, 44%). They reject the notion that religion does not address important issues (V21, 43%). A smaller number of this group reject the proposition that church attendance is unnecessary (V10, 13%) and that people can be religious without an affiliation with church (V22, 11%). The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items. A focus on the positive characteristics of those who score highly on this scale led to its naming as “Expressed Faith”, EXPFAITH.

Of the nine items on the EXPFAITH scale, five (V08, V11, V13, V15, V19) are worded in the same or a in very similar form to five of the twelve questions used by Flynn (1993, p. 307) in his analysis of student religious commitment. Table 5.2 (p. 155) compared the results of this research with Flynn’s response rates.

DEPRESS: (Depression)	Survey questions 56, E05, “there are times when there is no purpose in life”	59, E08, “there are times when life has no meaning”	53, E02, “at times experience loneliness and severe depression”
	62, E11, “have found meaning in life and am at peace”	54 E03 “awareness of an ‘evil’ presence”	57 E06 “sometimes there is a pattern to events”
	55 E04 “experienced a powerful presence”		

The depression, DEPRESS, scale is a grouping of “experience” (E) item responses on which those with high scores will tend to state that, (E08, 50% and E05, 47%) life has no purpose or meaning for them at times, that they experience loneliness or depression (E02, 72%) and are not at peace with their lives (**E11, 28%**). On the other hand they see a pattern to the events of life at times (E06, 60%) and have experienced either or both a “powerful” (E04, 51%) and an “evil” (E03, 51%) presence. Those scoring at the lower end of the items on this scale would, in contrast, be more optimistic and comfortable with their lives. In keeping with the emphasis on the positive end of these scales, the name Depression, DEPRESS was deemed appropriate, although “depression – elation” was considered as an alternative.

The correlation between the EXPFAITH scale and the DEPRESS scale was .98 ($p = .01$).

Those in the cohort with a strong belief in the “traditional” determinants of faith – belief in God, leading a life based on Christian values, strong affiliation with church attendance, belief in the relevance of religion – probably tend to be those who report more strongly that they at times experience a depressing side to life. These students will have found that sometimes life lacks meaning, have been lonely and severely depressed and may have experienced the fear of an “evil presence”.

The second pair of scales, SOCAWARE and MYSTICEX, correlated equally as strongly ($r = .988$, $p = .005$).

SOCAWARE: Survey questions	43,	45,	41,	38,	46,
(Social Awareness)	V14,	V16,	V12,	V09,	V17,
	“helpful to	“concerned for	“concerned for	“majority	“way of life not
	lonely and rejected”	world hunger”	justice to the poor”	rules”	religious faith important”
	51,		30		
	V22,		V01		
	“can be religious		“Enjoy RE		
	without church affiliation”		classes”		

The high scoring individuals among these respondents were strongly concerned about lonely and rejected people (V14, 74%) and world issues such as hunger and poverty. For

instance 88% responded they are concerned that a large part of the world suffers from hunger (V16), while only 3% are not concerned about this. The proposition (V09) that it could be “alright to do something if everyone else is doing it” was rejected by **81%**. On the other hand, many of this group in contrast to the EXPFAITH scale responses, state that church affiliation as such (V22, 69%) is not necessary in their lives and that the way people live their lives, not their religious faith (V17, 68%) is the important issue. They also tend to “enjoy the classes in Religious Education” (V01, 42%). The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items. In keeping with a focus on the high end of the items within a scale this scale was termed “Social Awareness”, SOCAWARE.

Of the seven items on the SOCAWARE scale, three (V09, V14, V16) use the same or very similar wording to three of the four questions used by Flynn (1993, p. 315) in his analysis of students’ social justice values. Table 5.1 (p. 152) compared the results of this research with the Flynn responses.

The corresponding experience scale centres on types of experiences that Robinson and Jackson (1987, p. 27) classify as “mystical”.

MYSTICEX: Survey questions 66, (Mystical Experience)	66, P04, “experience that ‘all things are one’”	65, P03, “experienced a sacredness in nature”	60, E09, “felt presence of deceased friend or relative”
	61, E10, “experienced a sacredness in nature”	67, P05, “experienced a pattern to events”	62 E11 “found joy and meaning in life”

The strongest factor loading is for an item to which only a small number responded at the highest level (P04, 17%). The experience is one that Ahern (1990, p. 55) terms a “unitive” (“all things are one”) experience. A larger number respond positively to having experienced a pattern to events or a sacredness in nature (P05, 57% and P03, 49%). The experiences of those scoring highly on the items making up this factor may include the awareness of the presence of a deceased friend or relative (E09, 38%). In contrast to the

DEPRESS scale, there is a positive factor loading for meaning in life (E11, 38%). The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items. The factor loadings on unitive experience, sacredness in nature and patterning of events, led to naming this scale “Mystical Experience”, MYSTICEX.

Who are these respondents who have experienced “limit” in their lives? The strong correlation ($r = .988$, $p = .005$) means that those high on the SOCAWARE factor tend to be high on the MYSTICEX factor. Those low on the SOCAWARE scale tend to be low on the MYSTICEX scale. There are two shared questions with the earlier pairing that distinguish the SOCAWARE and MYSTICEX pair of factors from the EXPFAITH and DEPRESS pair. The proposition that “you can be religious without belonging to a religious organisation” (V22) elicits a positive response (69%) from those scoring highly on the SOCAWARE and MYSTICEX pairing and rejection (11%) by those scoring highly on the EXPFAITH and DEPRESS pairing. Those high on MYSTICEX responded positively to E11 (“I have discovered a joy and meaning for my own life now and am satisfied and at peace”, 38%) while those scoring high on the DEPRESS (27%) scale responded negatively to this item.

The third pair of scales, SCEPTIC and NUMINOUS, present both similarities and contrasts with the earlier pairs.

SCEPTIC: Survey questions 32,	34,	36,	51
V03,	V05,	V07,	V22
“science will control the world”	“believe with proof only”	“most important things in life can’t be proved”	“can be religious without church affiliation”

Those scoring highly on the items on this scale appear to have complete confidence in science both for its positive influence on the world of tomorrow and its objective approach to truth. They respond positively to the statements (V03, 37% and V05, 33%) that “science will eventually give us complete control over our world” and that “we should not believe anything until it has been proved to be true”. A smaller number seem to place complete reliance on the scientific method in rejecting the statement (V07, 12%)

that “some of the most important things in life can never be proved.” Those scoring highly on this factor, however, also reject the notion that “you can be religious without belonging to any religious organisation” (V22, 69%). This is a similar response to those scoring highly on the EXPFAITH scale and may point to differing interpretations of the question among respondents. The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items. The reliance on objective proof of those scoring highly on this factor led to naming the scale SCEPTIC.

Of the four questions on the SCEPTIC scale, two (V3, V5) use the same wording as two of the four questions used by Robinson and Jackson (1987) for their SCEPTIC scale. Robinson and Jackson found 32% agreement with V3 and 46% with V5. The respondents to this survey had a 37.5% agreement with V3 but only 33.3% with V5.

The corresponding experience scale is:

NUMINOUS: Survey questions 58, (Numinous Experience)	E07, “experienced close awareness of God at times”	63, P01, “found help in prayer”	54, E03, “awareness of an 'evil' presence”
	64, P02, “experienced presence of God”	55 E04 “awareness of a powerful presence ”	

Those scoring highly on this factor have experienced a close awareness of God (E07, 64%), although only a small number affirm having an experience similar to the conversion experience described in P02 (7%) and have found help in prayer (P01, 32%). Those scoring highly on these items have, similarly to those scoring highly on the DEPRESS factor, experienced one or both of an “evil” (E03, 51%) and a “powerful” presence (E04, 51%). The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items.

The two factors, SCEPTIC and NUMINOUS, had a correlation of .99 ($p < .005$) and so again those scoring highly on one scale are virtually synonymous with those scoring highly on the other.

Finally, the Implied Faith (IMPFAITH) factor is presented on its own, since it correlates less strongly but significantly with all of the experience factors.

IMPFAITH: Survey questions	49,	48,	46,	31
(Implied Faith)	V20,	V19,	V17,	V02
	“pattern and purpose to life”	“felt close to God at times”	“way of life not religious faith important”	“religious ‘talk’ not meaningful”

High scores among the items on the IMPFAITH scale relate to those who see a “pattern and purpose to life” (V20, 69%). While, in common with those scoring highly on EXPFAITH, they have felt close to God at times (V19, 43%). They accept, in contrast with that group, that (V02, 40%) “the way most religious people talk today does not mean much” to them. On the other hand, those high on this scale reject the proposition (**V17, 11%**) that “it does not matter so much what you believe so long as you lead a morally good life.”

The tendency of those scoring highly on this scale to affirm their closeness to God and the need for clear belief structures while questioning the relevance of “religious” talk led to naming this factor “Implied Faith”, IMPFAITH. As with the other scales, the lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of the above items.

The factor correlates most strongly with MYSTICEX ($r = .53$) and NUMINOUS ($r = .51$) and also with DEPRESS ($r = .48$), with all correlations having $p = .005$.

5.5.1 Gender and School Differences

In the studies reviewed it has usually been found that females report more of the experiences under investigation here than males. Only Greeley (1975) had found a such experiences more frequently reported by males.

The results of this research also show a higher number of reports from females. However, as has already been pointed out (Hypothesis 2, p. 166) the higher frequency of reports from females was not statistically significant. Analyses of each of the factor scales against gender (Chapter 4, p. 136) also found two statistically significant differences among the sexes in their scores on the scales.

The two exceptions to this were the EXPFAITH and DEPRESS scales. Using $p = .05$ as the criterion (4.5.2, p. 136, Appendix B, p. 298) the mean score for females on both EXPFAITH and DEPRESS was significantly higher than that for males. The females in the cohort tended to have scores more towards the depression end of the scale. They also tended to score more highly on the EXPFAITH factor, tending more to affirm belief in a loving, personal God and a commitment to live Christian values. The relevance of church and institutional religion for daily life has a negative loading on the factor. In an interesting contrast, males tend to the opposite, elation end of DEPRESS and are less strong on EXPFAITH.

Bentley and Hughes (1998, pp. 106-107) note the predominance of females expressing affiliation with institutional religion. They also record (p. 75) that females predominate in reports of both short and long term health problems and experience more headaches and hypertension than males. The strong correlation of EXPFAITH with DEPRESS and the significantly higher mean for female responses on the scales provides a link between an explicit faith and either elation or depression. The female cohort of this research appears to have a slightly stronger explicit religious faith than the male. On the other hand the males are somewhat less prone to loneliness and depression and more likely to state that they are at peace with their lives.

There were no other statistically significant relationships found between the factors and either gender or type of school attended.

5.5.2 Relation of Values Scales to LIMTOT

The unusually strong correlation among the three pairs of Values and Experience scales has been mentioned above (p. 179 ff.). Of these, the strongest correlation is between SCEPTIC and NUMINOUS ($r = .99$) and between SOCAWARE and MYSTICEX ($r = .99$). The correlation between EXPFAITH and DEPRESS ($r = .98$) is almost as strong. The Experience scales contain within themselves items that are directly related to “limit” experiences. Hence it would be redundant to have undertaken a regression analysis with the Experience scales and LIMTOT, the report of one or more “limit” experiences. The analysis concentrated on the Values scales.

The way in which the values scales correlate with LIMTOT, the report of one or more “limit” experiences at the highest level (5 for “E” and 4 for “P” type questions) is outlined in Table 4.26 (p.136) and a full set of results given in appendix B (pp. 297 ff.). SOCAWARE was the strongest predictor of LIMTOT, on its own ($\beta = 0.71$) accounting for 51% of the variance. When combined with the other Values scales, SOCAWARE ($\beta = 0.48$) was the strongest predictor with significant though weaker contributions made by SCEPTIC ($\beta = 0.23$) and IMPFAITH ($\beta = 0.22$). The EXPFAITH dimension had the weakest, but still significant, relationship to LIMTOT ($\beta = 0.18$). The four Values scales accounted for 66% of the variance in LIMTOT.

Those scoring highly on the SOCAWARE scale have a number of individual items that make up the scale where the positive response (“Probably True” or “Certainly True”) is in excess of 75%. When so large a majority is in favour of any statement (or for negative factor loadings, rejects it) more importance than usual could be attached to it. Those who score highly on the socially aware scale are most concerned for the lonely (V14, 83%)

world poverty (V16, 88%) and the poor (V12, 76%). They also reject any notion of following the crowd (**V09, 81%**).

The statistical significance of this factor, on its own accounting for 51% of the variance in reporting of “limit” experience, coupled with the high response rates for items above, give some indication of the attitudes of this particular group of Year 12 students. The predictor here is for “limit” experience, which broadly subsumes “religious experience”. It does not have clear links to institutional religion as such. In fact the high scorers on Social Awareness tend to reject church as irrelevant in their lives (**V22, 69%**).

Those who teach the religious education classes of these Year 12 respondents confront a very diverse group. Significantly, the SOCAWARE scale is the only scale to include the item on religious education classes as a loading on the factor, in this case a positive one. On the other hand, both from personal experience and these results, it is those who enjoy the classes (V01, 42%), who seem often to be precisely those who reject institutional religious affiliation. Yet, they are also more likely to relate to the experience of “limit”, in particular, the strong correlation of SOCAWARE with MYSTICEX ($r = .99$) implies that they may relate more closely to the mystical type of experience. It seems that any teaching that aims to foster growth of religious or spiritual awareness in the minds of young people must relate to these experiences that mean most to them at this time of life.

By comparison, students who feel that there is a pattern and purpose to life and who have felt close to God at times, those with high scores on the IMPFAITH factor, also relate to all of the experience scales significantly. IMPFAITH is a significant, though weaker, predictor of LIMTOT. The correlations with MYSTICEX ($r = .53$) and NUMINOUS ($r = .51$) and DEPRESS ($r = .48$) indicate that the type of experience for those scoring high on IMPFAITH may be more diversified and could be mystical, experience of the numinous or indeed relate to depression and searching.

These respondents have a key difference from the SOCAWARE group in the factor loading of question 51: “You can be religious without belonging to any religious organisation” (loading on SOCAWARE .40, loading on IMPFAITH $-.49$). Membership of institutional church, in some form, might therefore be inferred to be important to those scoring highly on IMPFAITH, although only 12% of total respondents actually rejected this statement. On the other hand, perhaps the interpretation taken by some was not personal. Perhaps some are affirming that religious affiliation is indeed essential to being “religious” yet not seeing themselves as being in any way committed to this.

The third predictor of LIMTOT, the SCEPTIC scale, provides interesting material for reflection. This predictor is of the same significance ($\beta = 0.22$) as IMPFAITH. High scores on the scale come from those who wish to have proof before belief (V05, $\beta = 0.69$) and who reject the relevance of church (V22, $\beta = -0.37$). Yet, their common human experience still appears to be a significant predictor of “limit” experience.

Finally, the EXPFAITH scale, ($\beta = 0.18$) is a weak but significant predictor of LIMTOT. Certainly many of those responding positively to the items making up this scale also responded positively to items on the SOCAWARE scale. The contrast is that none of the items in EXPFAITH, centred on more traditional statements on God’s love, Christian values for living and the relevance of religion, has the strength of positive response of those on the SOCAWARE scale referred to above. One telling negative loading factor on the EXPFAITH scale, **V10 ($\beta = -0.51$)**, has only 17% of respondents rejecting the statement that “you don’t have to go to church to live a good and meaningful life.” It seems that the more traditional religious affiliations are not strong predictors of LIMTOT among this group.

5.5.3 Influence of Family

Flynn (1985, p. 327), using commonality analyses, had found that the home had the “primary unique effect” on Religious Practice and Moral Values and the “secondary unique effect” on Personal Faith, Religious Commitment and Religious Knowledge.

Of the family measures used in the survey, only the attitude to religion of the mother was found to have a relationship to both the attitude to religion of the respondent and actual church attendance of the respondent. (Chapter 4, p. 122) None of the measures of home background, however, had any significant relationship to LIMTOT. Only the individual’s attitude to religion bore any relationship to LIMTOT and that only weakly.

It is clear from the survey results, that LIMTOT, the experience of one or more types of “limit” experience, is independent of the particular measures of family background represented in the data set. This is in contrast to Robinson (1977), who believes that religious experience is influenced by upbringing or culture at every point of development. Perhaps, however, he was looking at the issue from a different perspective. He believes that recognition of religious feelings, and hence the ability to recognise “limit” experience, is assisted where early searchings and longings are not met with opposition, dogmatic pronouncements or indifference. Perhaps, then, this is in line with the weak effect of the attitude of the mother outlined above.

5.5.4 Influence of School Subjects

Only two of the school subjects taken by the survey group had any influence on LIMTOT, the positive response to any one or more experience items; Religious Education and, to a lesser extent, Science. The results must be treated with caution, since not all the respondents take all subjects and hence the samples for individual subjects become much smaller than the complete cohort. In earlier correlations with LIMBIN (limit experience binary form – “yes” or “no” to one or more “limit” experience

questions) History had been identified as having a significant relationship to LIMBIN with weaker relationships recorded for Social Science and Physics (see Hypothesis 3, p.113, Ch. 4 and p.167, Ch. 5). Science did not feature at all in this particular analysis.

Regression analysis of the school subjects as predictors of LIMTOT showed religious education having the largest weighting ($\beta = .26$) on LIMTOT with science ($\beta = .23$), as the only other significant predictor, having the second largest weighting. This is consistent with the earlier finding that those scoring highly on the SOCAWARE factor also enjoy religious education classes and are most strongly related to LIMTOT.

The relationship to science is also interesting. Scores on the SCEPTIC factor were correlated strongly ($r = .99$) with NUMINOUS experience. Those scoring highly on SCEPTIC have the scientific mindset that only what has been proven to be true can be accepted, yet affirm their experience of the divine, the help they find in prayer and their awareness of the presence of evil. Honner (1999) believes that good science teaching can awaken an awareness of mystery and Tracy (1975) certainly believes that all scientists must experience “limit” as they strive for understanding of the universe. Perhaps there is a path towards the divine here that could well be explored by catholic school curriculum.

5.5.5 Influence of School Involvement

As predictors of LIMTOT, the results of hypothesis 4 (p. 115 and p. 170), show that only involvement in performance and involvement in sport were of statistical significance. Those who report “limit” experience were less involved with sport than those who do not report such an experience. Those involved with “performance” report “limit” experience more frequently than those who are not.

Regression analysis of all of the “involvement” items (S15 to S23) confirmed the analyses of Hypothesis 4. Only “Involvement in sport” ($\beta = -0.017$) and “Involvement in Performance” ($\beta = 0.244$) were included in the final model. Sports involvement was a negative predictor of LIMTOT.

5.5.6 Summary

This section discussed the results of regression analyses of the survey data. The initial analyses produced 4 factors from the values (“V”) items and 3 from the experience (“E”) items, accounting for 53% and 52% of the variance respectively. The significant pairwise correlations between sets of values and experience factors indicted a strong predictive relationship between the pairs.

It was noted that Flynn’s (1985, 1993) items on religious commitment and social justice values had been used as items on the EXPFAITH and SOCAWARE scales as had items on the Robinson and Jackson (1987) scepticism scale for SCEPTIC. Gender or school attended had no statistically significant influence on any of the scales with the exception of a weak relationship for females to score more highly on DEPRESS and EXPFAITH.

The predictive relationship for LIMTOT, reporting of limit experience, was examined with reference to the values scale, family background, school subjects and level of school involvement. The values scales bore a strong predictive relationship to LIMTOT. None of the other sets of items had a strong predictive relationship to LIMTOT. Weaker predictive relationships were noted for the attitude to religion of the mother and the school subjects of religious education and science. Level of school involvement in performance was found to have a weak predictive relationship to LIMTOT and involvement in sport to have a weak negative predictive relationship to LIMTOT.

5.6 *Adolescents and Limit Experience*

5.6.1.1 *Flynn's Research*

Flynn (1985) cites Fowler as believing that faith in some form is a universal human characteristic. Fowler (1980) uses “faith” both in the context of a fundamental attitude to life, human faith, and in the context of his stages of religious faith development. It is the person’s way of knowing and interpreting life experience that in turn allows them to relate to the ultimate conditions of their lives. This universal faith development may parallel a development of Religious Faith if the *content* of faith is religious.

Flynn (1985, p. 242 ff, 1993, p.332 ff) links his findings to Fowler’s (1980) stages of religious faith development and proposes his own model of the faith journey for Year 12 students. Flynn (1985) states that around 30% of the students surveyed had an “experienced” or “conventional” faith. “Experienced faith” is strongly influenced by parents while “conventional faith” is characterised by an allegiance to formal religion. A further 20% were at the stage of “searching” or “questioning” faith and another 20% had moved from this to some form of autonomous “owned” faith but not necessarily beyond to a personal faith in Jesus.

Flynn (1985, p. 259) adapts Fowler’s stages in a diagrammatic way beginning with Childhood Faith and moving to the searching stage of adolescence.

Flynn (1985)
(after Fowler 1980)

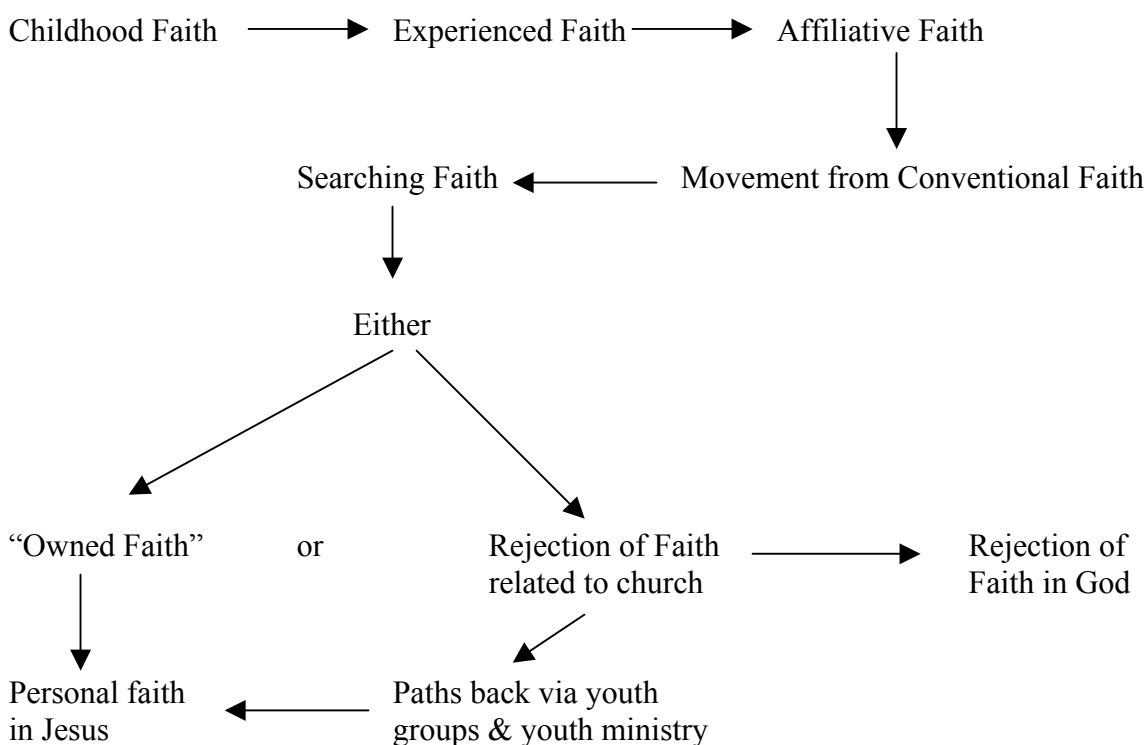


Figure 5.1 The Life Journey of Faith (Flynn 1985)

Fowler's (1980) stages of faith model looks beyond the credal dimensions of particular religious faith to the fundamental need for people to find meaning in life. There are two different kinds of faith change (see Ch. 2, p.57), *stage change* and *conversion*. The experience of "limit" might indeed prompt a conversion experience encompassing the recentering of personal images and the adoption of a new set of master stories. It may not necessarily lead to allegiance to formal religion if the *content* of faith is not religious. However, Flynn (1985, p. 244) cites Fowler in stating that the latter stages, beyond personal faith in Jesus (stages 5 and 6), of growth in faith can only be reached through contact with a religious tradition.

In contrast to growth in religious faith, the Flynn (1985) diagram points to progression beyond “rejection of faith related to church” as being achieved by way of “youth groups and youth ministry” moving to a “personal faith in Jesus”. The alternative is eventual “rejection of faith in God”.

Perhaps there is a third path now taken by many that highlights a dissonance between formal religion and life experience. Perhaps what might be termed “rejection of allegiance to formal religion” is an on-going stage for many. Tables 5.1 (p. 152) and 5.2 (p.155) outline the differences between this research group and the earlier Flynn (1985, 1993) groups. Perhaps the most telling differences are in levels of church attendance and attitudes to formal religion. Flynn found (1985, p. 209), that 55% of his survey population attended church each Sunday, with 76% attending at least monthly. The survey respondents (see Table 4.3, p.96) had a far lower attendance frequency, with only 13% attending church weekly and 34% at least monthly. The proportion (Table 5.2, p. 155) who believe that (V07) “religion helps me answer real questions about the meaning of life” has fallen from 42% (Flynn, 1985) to 36% among the research group.

Flynn (1985, p. 230) believes the level of alienation he found at that time among students stood “in contrast to their love for Jesus, their perception of God as a loving father and their warm regard for Catholic schools.” His interpretation of this (p. 260) is that many are at the stage of “searching faith” and that “childhood forms of faith, which sustained them until now, are disintegrating, but this is not the end.” He states optimistically (p. 261): “this should not always be viewed in very negative terms as though they are lost to the community of faith. For some it may be a necessary but painful stage of growth in faith.”

By the time he analysed the last cohort, Flynn (1993, p. 355), had concluded that the questioning stage of adolescent faith was “*clearly not an intermediate stage* in the development of personal faith in Jesus. It appears to be more of a *pervasive attitude or condition* which can act as a catalyst in the *maturing of faith* or it can lead to *rejection of faith* altogether.”

It appears that there is a further increase in rejection of “Faith related to church” among the respondents to this research. Bentley and Hughes (1998) confirm that this appears to be a societal phenomenon. They quote (p.117) the 15 to 29 year age group, as seeing a major fall in weekly church attendance since childhood (from 31.7% in childhood to 6.3% now). The 40 to 49 year age group, encompassing the initial Flynn (1975) cohort, has seen a lesser, though similar, fall in weekly attendance (from 40% in childhood to 11.7% now.) Bentley and Hughes do not quote the results for the 30 to 39 group, which would include the Flynn (1985) cohort, but it could be inferred that the results would be similar.

This research takes a different perspective. It does not intend to examine formal allegiance to church in any detail. It looks at “limit” experience and asserts that young people very frequently report such experience. If Hardy (1997, 1974, 1978) and Hay (1987, 1990, 1994) are correct, spirituality itself is grounded in a universal human awareness. It is biologically natural to the human condition. Hence, while it may be true for some that their questioning faith might lead to personal faith in Jesus, the majority appear to be rejecting, rather than questioning formal faith commitment. Fowler (1980) believes all experience a fundamental search for meaning. For the survey respondents the extent of its expression via formal religious practice is a matter of statistics. The need for meaning is simply not being expressed in this way by the group surveyed in this research.

Perhaps there is a third way between the total rejection of faith in God or the eventual return to personal faith in Jesus, a way that can be linked to individual spirituality. The overwhelming evidence of the extent of “limit” experiences among the survey cohort, (76%) and the positive response of Hay and Hunt (2000) to “religious experience” questions (76%) may point to the existence of a strong spirituality which may not take either path.

5.6.1.2 Adolescent Spiritual Consciousness

The significant extent of “limit” experience, as determined by the variable LIMTOT has been established among the survey respondents.

This has in turn been related in statistically significant ways to the values held by the respondents. The level of social awareness, determined by the variable SOCAWARE, correlates most strongly with the extent of “limit” experience ($r = .71$, $p < .001$). The implicit faith of the respondents, given by IMPFAITH, is also strongly correlated with the extent of “limit” experience ($r = .57$, $p < .001$), as is the tendency to scepticism ($r = .59$, $p < .001$) given by the variable SCEPTIC. The least correlation, still significant, with “limit” experience is for respondents with a formal religious allegiance, as given by the variable EXPFAITH ($r = .35$, $p < .001$).

Tables 5.1 (p. 152) and 5.2 (p. 155) examined the relationship between similar items used by Flynn (1985, 1993). Five of nine items on expressed faith corresponded with five of twelve on Flynn’s (1993, p. 307) “Religious Commitment” table. Three of the seven items on social awareness correspond with three of the four on Flynn’s (1993, p. 315) “Social Justice” table.

The types of experiences reported within this significant occurrence of “limit” experience have also been correlated strongly with the values of the respondents. Expression of strong social awareness values has a strong correlation with “limit” experiences that are mystical in nature, given by the variable MYSTICEX ($r = .99$, $p < .001$). Experiences of the Numinous, defined by the variable NUMINOUS, correlate most strongly ($r = .99$, $p < .001$) with the sceptical approach to life. Experiences of elation or depression are strongly correlated ($r = .98$, $p < .001$) with an allegiance to formal religion.

Chapter 3 (p. 81) described the way in which the “Experience” questions had been developed to parallel the Hay categories for religious experience. Table 4.4, p. 101 gave

the specific questions in the survey that related to each of the Hay categories. The questions related to the Hay categories as follows:

Patterning of events	E06 and P05
Awareness of the presence of God	E07 and P04
Awareness of receiving help in prayer	P01
Awareness of a guiding presence not called God	E04
Awareness of the presence of the dead	E09
Awareness of a sacred presence in nature	E10 and P03
Awareness of an evil presence	E03
Experience that all things are “one”	P04

Chapter two (p. 62) outlined the initial framework of Awareness sensing, Mystery sensing and Value sensing proposed by Hay and Nye (1998) as a way of analysing the spirituality of children. Their framework is given again below as Table 5.5.

Table 5.5 Categories of Spiritual Sensitivity

Category	Examples
<i>Awareness sensing</i>	Here and now Tuning Flow Focusing
<i>Mystery Sensing</i>	Wonder and awe Imagination
<i>Value sensing</i>	Delight and despair Ultimate goodness Meaning

(from Hay and Nye, 1998, p. 59)

The spiritual sensitivity categories provide an appropriate framework of experience at any age, not just for children. The experience of wonder and awe, despair, tuning and others, for instance, are characteristic of many of the written reports (see Appendix B, p. 245) of the survey respondents, for instance. As such they are experiences more akin to the self-actualisation of Maslow (1964) or the self-transcendence of Frankl (1989) rather than being locked into a particular stage of development.

The Hay and Nye (1998) research involved qualitative data obtained through interviews with children and subsequent analysis of the interview transcripts. By contrast, this research is essentially quantitative in nature and the items included in the survey were not designed with the Hay and Nye sensitivity categories in mind. Hence the items did not cover all of the categories above.

Of course, even where it can be reasonably inferred that a particular question does include one of the categories of spiritual sensitivity above, there is a question of interpretation. How the respondent interpreted the question can only be inferred from the data.

All of these limitations accepted, however, there appear to be clear links to the Hay and Nye (1998) categories when the experience (“E” and “P”) questions making up the DEPRESS, MYSTICEX and NUMINOUS scales are compared to the categories above.

It could reasonably be inferred that a response of “Certainly True” or “Certainly False” for certain “E” items was indeed evidence of the various types of spiritual sensitivity above. For instance, a response at either extreme of the scale to E02, “At times I have experienced loneliness and severe depression” could be evidence of either despair or indeed a joy for living. Similarly, a response of “Definitely, yes I had a similar experience” to certain “P” items could be interpreted as one of the categories of spiritual sensitivity above. The questions and the possible relationship to various types of spiritual sensitivity are given as Table 5.6.

Table 5.6 **Survey Experience items compared to Awareness Sensing**

Category	Survey Questions
<i>Awareness Sensing</i>	
Here and Now:	<p>P04 ‘I was standing alone on the edge of a low cliff, overlooking a small valley leading to the sea. It was late afternoon or early evening and there were birds swooping in the sky – possibly swallows. Suddenly my mind ‘felt’ as though it had changed gear or twitched into another view of things. I still saw the birds and everything around me but instead of standing looking at them, I <i>was</i> them and they were me.’</p>
Tuning:	<p>E10 “Sometimes I have recognized a ‘sacred presence’ in the patterns of nature”</p> <p>E09 “Sometimes I have felt a guiding presence from a friend or relative who has died.”</p> <p>P03 ‘.. as I sat thinking, looking at the beauty of the valley below, I felt as if the whole scene became luminous, I was aware of the tremendous intensity of colour – I felt intensely happy, for no reason at all. I suddenly felt at one with the very life force of creation, whatever that is. I felt part of it. I felt caught up in a tremendous theme of praise... the feeling of elation lasting for some time...’</p>

P04 is classified as an example of the “Here and Now” experience since Hay and Nye (1998) describe this as an experience in which the person is transfixed in appreciation of the intensity of the present moment. The concept of “Tuning” they define as a type of heightened awareness, such as might be experienced by listening to music or being aware

of the beauty of nature. On this second ground, both E10 and P03 are clear classifications. The guiding presence of a friend or relative is an experience of being in touch with something outside of the self, but not the divine. Argyle (1997) classifies such experiences as “psychic” experiences along with (p.7) “peak experiences which are aesthetic”, such as listening to music. This lends support to the classification of E09 under the heading of “Tuning”, understood as being in touch with a reality outside of the self.

Table 5.7 Survey Experience items compared to Mystery Sensing

Category	Survey Items
<i>Mystery Sensing</i>	
Wonder and Awe:	
	E04 “At times I have been aware of a presence or power which seems to be beyond and different to my everyday self”
	E07 “At times I have felt a very close awareness of God in my life”
	E03 “At times I have been aware of an evil ‘presence’ beyond myself”
	P01 “At times of great difficulty or danger in my life I have felt I could always pray to God and get help. One night we were in a traffic accident and I was very frightened, and I prayed. Somehow I knew there was someone else with us, a presence of some kind; and I escaped with just a few bruises. At other times, too, when I have felt very depressed I have had this same feeling of being given strength and hope.”
	P02 “It was about mid-morning, I came from the kitchen into the bedroom, sat at my dressing table, opened a drawer and began to do something quite ordinary, I can’t remember what, when I was absolutely overwhelmed by the presence of God. I was absolutely astounded. I hadn’t known there was a God at all...I was pretty much an atheist or agnostic and had no interest in religion. I had no such thoughts at the time, however, I was just shattered, shaken to the roots of my being.”

The placement of P02 within Mystery Sensing under the heading of “wonder and awe” is consistent with its intent (Table 4.10, p. 107) to ask about respondent awareness of the presence of God. This experience of the divine would also imply classification of both E04 and E07 under this heading as they each had similar intents to P02. The experience of an “evil presence” is one of the experiences of awe outlined by Otto (1950) as one aspect of numinous experience so seems to fit with other experiences of presence of God.

Table 5.8 Survey Experience Items compared to Value Sensing

Category	Survey Items
<i>Value Sensing</i>	
Delight and Despair:	E02 “At times I have experience loneliness and severe depression”
	E05 “At times I have felt there is no purpose or reason for living”
Ultimate Goodness:	P01 ‘At times of great difficulty or danger in my life I have felt I could always pray to God and get help. One night we were in a traffic accident and I was very frightened, and I prayed. Somehow I knew there was someone else with us, a presence of some kind; and I escaped with just a few bruises. At other times, too, when I have felt very depressed I have had this same feeling of being given strength and hope.’
Meaning:	E08 “There are times when life has no meaning”
	E11 “I have discovered a joy and meaning for my own life now and am satisfied and at peace.”

E02 and E05, being expressions of despair (or elation for low scores on the item) appear to be correctly classified within value sensing, as do the questions on meaning in life (E08 and E11). The feeling of “strength and hope” in the passage (P01) might be a recognition of ultimate goodness and meaning for living. On the other hand it was included in the survey (see Table 4.10 p. 107) as being an example of receiving help in

prayer. Hence an experience of the reality of God via “wonder and awe” could have been, and perhaps was more likely to have been, the experience of the respondent.

The questions not classified in the above table are the two questions on “patterning of events”(E06 and P05). It is unclear where the “patterning” questions might be placed in the above framework.

If the relationships expressed above are accepted, the Experience scales then have an interesting relationship to the Categories in tables 5.6 to 5.8 and this is given as Table 5.09. The beta value of each item is given in brackets. Items listed as not included are items on the experience scale but are not listed within the sensitivity category in tables 5.6 to 5.8.

Table 5.9 Relationship of Experience Scales to Spiritual Sensitivity Categories
(Factor loadings for survey items shown in parenthesis)

Sensitivity Category	Experience Scale	Survey Items
<i>Awareness sensing</i>		
Here and Now	MYSTICEX	P04 (0.83)
Tuning		P03 (0.66), E09 (0.60), E10 (0.59)
Not included		P05 (0.46),E11 (0.44)
<i>Mystery Sensing</i>		
Wonder and Awe	NUMINOUS	E07 (0.89),P01 (0.85), P02 (0.44),E04 (0.41),E03 (0.57)
<i>Value sensing</i>		
Delight and despair	DEPRESS	E05 (0.88),E02 (0.66)
Ultimate goodness		E04 (0.38)
Meaning		E08 (0.82),E11 (-0.53)
Not included		E03 (0.51),E06 (0.39)

That most items on each scale are included in the above table comparison suggests that a respondent scoring highly on mystical experience, for instance, will have spiritual sensitivity typical of tuning or of focussing on a particular moment in time – the here and now experience. Similarly, a high score for numinous experience would indicate a respondent sensitive to mystery via wonder and awe. A response skewed towards depression rather than elation would indicate a spiritual sensitivity that tends to value sensing for that respondent. Low scores on the particular scale, of course, indicate that little or no such awareness has been recognised by the respondent.

Hay and Nye (1998), working from the starting point of the spiritual sensitivity categories above, proposed that the category which drew together all the different kinds of seemingly relevant data from their work with children was a compound property which they termed ‘relational consciousness’. This they saw as a type of consciousness underlying ordinary conscious activity. It enabled an individual to be receptive to and understand their religious or limit experience (see Chapter 2, p. 63). “Consciousness” in this instance is more than alertness or mental attentiveness, it is discrete moments of unusual awareness. It is a distinctly reflective consciousness akin to meta-cognition in cognitive psychology.

The contexts in which relational consciousness occurred they defined as: Child – Self consciousness; Child – World consciousness; Child – people consciousness and Child – God consciousness.

Child-God consciousness is a traditional way of interpreting the world. The child’s spirituality is reflected in their feelings and thoughts about their relationship with God. Child-People consciousness refers to relationships with others in their world. Hay and Nye (1998) believe these can form a bridge to and from the Child-God context. In Child-World consciousness, spirituality is experienced through the child’s relationship to the natural world. Finally, Child-Self consciousness was experienced in the context of the child’s sense of relationship with its own identity and mental life. There was often talk of the mystery of death in this last context.

Once more, comparison of the quantitative data from this research with the above framework must be made cautiously. It can only be inferred how an individual respondent may have interpreted the experience referred to in a particular item. That being said, sorting of the scale items under the relational consciousness categories is enlightening and given as tables 5.10 to 5.12 below. Because the comparisons are with senior high school age students it does not seem correct to keep referring to “child” consciousness. Each of the categories has been renamed as “I” consciousness.

Table 5.10 Comparison of Experience Scale Items with I - Self Consciousness

Relational Consciousness		Survey Question
I – Self consciousness	E02	“At times I have experience loneliness and severe depression”
	E05	“At times I have felt there is no purpose or reason for living”
	E08	“There are times when life has no meaning”
	E11	“I have discovered a joy and meaning for my own life now and am satisfied and at peace.”

Awareness of the self, as a recognition of the individual’s mental life, appears to have E02, E05, E08, and E06 appropriately placed. E11, on having discovered a “joy” in life, had a negative beta weight (-0.53) on the elation depression scale. Hence E11 has also been placed here on the understanding that a “joy for life” may have been interpreted in similar fashion by respondents as were the other items that state they find “no meaning” and “no purpose” in life. Thus five of the seven items on elation or depression are placed within I-Self. The missing items are E03 on the experience of an evil presence and E06 on “patterning” of events.

Table 5.11 Comparison of Experience Scale Items with I – World and I- People Consciousness

Relational Consciousness	Survey Question
I – World consciousness	<p>E10 “Sometimes I have recognized a ‘sacred presence’ in the patterns of nature”</p> <p>P03 “.. as I sat thinking, looking at the beauty of the valley below, I felt as if the whole scene became luminous, I was aware of the tremendous intensity of colour – I felt intensely happy, for no reason at all. I suddenly felt at one with the very life force of creation, whatever that is. I felt part of it. I felt caught up in a tremendous theme of praise... the feeling of elation lasting for some time...”</p> <p>P04 “I was standing alone on the edge of a low cliff, overlooking a small valley leading to the sea. It was late afternoon or early evening and there were birds swooping in the sky – possibly swallows. Suddenly my mind ‘felt’ as though it had changed gear or twitched into another view of things. I still saw the birds and everything around me but instead of standing looking at them, I <i>was</i> them and they were me.”</p>
I – People consciousness	<p>E09 “Sometimes I have felt a guiding presence from a friend or relative who has died.”</p>

Placing E09 within I-People consciousness reflects the experience of a personal relationship with a friend or relative being experienced as still real. E10, P03 and P04 would be appropriately placed within the experience of I-World. Four of the six items on mystical experience appear within the two categories of I-People and I-World under this arrangement. The missing ones are P05, a “patterning” item and E11, an item on the joy and meaning of life. E11 had a positive beta weight (0.44) on the mystical experience scale. Respondents who scored highly the mystical experience questions would tend to respond positively to this item, perhaps indicating a peacefulness with the world and its people. So it could perhaps be appropriately placed under these categories.

There is a temptation to include I-People and I-World as one category, since all mystical experience items could then be included together. However, the placement of only one item under I-People, and that perhaps contentiously, seems to point to there not being

sufficient appropriate items within the experience questions for any determination to be made. Hence the I-People category is deleted from further discussion.

Table 5.12 Comparison of Experience Scale Items with I - God Consciousness

Relational Consciousness	Survey Question
I – God consciousness	<p>E04 “At times I have been aware of a presence or power which seems to be beyond and different to my everyday self”</p> <p>E07 “At times I have felt a very close awareness of God in my life”</p> <p>P01 “At times of great difficulty or danger in my life I have felt I could always pray to God and get help. One night we were in a traffic accident and I was very frightened, and I prayed. Somehow I knew there was someone else with us, a presence of some kind; and I escaped with just a few bruises. At other times, too, when I have felt very depressed I have had this same feeling of being given strength and hope.”</p> <p>P02 “It was about mid-morning, I came from the kitchen into the bedroom, sat at my dressing table, opened a drawer and began to do something quite ordinary, I can’t remember what, when I was absolutely overwhelmed by the presence of God. I was absolutely astounded. I hadn’t known there was a God at all...I was pretty much an atheist or agnostic and had no interest in religion. I had no such thoughts at the time, however, I was just shattered, shaken to the roots of my being”.</p>

Placement of E04, E07, P01 and P02 within the I-God category reflects a traditional expression of “limit” experience as relating to an experience of God. It may be arguable that E03 does fit within the traditional image of God consciousness. If it is placed there all five items on the experience of the numinous are then included within the category of I-God consciousness.

Once again the two items (E09 and P05) on “patterning” have not been included nor has the item on the experience of an “evil”presence (E03).

A comparison of the scales and the included items with the categories of relational consciousness appears below as Table 5.13 (items listed as “not included” are items on the particular scale not included in tables 5.10 to 5.12. Beta weights of each item are given in brackets.

Table 5.13 Relational Consciousness compared to Experience Scale Items
(Factor loadings for survey items shown in parenthesis)

Category	Experience Scale	Individual Items
I – Self consciousness	DEPRESS	E05 (0.88),E08 (0.82) E02 (0.66),E11 (-0.53) E04 (0.38)
	Not included	E03 (0.51),E06 (0.39)
I– World consciousness	MYSTICEX	P04 (0.83),P03 (0.66) E10 (0.59)
	Not included	E09 (0.60),P05 (0.46), E11 (0.44)
I – God consciousness	NUMINOUS	E07 (0.89),P01 (0.85) P02 (0.44),E04 (0.41)
	Not included	E03 (0.57)

Although the allocation of experience scale items does not produce a complete match with the relational consciousness categories, there is enough similarity to infer that those responding strongly towards the depression end of the elation and depression scale tend to an I-Self relational consciousness. High scores on numinous experience indicate respondents who tend towards an I-God relational consciousness. A slightly more

tenuous claim could be made for the relationship between mystical experience and I-World relational consciousness for respondents scoring highly on the mystical experience items.

In summary, high scores for this group of respondents on the depression end of the elation depression items appear to bear a strong relationship to both I-Self relational consciousness and a spiritual sensitivity tending to value sensing. High responses for the mystical experience items bear a similarly strong relationship to both an I-World relational consciousness and a spiritual sensitivity that tends to awareness sensing. High scores on numinous experience items correspond to both an I-God relational consciousness and a spiritual sensitivity that tends towards mystery sensing. As the way in which respondents interpret the items in the survey can only be inferred, further research would be necessary to validate these relationships.

5.6.1.3 Predictors of Spiritual Consciousness

The very strong correlation between individual values scales and the experience scales was outlined in Table 4.26 (p. 136). All correlations were statistically significant at the 0.001 level. Thus the values scales are strongly related to the experience scales. In the following discussion the earlier convention of highlighting items having a negative beta weight on a particular scale is continued.

The correlation between experienced faith and levels of elation or depression ($r = .98$) predicts that high scores on experienced faith will probably identify a respondent whose spiritual sensitivity fits with Value-sensing and with an I-Self relational consciousness. A high score on experienced faith implies high scores for individual item responses that affirm a believe in God (V13), a commitment to live Christian values (V11), a belief in a God who loves individually (V15) and to whom they have felt close at times (V19). High scorers on experienced faith would reject the proposition that religion does not address important issues (V21). There is a weaker relationship between respondents high on the experienced faith scale and rejection of the proposition that church attendance is

unnecessary (V10), and that people can be religious without an affiliation with church (V22). The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items. It is reasonable to infer that the corresponding style of relational consciousness would not tend to be I-Self for those at the elation end of the scale and that there would be a tendency towards forms of spiritual sensitivity other than value-sensing.

Similar suggestions of a relationship can be made between all values scales and the Hay and Nye (1998) frameworks.

Respondents with high levels of social awareness, as evidenced by their high scores on the corresponding survey items, are strongly concerned about lonely and rejected people (V14) and world issues such as hunger and poverty (V16). They reject the proposition (V09) that it would be “alright to do something if everyone else is doing it”. On the other hand, they state that church affiliation (V22) is not necessary in their lives and that the way people live their lives, not their religious faith (V17) is the important issue. Significantly, this group also tend to “enjoy the classes in Religious Education” (V01). The strong correlation between social awareness and mystical experience items ($r = .99$) implies that high scores on social awareness items will be predictors of a spiritual sensitivity that tends to awareness sensing and an I-World relational consciousness. The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items.

A spiritual sensitivity that tended to mystery sensing and an I-God relational consciousness was outlined above as corresponding to high scores on the numinous experience items of the survey. The correlation between numinous experience items and the items identifying a sceptical approach to life ($r = .99$) relates high scorers on the sceptic scale strongly to high scores for numinous experience. They would appear to have complete confidence in science both for its positive influence on the world of tomorrow and its objective approach to truth. They respond positively to the statements (V03 and V05) that “science will eventually give us complete control over our world” and that “we

should not believe anything until it has been proved to be true”. They reject the statement (V07) that “some of the most important things in life can never be proved” and the notion that “you can be religious without belonging to any religious organisation” (V22). This last is rather surprising for scientific sceptics. Perhaps the high scoring respondents on this factor scale do associate in their own minds that being religious relates to formal church allegiance, yet do not classify themselves as religious. Those who have scored highly on the scepticism items could be predicted to have a spirituality that tends to mystery sensing and an I-God relational consciousness. The lowest scores on this scale would be calculated, in turn, for those who are towards the opposite end of the scale on all or most of these items.

The predictive value for this group of respondents for what Hay and Nye (1998) defined in their frameworks as spiritual sensitivity and relational consciousness is a very significant finding. The values questions appear to have no direct relationship to “limit” experience or religious experience as such. Yet the values scales themselves appear to be strong predictors of exactly this experience.

Experienced faith, with a number of items that parallel Flynn’s (1985, 1993) analysis of student religious commitment, is a strong predictor of both an I-self mode of relational consciousness and a spiritual sensitivity tending to value sensing. Social awareness, including items used by Flynn to analyse student social justice values, is a strong predictor of an I-world relational consciousness and spiritual sensitivity tending to awareness sensing. Scepticism, including items from the Robinson and Jackson (1987) SCEPTIC scale is in turn a strong predictor of both an I-God type of relational consciousness and mystery sensing as the mode of spiritual sensitivity.

For this group of students this research has established a quantitative link between the values scales and theoretical frameworks proposed by Hay and Nye (1998). The conclusions of this research are based on quantitative data on the “limit” experience of the respondents. It has also proposed possible links between items included in the major surveys of Flynn (1975, 1985, 1993) and Robinson and Jackson (1987) and the values

scales. These links could be explored further by surveys containing items from both the Flynn and the Robinson and Jackson research in conjunction with the experience items used in this research. Were these links to be validated in subsequent research, they would still more clearly associate student values with “limit” experience, spiritual sensitivity and the contexts of relational consciousness.

Further research among a larger cohort would be required for verification of this, but it does have significance, if verified by further research, for religious education and catholic school programs in general. The National Catholic Education Commission (2000) defines some of the roles of catholic schools as being to:

offer the Catholic community and the people of Australia an educational foundation for life to the full, meaning the full development of the person - intellectually, spiritually, physically, morally and emotionally;

enhance, by emphasising the common good, the development of Australia and the building and improvement of a socially just Australian society that is multicultural and multi-faith;

offer a voice which challenges current and future generations to reflect on their world in the light of Christ’s message; (p. 2)

There is nothing here that speaks of spiritual awareness at the depth of “limit” experience or relational consciousness, yet the survey respondents appear to have such things in abundance. It could be inferred, but require further research validation, that their catholic school background has contributed to this.

5.6.2 Summary

This section has analysed the values and experience scales and their relationship to the characteristics of the survey respondents. It began by comparing the responses of this cohort with the responses reported by Flynn (1985, 1993) and his interpretation of the faith journey of Year 12 students, based on Fowler's (1980) stages of faith development. It suggested that this group was clearly different in character to the earlier Flynn cohorts and that this might point to a third path of faith development for many in this group. This path would be in addition to the Flynn alternatives of finding faith in Jesus or eventual rejection of church.

The section has also explored the relationship of the scales to the Hay and Nye (1998) categories of spiritual sensitivity and the contexts within which relational consciousness occurs. It has first established a quantitative link between the items of the experience scales, the various categories of spiritual sensitivity proposed by Hay and Nye (1998) and the contexts of relational consciousness. Relational consciousness they see as the category that draws together all the different kinds of relevant data from their work with children. Next it has established the values scales as strong predictors of the categories of spiritual sensitivity and the contexts of relational consciousness.

Finally, possible relationships were suggested between items used by Flynn (1975, 1985, 1993) in reporting student religious commitment and social justice values and the items on the expressed faith and social awareness scales. A similar relationship was proposed between items on the scepticism scale and items used by Robinson and Jackson (1987). It was suggested that further research might use combinations of the Flynn and Robinson and Jackson items in conjunction with the experience items of this survey to further explore the strong predictive relationship of the values scales for "limit" experience, spiritual sensitivity and relational consciousness.

5.7 *The Written Accounts*

Chapter 4 (p. 142) outlined the subject categories of the 85 written responses. The point was made that it is difficult to analyse the written responses closely due to their smaller number and their more discursive nature. Often more than one topic was broached in a particular response, hence the number of subject classifications exceeds the actual number of responses.

Where it is possible, however, it is interesting to compare the frequency of the topics (of the 105 identified from 81 written accounts) with both the Hay (1987) framework and the survey response rate for the same framework. The comparison appears below as Table 5.14.

Table 5.14 Comparison of Hay Categories with Survey and Written Accounts

Type of Experience	Survey Questions	Analysis Coding	Hay Response Rate	Survey Response Rate	Written Account Rate
Patterning of events	57 & 67	EO6 & PO5	29%	28%	28%
Awareness of the presence of God	58 & 64	EO7 & PO2	27%	20%	23%
Awareness of receiving help in prayer	63	PO1	25%	11%	5%
Awareness of a guiding presence not called God	55	EO4	22%	22%	7%
Awareness of the presence of the dead	60	EO9	18%	21%	7%
Awareness of a sacred presence in nature	61 & 65	E10 & PO3	16%	14%	10%
Awareness of an evil presence	54	EO3	12%	19%	5%
Experience that all things are “one”	66	PO4	5%	5%	0%

The number able to write about and affirm prayer as the source of their experience has fallen markedly from the survey response. On the other hand, they would have been

among the 76% of respondents who could relate to “limit” experience in their lives as such. How did they interpret the experience? Certainly for most, prayer was not a trigger.

The other categories are largely similar to the survey results, although the number prepared to write about an evil or fearful presence has fallen compared to the survey result. Of some significance is the increase in the number who see the “presence of God” in their experience. While not large, the increase over the survey response could be regarded as unexpected, given there are a number of alternative attributions that could be made for the experience and that the “prayer” attribution fell so markedly. Perhaps it is evidence that the language of religion is still, for many, the only coherent way to express an experience beyond the norm.

For Shea (1980, 1989) and Tracy (1975) religious language is characteristic of a common human experience of discovering the sacred or discovering the mystery of life itself. Hay (1987) is certainly of the opinion that religious language is used simply because it is the only way people know to express the concepts.

5.8 *Summary*

This chapter has analysed the results of the research. The results of the survey have been compared and contrasted to the work of Flynn (1975, 1985, 1993) with similar cohorts in an Australian context and that of Robinson and Jackson (1987) with students in the United Kingdom. The results were also examined using the Hay (1987) categories of religious experience and were largely consistent with those.

Actual occurrence of “limit” experience was beyond the expectations created by Hay’s (1987) earlier results although in line with the more recent work of Hay and Hunt (2000).

The sample itself is probably broadly representative of students in Australian Catholic schools at the end of the millennium, although a much wider sample would be required to

confirm this. The sample is probably not as representative of the general population of young people in Australia today, being more catholic, in terms of both practice and notional church affiliation than the general population.

All hypotheses proposed for the research were accepted with some interesting caveats to complete acceptance. Of most significance for catholic schools is the finding that the religious education program does make a significant contribution to the recognition and reporting of “limit” experience among this cohort.

By factor analysis three values and four experience scales were developed that were shown to be independent of school attended, home background and gender. These scales were further analysed by multiple regression analysis and found, with some few reservations, to validate the conclusions above for the hypotheses. The strong predictive relationship of the factor scales to LIMTOT, the reporting of one or more “limit” experiences, was also explored.

Finally, the relationship of the experience scales to both the Hay and Nye (1998) categories of spiritual sensitivity and their contexts for relational consciousness was established. This group of respondents has provided quantitative confirmation that both frameworks are applicable to the classification of “limit” experience. A major finding of the research is the strong predictive value of the scales for social awareness, scepticism and depression – elation for the categories of spiritual sensitivity and the contexts of relational consciousness.

Chapter 6

Summary, Conclusions and Implications

6.1 *Introduction*

The purpose of the research reported in this thesis is to investigate the occurrence and recognition of “limit” experience and “religious” experience among some Catholic High School students in Brisbane secondary colleges. As has already been pointed out “limit” experience subsumes the term “religious”. The questions in the survey instrument are based on types of “limit” experience rather than targeting specifically “religious” experience as such. This is intended to minimise the possible confounding variable of a negative attitude to “religion” or “church”. The interpretation of an experience as “religious” will be inferred from the types of experience reported and the language in which they are described.

In its essence this research set out to ask of a group of Year 12 students in some Australian Catholic schools to respond to the Alister Hardy question (Hay 1987, p. 114):

Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday world?

Such experiences beyond the everyday world were defined as “limit” experiences in order to standardise the way in which reference was made to them and to remove them from direct association with a religious interpretation. In chapter one (p.4) a “limit” experience was defined as:

“an experience that reveals a reality of life beyond the self, beyond the here and now. It may be recognition of our own fragility and vulnerability as much as a joyous awareness of a reality beyond our normal encounter with life.”

The research progressed this question on three fronts. Firstly, it intended to determine the extent of recognition and reporting of “limit” experience among Year 12 students in some Catholic Secondary Colleges. It was designed to break new ground by using the Hay (1987) categories for classification of religious experience in order to examine the “limit” experience of senior high school students in an Australian context. These responses were also to be compared and contrasted to the earlier work of Flynn (1975, 1985, 1993) and that of Robinson and Jackson (1987) both of whom had worked with similarly aged cohorts.

Secondly, the research intended to confirm or deny six hypotheses proposed with regard to “limit” experience and framed after consideration of and with reference to the earlier results of Hay (1987), Flynn (1985, 1993) and Robinson and Jackson (1987).

Thirdly, the research intended to provide some exploratory analyses. These were designed to seek predictors for reports of “limit” experience among the cohort and provide some directions for further research in the field.

6.2 The Design of the Research

The research used a cross-sectional sampling technique by means of a questionnaire administered to Year 12 students attending four secondary colleges administered by the Archdiocese of Brisbane. To allow for comparisons to be made among different types of schools, the schools chosen included one all-girls school, one all-boys school and two co-educational schools. The school populations were drawn from mid to lower socio-economic backgrounds.

The questionnaire was designed in six segments: background information, family details, school life, values and attitudes, experiences in living and descriptive passages on

personal experience. An opportunity was given for students to write an account of their own experience at the end of the questionnaire if they so wished.

In framing the values and attitudes questions some questions used by Flynn (1985, 1993) and Robinson and Jackson (1987) were either included word for word or adapted slightly to allow for some comparative analysis between this cohort and their much larger samples. The core of the questionnaire was the two “experience” segments, designed to include at least one question from each of the Hay (1987) categories for religious experience.

Data collection consisted of the administration of a survey under similar conditions in all schools during the first half of the year. The Australian Catholic University Ethics committee provided ethical clearance for the survey. All parents were asked to sign a permission note to allow use of the survey data from their student and only those surveys with a valid permission note were used in the data analysis. The anonymity of the individuals involved was assured by the design of the instrument and the method of data collection.

The results were analysed using the SPSS Release 10.0 (2000). A range of descriptive data was generated. Data reduction was undertaken by means of a factor analysis to produce three values and four experience scales. These were then analysed step by step against both reports of “limit” experience and the various segments of the survey instrument. Possible links between “limit” experience and the factor scales were explored by this means.

6.3 *Research Conclusions*

6.3.1 Outcomes

There are several outcomes from this research. Firstly, the reality of the occurrence of “limit” experience among Year 12 students in these catholic schools was overwhelmingly confirmed. In fact, the level of reports far exceeded all expectations of the researcher.

Secondly, the six hypotheses posed as bases for the research questionnaire were all confirmed with some important reservations. These reservations provide important information both for catholic school educators and fruitful areas for further investigation.

Thirdly, exploratory factor analysis determined three values scales and four experience scales. The values scales were analysed as predictors of “limit” experience among the cohort. The unusually strong pairwise correlation between individual values and individual experience scales provided a snapshot of the student backgrounds, the type of “limit” experience likely to be reported and the likely attitude to formal religion.

Finally, using the categories of spiritual sensitivity and the concept of “relational consciousness” (Hay and Nye, 1998), it was established that each of the experience scales corresponded to particular segments of both models. It was then established that the strong pairwise correlations between individual values and experience scales made the values scales themselves strong predictors of the various categories of spiritual sensitivity and contexts of relational consciousness.

Both of the above explorations provide fruitful directions for further research in the field.

6.3.1.1 *The Occurrence of “Limit” Experience*

The first hypothesis investigated by this research was that in excess of 30% of the survey respondents would report “limit” experience.

Tracy (1975) proposes that the experience of “limit” is part of what he terms “the common human experience”. There were two motivating forces for this research. First was an unshakeable belief from the researcher, the result of many years working with senior students in religious education classes, that “limit” is indeed a “common human experience”. Second was a personal desire to validate this belief. The belief was validated beyond any expectations that were held at the commencement of the research.

The results are very significant. To have had over 90% of the respondents affirm that they had indeed had one or more of the categories of experience described by Hay (1987) was at first beyond belief. It led to painstaking re-checking of the data entry and the calculations involved. When these were validated, the decision was taken to tighten the reporting criteria and only to accept a response at the highest level of the individual scale (5 for “E” items and 4 for “P” items) as being a positive response.

While being sure that such tightening of criteria would reduce the response rate, it was again totally unexpected that it would only do so to a level whereby still 76% of the respondents could now affirm a “limit” experience of some type as being part of their lives at some point in time.

The results support the conclusion that Berger (1999), Frankl (1989), Hardy (1978), Maslow (1964), Schillebeeckx (1990) and Tracy (1975) are correct in regarding this type of experience as part of the human condition. The real significance of such experience in the lives of these young people confirms that experience of “limit” is strong among the students in these catholic schools and may provide one way forward in overcoming the dissonance that appears to exist between these students and institutional religion.

6.3.1.2 *The Other Hypotheses*

It had been confidently expected that at least some of the other Hypotheses would be denied as a result of this research. They were posed as null hypotheses and proposed that influences such as type of school attended, home background, school subjects, involvement in social responsibility programs and religious practice would not influence frequency of reports for “limit” experience.

Flynn (1985, p. 327), for instance, had found a “primary” significance for home background in the development of religious practice and moral values and “secondary” significance in development of personal faith and religious commitment. Robinson and Jackson (1987) had gathered inconclusive but positive evidence that at least some school subjects had potential to positively effect religious experience.

Significantly, the Robinson and Jackson (1987) research had identified religious education as having no measurable impact on reports of religious experience. This research found the opposite in considering “limit” experience. The cause of this might be attributed to the different structures of the religious education programs in Great Britain and this area of Australia or it may have other causes.

It is very surprising that all hypotheses were accepted with one or two notable caveats on complete verification of the hypothesis. We can hence state with confidence that, for this group of respondents:

That there is no significant difference in the number of reports from different types of schools

That students whose teaching in a particular subject area has stirred deep questions about life are no more likely to be open to “limit” experiences than other students, with

the notable exception of religious education and, to a lesser extent, history. Regression analysis added science as having a weak relationship to reporting of “limit” experience.

That students actively involved in social responsibility programs and / or actively involved with school life are no more likely than others to be open to” limit” experiences than those who are not, except that involvement in performance and the arts tends to lend slight assistance to recognition of such experiences while involvement in sport tends to be a negative influence on recognition.

That students who participate in organised religion are no more likely to be open to “limit” experiences than those who do not.

That students who experience a happy and stable home background are no more likely to be open to limit experiences than those who do not have such a home background.

The difference with Flynn (1985) over the significance of the home can readily be explained by the fact that “limit” experience and religious practice do not tap the same dimension. Francis and Wilcox (1993) made a similar statement when comparing prayer with church attendance. This difference in dimension provides a way to explain the rejection of home and formal religious practice as influences on “limit” experience.

On the other hand, the experience of the spiritual forms the basis of formal religion (Schillebeeckx, (1990)), provides a language with which to interpret the experience (Hay, 1987; Robinson, 1977; Shea, 1980) and a potential way to enter the church tradition (Mason 1981). Given the dissonance of many in the research cohort with institutional church and their high level of “limit” experience per se, it is vital for church to find ways to link these dimensions if the allegiance of the young is to be regained.

The research points to a strong relationship between Religious Education (R.E.) and “limit” experience. Flynn (1985, p. 327) had identified the R.E. curriculum as a “primary determinant” of personal faith. It appears that it taps an even deeper dimension. It does

not, however, translate into religious commitment and a positive attitude towards church, as it did for Flynn's cohort.

The finding that Science has a weak relationship to the recognition of "limit" experience as does involvement in artistic performance might also lead catholic schools to examine both the way in which science is presented as a subject, and the informal curriculum opportunities available for artistic involvement.

6.3.1.3 The Exploratory Analyses

The exploratory analyses undertaken produced seven factor scales. These were then compared to the responses to provide possible causal relationships for reporting of "limit" experience.

6.3.1.3.1 The Values and Experience Scales

The three values scales all had very significant pairwise correlation with an individual experience scale:

Explicit Faith (EXPFAITH) with Depression - elation (DEPRESS)

Sceptics (SCEPTIC) with numinous experience (NUMINOUS)

Social awareness (SOCAWARE) with mystical experience (MYSTICEX)

Those with an implicit, but not formally expressed, faith (IMPFAITH) had less strong but very significant correlations with all three values scales.

Each value scale was also correlated with the number of reports of "limit" experience (LIMTOT). Social awareness was found to be the most significant predictor of "limit" experience for the majority of the cohort. The type of experience for this group tends to be mystical in content. There is not necessarily any interpretation of the experience as

being religious. Significantly, respondents scoring highly on the social awareness factor are also likely to have responded that they enjoyed their classes in religious education. They were the only group to have this item included on the factor scale.

The second significant predictor of reports of “limit” experience is implied faith (IMPFAITH). Respondents scoring highly on the implied faith factor may interpret the experience as religious, and affirm that the message of religion is still important to them. However, they do not believe that personal membership of a church group is important in their lives.

Of less significance as a predictor of “limit” experience for the cohort is the scepticism (SCEPTIC) scale. Respondents scoring highly on this factor believe science will eventually be able to give us control of our world. Their “limit” experience tends to be of the numinous. The least significant predictor of “limit” experience is explicit faith (EXPFAITH). For the survey respondents high scores on this factor were also a strong predictor of an experience of life tending to depression.

It is of concern for teachers of religious education that those who most enjoy their classes and who can readily relate to the experiences identified in this research do not affirm allegiance to institutional church. It is of at least as much concern that those who do affirm the institution of church appear least likely to have experienced “limit” and most likely to suffer from depression and lack of meaning in their lives.

6.3.1.3.2 *Adolescents and “Limit” Experience*

A major finding for this research was the establishment of a significant quantitative link between each of the experience scales and specific segments of both the Hay and Nye (1998) categories of spiritual sensitivity and their contexts for relational consciousness. This is a quantitative validation, for this group, of these two theoretical frameworks

originally proposed from extensive analysis of qualitative statements of children's experience.

The significant pairwise predictive characteristics of the values scales with individual experience scales was another major finding of this research. The values scales also have strong predictive value for specific segments of the Hay and Nye (1998) categories of spiritual sensitivity and the contexts of relational consciousness.

6.4 Implications for Further Research

There are several clear caveats to this research, and thus to the generalisability of the results and the conclusions drawn.

One of the main factors limiting generalisability of these research outcomes is the locus of the research itself: the concentration on only four catholic secondary schools in one geographic region of the country and the use of a limited number of the possible responses. The survey results were also limited due to the selective sample. Only those who had returned a valid permission note from parents allowing the responses to be used were included in the sample.

The construction of a survey instrument to measure the occurrence or otherwise of a deeply personal phenomenon, "limit" experience, is also problematic. The values and attitudes "V" and experience of living "E" segments of the survey asked questions in a very direct way. These could possibly be misinterpreted, with the respondent having created a different mental image to that proposed by the researcher and thus responding differently to the researcher's interpretation of a particular question. On the other hand, the descriptive passages of the personal experience ("P") segment asked respondents to respond to passages written by others about their personal experience. These could also be misinterpreted. The indescribability present in every such experience (Ahern 1990)

may mean that the respondent did not relate to the written description yet may have had a profoundly similar experience from the point of view of analysis.

On the other hand, the survey has enough similarity, via the comparisons able to be made with the work of other researchers in this and related fields (cf.: Bentley and Hughes (1998), Flynn (1985), Hay and Hunt (2000), Hay and Nye (1998), Hay (1987), Robinson and Jackson (1987)). for the claim to be made that the survey instrument is a reliable instrument for measuring “limit” experience among senior high school students. The research reported in this thesis could provide an appropriate empirical basis for a larger survey of senior high school students. The role of this study as a “pilot project” could be helpful to researchers seeking to embark on a more comprehensive and far-reaching analysis of such experiences among senior high school students and others. It is of note that the “pilot” group for this particular survey was a group of teachers in catholic schools and that the instrument was not changed markedly after that. Hence, with minor changes to the early sections, it could also be readily used with adults.

The links between the items included on the values scales and the earlier items of the Flynn (1985, 1993) research could provide very fruitful research in the field. A more comprehensive survey, including all of the Flynn questions and the experience questions of this research could provide very valuable data on catholic schools and the relationship of their programs to recognition and occurrence of “limit” experience.

Were a more comprehensive survey to be carried out, consideration should be given to including schools other than catholic, although this would require some adaptation to some of the specific Flynn (1985, 1993) items. The significant link between religious education and those who report “limit” experience seems to point to the continued significance of this aspect of catholic school curriculum. However, this could only be validated by use of the survey in other school environments and subsequent comparison of the results. It is possible that “limit” experience is such a fundamental human characteristic that it is independent of type of school attended.

The applicability of the survey to adults, demonstrated only in pilot work with teachers prior to final administration in schools, could provide for its adaptation to local church communities. It could be valuable to compare recognition of “limit” experience among those who are regular church attenders and the younger generation of school leavers with their own remarkable level for reports of “limit” experience.

The results from any larger survey could also be supplemented by a series of qualitative analyses, perhaps using interviews of volunteer respondents, along the lines of the data being collected by the Religious Experience Research Unit. Although the written responses to this survey provided some interesting background to the statistical analysis, there were too few and their subjects too varied for any conclusions to be drawn and hence the analysis of them was only cursory. With permission, they could be included as part of the qualitative data in a much wider analysis.

Any further research could well consider linking attitude to institutional church, the presenting reasons for these attitudes among individuals and reported occurrence of “limit” experience. This may provide valuable data on the apparent drift of the young away from the formal institution of church. The results of this research and those of Hay and Hunt (2000), both with unexpectedly high levels of personal experience reported, affirm the reality of “limit” experience in this world. Research into ways to bring the reality of “limit” into a religious context for the young may be invaluable for the medium term future of church in this country.

6.5 *Summary*

The purpose of this research was to explore the reality of “limit” experience in the lives of senior high school students in selected catholic schools. It also reflected, within the parameters of the literature and earlier research in the field, on the way in which catholic schools facilitate the recognition of such experiences among students. The literature

affirms the reality of such experience for an increasing number in the general population at the same time as there is a marked decline in allegiance to formal religious institutions and their beliefs and practices.

The data gathering, treatment and analysis focused on four catholic secondary schools in the Brisbane Archdiocese. While the research focus was by definition limited, and while the results have of necessity to be treated with some caution before wider generalisation, the outcomes of the research do illuminate some of the important issues identified in the literature.

This research has highlighted the reality of “limit” experience among this cohort of catholic school students. It has also identified that the catholic school, via its religious education program in particular, appears to be able to make a positive difference to the ability to recognise such experiences. The research also highlights some of the conflict between the reality of spiritual experience as the basis for religious faith and the dissonance apparent between the formal institution of church and the values and experiences of many of the youth in these catholic schools.

The document “The Catholic School on the Threshold of the Third Millennium” (Congregation for Catholic Education, 1998, p. 8) affirms the importance of the evangelising mission of the school: “..we must recognize the contribution it (the catholic school) makes to the evangelising mission of the church throughout the world, including those areas in which no other form of pastoral work is possible.”

While evangelisation is not simply about conversion and allegiance, there is a challenge for all involved with church to find ways to harness the profound level of “limit” experience among our youth.

Appendix A

Selected Written Accounts

The Written Accounts

The following is a selection of the student written accounts of experience. They have been re-typed but otherwise are presented as they were written. Not all of the accounts have been included. It was felt that it would be unfair to an individual writer to included accounts that required heavy editing for spelling or grammar and these have been omitted. The accounts have been grouped together in topics using the Hay (1987) categories of Religious Experience. The classification is based on the overall content. Some accounts could be classified under more than one heading.

Awareness of the Presence of the Dead

I felt depressed, lonely and sad because my friend died in a car accident. I felt sad but then all of a sudden I felt the will to go on and think about the good times we had and the more and more I thought about it I felt sort of happy but knowing I would never see my friend ever again; but I feel that he was one of my closest friends and he was a good guy.

The feeling was weird. I knew he was going to have a good after life and I know he has done some bad things but I knew he was sorry for what he had done wrong.

I feel my friend is looking over me and all of the boys and guiding us through the hard times.

He was a good guy and he didn't deserve to die.

This made me think about life and how you can just die anywhere, unaware of what can happen. This also made me stronger and think about what I will do with my life in the future.

When I was about 11 years old I was at home with Mum because I was sick that day. I had some sort of fever. I remember seeing some sort of spirit standing in front of me; it looked like to me an old lady. I ran out of bed screaming and I told Mum all about it. Mum told me it was just my fever.

Two weeks later we were looking through the photo-albums and I got the biggest shock of my life. I saw the same lady that was standing at my bedside in one of the photos. I started


crying and showed my Mum the photo. I guess what surprised me was it was my grandma. She died before I was born which is why I didn't know her.

That's my experience anyway.



I was laying in bed when all of a sudden I felt grief and loss. The next day I found out that my great-aunt died at the same time I had this amazing feeling. My great-aunt and I were very close.


I felt she was saying goodbye for now.



A few days just after my great-nanna died, I went into a great depression as we were rather close.


A few days later, whilst I was lying in bed staring at the ceiling, a blurry figure appeared and spoke with the voice of my great-nanna. She told me everything will be all right and a loss in the future is for the better. Then a warm feeling consumed my body and a smile concealed my face. My life was happy for the next two years until in the third year after her death I had a miscarriage on the anniversary of her funeral. So I assume that was what she meant as I was rather upset.

This was an inspirational experience for me, however, she has not returned since.




I was having a rotten time of life and was sitting on the edge of my bed, knife in hand and I started to scratch down my wrist and had cut one hand and next minute I heard this voice that I had never heard before, but I knew who it was. It was my sister, my dead sister. I had never met her before, but I knew it was her.

She talked to me, she convinced me that I should live the rest of my life and not end it then and that way. She didn't get to live more than a day which when she spoke to me really hit home and I now appreciate my life a lot more.




I was actually asleep. I don't know what time it was but I had a dream that my mum was alive. She had come to visit me at school.

We talked for a while and then she said goodbye. In the dream I was crying and not wanting her to leave but I knew she was going forever. I thought that when she was in my dream, she was saying goodbye because she didn't say it when I was younger.



It was exactly a month after a friend was killed in a car accident. That night we were involved in a minor car accident. When I got home I was thinking about him and looking at the stars. I asked him a question and saw two shooting stars. I felt he was looking down at me.



My mother passed away very recently. However, when I was in my bedroom one time crying and looking at the photo of my mother, I started to reminisce and think of her smile, touch and laugh. But then for a second I felt somebody (a presence) in the room. I felt scared at first and started to pray. I also cried at the same time. Scared that it was an evil spirit. Because someone once told me that if a person commits suicide they go straight to hell without a doubt. So I was scared that it was an evil spirit. Also, when I slept that night, I dreamt and saw my mother. She told me many lessons, lecturing me saying look after and love your siblings and father and stay in school, don't give up. (However, she was saying it in our own language.)

I woke up the next morning and found a bruise on my left leg on the calf muscle side. My father said it was a devil's bite. However, I couldn't make sense of it and the bruise did look

like a large bite mark. I also showed my friends and they were freaked out about the whole situation.

Also for me it's through my sad times that I am often drawn closer to God and have a stronger relationship with him.

Sometimes I feel the presence of my past relatives whom I have known but not had the chance to say goodbye. Also I have felt the presence of my grandfather and he died before he met all of his grandchildren and me being the oldest of his grandchildren I felt he was there to meet me.

Awareness of the Presence of God

I was in Albania, in a very small, poor village where my grandmother was born and grew up. I was troubled by the way people lived in the village, with very little fresh water, no sewerage pipes and houses that were small and dilapidated. My grandmother was a deeply religious person but never attempted to force her beliefs on others. One day I decided to go and visit her church in that small village and see what it was like. I was 12 years old and already a member of the Orthodox religion but had never had a 'spiritual experience' before. I was inside the church all on my own, admiring the beautiful golden Icons. I couldn't believe that such a poor village could have such a beautiful church. As I was about to leave I walked to the door, but I was compelled to turn and take one last look at the altar. As I turned in the darkness I saw an Icon of Jesus glowing with what seemed great intensity.

This experience has made me believe in my religion, despite all adversities.

Many times when I'm in the presence of God praying I get into it and then I feel as though he is there with me. I start to shake and I feel cold but full, it is an experience hard to explain. I feel my hairs stand and I get this feeling like electricity running through my body.

I have recently been thinking of suicide. Yesterday, (Tuesday, 14 March) I stayed home to try and end my life. In the morning I went to church, and when I tried to slit my wrists with a knife I felt pain, but looked and I hadn't even cut myself. I felt a presence in the room. I am sure it was God. I have a purpose in my life. I thank God.

It was at night while I was sleeping. I don't know if it was bad or good, but I dreamt of seeing Jesus and Mary. I have never dreamt of them before. Did I act upon this dream? A little, I felt that I must be special to receive this dream and that God wanted me to do something. In the dream, although Jesus and Mary appeared to my family, they seemed to only talk to my parents. I think this is why I acted so little on this dream. The fact that Jesus and Mary wanted my parents to help them. When I woke up I felt different, and it is this feeling that has made me believe more.

Although I have experienced similar events to the stories mentioned above, I don't believe they are the most important "religious/spiritual experiences". My contact with God is not restricted to a big cataclysmic event, it is constant and continually present even in the mundane. I do not believe the sacred is confined by the four walls of a church, it is omnipresent throughout the world. I believe we are all one in the same – flowers, humans, animals etc. We are all a manifestation of that which is sacred. Therefore, every moment of life is a spiritual experience which if used correctly can allow spiritual growth.


I was attending a youth church for the first time and when I walked in I was astonished to see a large crowd of youth gathered in a large hall and a band playing songs of praise. Coming from Christian and Catholic schools I was shocked to see - well it's hard to put it – but I was shocked to see them moshing to could I say grunge music. The night was so fun and being there and experiencing the ultimate presence of God and rejoicing his name was energising. That night I was invited to become Jesus' friend and was overjoyed. The day after I was quite tired from the night before and we had to get up to get to the movies by 9.30. It was 8.55 a.m. and I had ten mins. To get ready. Usually I would say I was too tired and go back to sleep, but that morning I got up and got ready in 10 minutes which is pretty amazing for me! After the movies I was in the car and we were coming home. I wound the window down and I just felt at ease and I couldn't stop smiling. It was like something had come over me and I was calm (extremely calm!!) I now believe, and I knew then that God was with me and helping me see how life could be if I embraced his presence and became his friend. From this experience I have learned that God is with us always even if we feel depressed. He will always be there for us and forgive us.

My grandmother and I saw something in the sky one day near her house, we took out the camera and took a picture. When the picture was developed, you could see the last supper. Jesus and the disciples sitting at a table. My grandmother still till this day has the picture.


Awareness of a Presence Not Called God

I was at home one afternoon and I was listening to music and cleaning up the house. I was waiting for a particular song to come on but I got sick of waiting so I turned it off and put the remote on top of the stereo. I went into the kitchen and came back to watch the television. I then stopped to see the remote was actually on the couch. But I knew that I definitely put the remote on the stereo because that's where I put it all the time. But for some reason I turned the stereo on and the song I was waiting for was playing. Then the front door slammed shut.


Whether it was the wind, I don't know but I felt like there was someone in the room with me. It took me a while to register what happened.



When I was a child around 7 years old I was sleeping and then I woke up and I saw a person praying next to my bed as if it was a 'guardian angel'. The person was really really white everything, it was really clear, its clothes were white everything and I knew it was an angel. When I looked at it I covered myself with the blanket and when I looked again it had disappeared. It was interesting.



I was sitting by myself, in my room one night, several years ago doing nothing much but typing up some things for someone who I feel close to. For no reason at all I realised my mind wandering, and something else. It was as if someone was talking to me, in my head, in private without my knowledge. When I realised this it was as if the thing fled and disappeared leaving me with an overwhelming feeling of sadness and loneliness. I just sat there with tear-filled eyes till dismissing it and continuing. A couple more pages into typing I felt something and saw a hand reaching for the drawer next to me, a feminine hand, light skin colour. It felt like it wouldn't harm me but I was freaked. I wished it would go away, but it still gently and slowly fingered the air. I couldn't stand it and got out of there a.s.a.p.



I was extremely depressed about a certain relationship in my life. While I was crying I felt something, some kind of presence near me passing vibes of help to me.

Sometimes I believe I have a guardian angel hovering over my back, watching and feeling every move and emotion I express or keep inside. I feel some kind of weight on my back, and I always look behind me, and talk to it. It responds through me. If I ask for help, it helps me. It makes me feel safe and wanted. It's with me now, I can feel it behind me watching.

Patterning of Events

Like that raffle incident, I once had that feeling. In my mind I know that I was going to win. It was a guaranteed chance, because I bought the last 6 tickets. As the tickets were being drawn, I became more excited. The ticket was drawn and it was my number.

Often I have dreams that will come true. They are not visions of exactly the event or circumstance, but they are more like feelings and signs that warn me or reveal truths about my life. One very simple one was a dream where I was extremely angry at my mother because she had worn my grandmother's wedding ring (which is platinum) so often that it split. I was frustrated and screaming at her. About two weeks after the dream my mother showed me the ring and it had split. I was not angry at her as in a way I knew it was going to happen and I just accepted it. Usually though I have more dreams around the time of traumatic or difficult times in my life.

I was sitting once in the car with my father on the way to school. I was feeling a little bored so I began singing Celine Dion's song "That's the Way It Is". After about 2-3 minutes, my father turned on the radio and B105 announced that they were going to play the same song. I looked at Dad and excitedly explained that I too had been singing the same song before. With this, when I began to listen to the words, I had this incredible spiritual connection with God. My spine kept jerking as if a piece of ice had been sent down my back. It was quite overwhelming to think I had guessed the song before it had been played. I kept thinking that God was trying to tell me something through Celine's words. I'm not sure if this could be considered as a 'spiritual experience' but it was a very strange experience.

Only recently, I've found that whenever something major is about to happen whether it be good or bad, I get these funny feelings in my stomach, in fact in my whole body. It's as if I know. An example of this is when my friend went for her driving test. The day before I woke up and I felt awful and I knew something was going to happen. I mentioned this to a close friend and told her that I don't think that the particular person would get their licence and she didn't. This also happened before my grandmother died. For weeks I felt awful and this weird feeling and sure enough about two weeks later she died.

I was standing at a set of lights with some younger kids. They were in a hurry to cross the street. The light went red but there was a car coming. Suddenly one of the kids walked out to cross the road. I caught him just in time so he didn't get hit by the car. I knew the car wasn't going to stop.


Sometimes I can pick things that will happen before they actually do: Like I can guess numbers and little things, like what colour car will be the next to pass my house. Of course, no one would believe me if I told them. Sometimes I get instinctive feelings to either use my left or right arm to do something or pick up one or the other. Maybe I'm just obsessive.

Also, in English, we were taking numbers out to make an order to do our orals. I picked at least 5 people correctly before they were even drawn. Everyone was amazed, but it wasn't anything special. I've done things like that a few times.


Awareness of Help in Prayer

My 11 year old brother is autistic. He is very smart, but finds it difficult to express his feelings, and finds it hard to socialise. From Grade Eight to the start of Grade Twelve, I would always pray at night and ask the Lord if he could make my brother a normal person.


But one night while praying, I suddenly thought, “What is normal? What does my brother have which makes him ‘not normal’?” He has no physical handicap, he talks to me, tells me what games he likes, what he doesn’t like, he looks up to me for guidance in life. He laughs, he plays, but when he tries to talk to others, he finds it difficult. Then I realised, he IS normal. All these years I have been asking God the wrong thing.



I was reading a book which talked about the ‘Doorway to the Soul’. It talked about the supernatural experiences and wisdom. I closed my eyes and fell into an utterly deep sleep, the most peaceful sleep I have ever had. When I awoke I felt revitalised, full of energy. I began to pray and I knew this was one of my first ‘spiritual experiences’.



I was doing a 40km time trial on a road bike set up so it was stationary. I knew it would be tough before I started because I had done at least 5-10 of them before this one. Sometime in the first 3 km I started to feel pretty rotten. But I asked God to be there to push me through it and I believe he/she did. It helped me to stay positive where usually my mind would wonder.




Many times I have asked God to help me with someone or asked for help (e.g. if my sister was sick ask him to take care of her) and he has helped. However I do know that say if a family member died, I cannot blame this on God.


I have recently been aware from the ministry I belong to that by having faith anything is possible. So I have started to really think about God more throughout the day and try to be a better Christian and it has made me feel positive and more happy than I’ve ever felt. And I know with God in my life that he/she is the only way I believe I could live with. I couldn’t imagine not believing in God because God makes sense and meaning to life. And I feel blessed to be a part of this wonderful world God has put me in.

Sacredness in Nature


I was walking through school the other morning when I began to notice how colourful and vibrant the flowers were. It overwhelmed me. The birds all seemed happy and everything was so beautiful. I felt overpowered by the beauty. Life is good, and colours help you realise that.



One weekend my family and I went on a holiday to an island along the Great Barrier Reef. I woke up early one morning so that I could watch the sun rise. And as I was sitting on the white sand of the beach gazing out at the ocean the sun started to rise. It was the most beautiful picture I had ever seen in my life. And from that moment on, I knew that I believed in God. Because only God can create such a beautiful thing, like the sunrise I watched.



I go rock climbing with my dad and when you reach the top, all creation is at your feet, there is something majestic and overpowering about nature and its overwhelming presence that surrounds you – just a little person. Huge things like mountains, rocks and waves make you realise how you can't take on everything. There is something majestic about natural things like the examples given that I just can't explain.



I was at a school camp and we were camping near Fernvale on the Brisbane River. It was a fairly cold night and we had just woken up. There was a light mist over the river and up onto the bank, as I stepped out of the tent and looked around the beauty was overwhelming. It is how I would describe heaven. Along with the beauty there was this presence that I could not explain.

In a retreat camp in year 11, it was lunch time and I took a walk into the beautiful wide fields behind the main building. I stared at the outlines of mountains faraway and looked at the blue, blue sky. All of a sudden I felt I could stay here forever in the beautiful coolness and nature I was in. I felt amazed by the beauty of the lands God created.


Receiving Help in Prayer

I was in a room with the school group – less than half the year level and we were trying meditation (at a religious Buddhist place) and I wasn't really having a good day and was sick and I tried meditation and in a few minutes I had this feeling that everything was going to be O.K. and I felt happy and like my energy had been refilled.

All Things are 'One'

This has happened to me a few times. I'll be outside somewhere – surrounded by nature – I remember being out in a big field once, looking up into the sky, lying on my back – there were beautiful clouds floating across the perfect blue, and there was a beautiful breeze. Suddenly, if I relax, and open my mind, I get a rush of serenity and peace wash over me – like no matter how stuffed up my life was, that I knew everything was going to be O.K. It was like my mind was racing at a million miles an hour, with all these images in my head, but I was still completely at peace. As I stare into the blue sky, it's like a wave of realization flows through me and for a few confused seconds I actually know the meaning of life and it's wonderful, and I suddenly wonder why anyone would want to give up hope. The whole feeling only lasts for a few minutes, and then your brain suddenly snaps back to reality, but I always remember after the experience my feelings of hope for my future and the world are restored, and now, when I get depressed, I think of those special moments, though confusing,

and it's like I'm waiting for the next one to happen – it gives me something to live for. I truly think that it is God's way of helping me through my difficult times – and it really has helped.



When I was living near the beach in Sydney, it was a very early, crisp morning. I had just been for a surf and I had sat on my board on the sand. There were only about two other people on the beach and I was just sitting watching the ocean move with all its power and just all of a sudden I could just see things better, hear the ocean a lot clearer and it seemed like everything was in slow-mo.

In ways I thought I fainted because about 15 minutes passed and it only felt like 20 seconds.

Appendix B

Detailed Statistical Results

Appendix B

Descriptive Statistics – Means and Standard Deviations of Items

	N	Min	Max	M	SD
SCHOOL	213	2	5	3.46	1.17
B01 Q1 Gender	213	1	2	1.57	.50
B02 Year Level	213	1	2	2.00	.07
B03 Religion	213	1	6	3.54	1.20
B04 Australian	187	1	3	1.99	.73
B05 Other English	119	1	3	1.59	.74
B06 European	115	1	3	1.37	.61
B07 Asian	116	1	3	1.38	.69
B08 Pacific Island	103	1	3	1.20	.57
B09 South American	106	1	3	1.25	.57
B10 Other	40	1	3	1.80	.79
F01 Parents	213	1	6	1.85	1.50
F02 Attitude Religion: Mother	208	1	5	3.55	.95
F03 Attitude Religion: Father	198	1	5	3.44	.98
F04 Attitude Religion: Self	212	1	5	3.26	.93
F05 Attitude Religion: Older sib	124	1	5	3.11	.82
F06 Attitude Religion: Younger sib	129	1	5	3.25	.81
F07 Church Attendance Mother	209	1	7	3.80	2.07
F08 Church Attendance Father	197	1	7	3.50	2.10
F09 Church Attendance Self	212	1	7	3.71	2.00
F10 Church Attendance Older sib	132	1	7	3.39	2.03
F11 Church Attendance Younger sib	136	1	7	3.88	2.15
F12 Happiness home	213	1	5	3.56	1.05
S01 RE subject	213	1	2	1.48	.50
S02 Influential subject: RE	206	1	3	1.98	.66
S03 Influential subject: Soc Ed	134	1	3	1.57	.68
S04 Influential subject: Eng	206	1	3	1.80	.68
S05 Influential subject: Math	205	1	3	1.47	.68
S06 Influential subject: Science	157	1	3	1.72	.77
S07 Influential subject: Art	137	1	3	1.55	.73
S08 Influential subject: History	134	1	3	1.68	.81
S09 Influential subject: Biology	147	1	3	1.69	.75
S10 Influential subject: Chemistry	129	1	3	1.46	.70
S11 Influential subject: Physics	123	1	3	1.49	.75
S12 Influential subject: Geog	124	1	3	1.52	.73
S13 Influential subject: Other	84	1	3	2.20	.80
S14 Happiness school	212	1	5	3.79	1.05
S15 Involved in Retreats	210	1	5	3.87	1.25
S16 Involved with Disabled	207	1	5	1.74	1.01
S17 Involved with Aged	209	1	5	1.94	1.01
S18 Involved with Poor	207	1	5	1.49	.90
S19 Involved with Children	208	1	5	2.50	1.34
S20 Involved with Fund-raising	211	1	5	2.93	1.18
S21 Involved with Sport	212	1	5	3.27	1.53
S22 Involved in Performance	211	1	5	2.27	1.35
S23 Involved in Competitions etc	209	1	5	2.27	1.47
V01 Enjoy RE	212	1	5	3.06	1.14
V02 Religious language lacks meaning	213	1	5	2.90	1.20
V03 Science will control world	213	1	5	2.94	1.21
V04 Scientific law unchangeable	211	1	5	3.01	.96
V05 Believe with proof only	210	1	5	2.75	1.39
V06 Dont understand world	211	1	5	3.62	1.07
V07 Important things not proved	211	1	5	3.88	1.14
V08 Religion answers questions	212	1	5	2.99	1.26
V09 Majority rules	212	1	5	1.69	.88
V10 Church unnecessary	212	1	5	4.11	1.18
V11 Live Christian values	209	1	5	3.00	1.34
V12 Concern for poor	211	1	5	4.06	.98

	N	Min	Max	M	SD
V13 Believe in God	210	1	5	3.93	1.29
V14 Help lonely	211	1	5	4.17	.86
V15 God loves me	209	1	5	3.66	1.23
V16 Concern for world poverty	211	1	5	4.46	.83
V17 Life not faith important	211	1	5	3.94	1.15
V18 Sometimes uncertain about God	209	1	5	3.48	1.46
V19 Felt close to God at times	210	1	5	3.31	1.36
V20 Pattern and Purpose to life	211	1	5	3.96	.90
V21 Religion not relevant	211	1	5	2.63	1.11
V22 Church not relevant	210	1	5	3.92	1.20
E01 Most valuable experience indescribable	213	1	5	4.26	.91
E02 Experienced loneliness or depression	213	1	5	3.87	1.24
E03 Experienced evil presence	212	1	5	3.36	1.23
E04 Experienced powerful presence	213	1	5	3.54	1.10
E05 Felt no purpose in life sometimes	212	1	5	3.16	1.53
E06 Sometimes there is a pattern to events	211	1	5	3.73	1.07
E07 Close awareness of God sometimes	211	1	5	3.21	1.34
E08 No meaning for life sometimes	213	1	5	3.21	1.45
E09 Felt presence of deceased friend or relative	211	1	5	3.02	1.39
E10 Recognised a sacredness in nature	211	1	5	3.10	1.18
E11 Found joy and meaning for life	211	1	5	3.08	1.17
P01 Help in Prayer	209	1	4	2.14	.97
P02 Presence of God	213	1	4	1.32	.67
P03 Sacredness in Nature	213	1	4	2.48	1.09
P04 All things are one	213	1	4	1.63	.88
P05 Pattern to events	213	1	4	2.64	1.14
P06 Alone	85	1	2	1.39	.49
P07 Not told	81	1	2	1.51	.50
U01 Love	2	1	1	1.00	.00
U02 Life	6	1	1	1.00	.00
U03 Religious	0				
U04 Field	2	1	1	1.00	.00
U05 Landscape	11	1	1	1.00	.00
U06 Garden	1	1	1	1.00	.
U07 Valley	2	1	1	1.00	.00
U08 River	1	1	1	1.00	.
U09 Universe	1	1	1	1.00	.
U10 Sun	5	1	1	1.00	.00
R01 Church	3	1	1	1.00	.00
R02 Prayer	2	1	1	1.00	.00
R03 Lord	0				
R04 Father	0				
R05 Holy	0				
R06 Christ	0				
T01 God	20	1	1	1.00	.00
T02 Good	0				
T03 Jesus	3	1	1	1.00	.00
T04 Death	7	1	1	1.00	.00
X01 Fearful presence	5	1	1	1.00	.00
X02 Patterning	29	1	1	1.00	.00
X03 Auditory	3	1	1	1.00	.00
X04 Touch	4	1	1	1.00	.00
X05 Awareness of God	24	1	1	1.00	.00
X06 Near death exp	3	1	1	1.00	.00
X07 Peace	10	1	1	1.00	.00
X08 Help in Prayer	5	1	1	1.00	.00
X09 Sacredness in nature	11	1	1	1.00	.00
X10 Presence of other	7	1	1	1.00	.00
X11 Experience of Light	2	1	1	1.00	.00
X12 Inexpressible	2	1	1	1.00	.00

Results of Individual Items

SCHOOL

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	2	61	28.6	28.6	28.6
	3	52	24.4	24.4	53.1
	4	42	19.7	19.7	72.8
	5	58	27.2	27.2	100.0
	Total	213	100.0	100.0	

¢

Q1 B01 Gender

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Male	91	42.7	42.7	42.7
	2 Female	122	57.3	57.3	100.0
	Total	213	100.0	100.0	

¢

Q2 B02 Year Level

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Year 11	1	.5	.5	.5
	2 Year 12	212	99.5	99.5	100.0
	Total	213	100.0	100.0	

¢

Q3 B03 Religion

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Uniting	8	3.8	3.8	3.8
	3 Catholic	149	70.0	70.0	73.7
	4 Anglican	7	3.3	3.3	77.0
	5 No Religion	22	10.3	10.3	87.3
	6 Other	27	12.7	12.7	100.0
	Total	213	100.0	100.0	

¢

Q4 B04 Australian

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very Low	51	23.9	27.3	27.3
	2 Medium	87	40.8	46.5	73.8
	3 Very strong	49	23.0	26.2	100.0
	Total	187	87.8	100.0	
Missing	9	26	12.2		
Total		213	100.0		

¢

Q4 B05 Other English

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Very Low	67	31.5	56.3	56.3
	2	Medium	34	16.0	28.6	84.9
	3	Very strong	18	8.5	15.1	100.0
	Total		119	55.9	100.0	
Missing	9		94	44.1		
Total			213	100.		

Q4 B06 European

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Very Low	80	37.6	69.6	69.6
	2	Medium	27	12.7	23.5	93.0
	3	Very strong	8	3.8	7.0	100.0
	Total		115	54.0	100.0	
Missing	9		98	46.0		
Total			213	100.		

Q4 B07 Asian

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Very Low	86	40.4	74.1	74.1
	2	Medium	16	7.5	13.8	87.9
	3	Very strong	14	6.6	12.1	100.0
	Total		116	54.5	100.0	
Missing	9		97	45.5		
Total			213	100.		

Q4 B08 Pacific Island

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Very Low	90	42.3	87.4	87.4
	2	Medium	5	2.3	4.9	92.2
	3	Very strong	8	3.8	7.8	100.0
	Total		103	48.4	100.0	
Missing	9		110	51.6		
Total			213	100.		

Q4 B09 South American

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Very Low	86	40.4	81.1	81.1
	2	Medium	13	6.1	12.3	93.4
	3	Very strong	7	3.3	6.6	100.0
	Total		106	49.8	100.0	
Missing	9		107	50.2		
Total			213	100.		

Q4 B10 Other

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Very Low	17	8.0	42.5	42.5
	2	Medium	14	6.6	35.0	77.5
	3	Very strong	9	4.2	22.5	100.0
	Total		40	18.8	100.0	
Missing	9		173	81.2		
Total			213	100.		

Q5 F01 Parents

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Mum&Dad	150	70.4	70.4	70.4
	2 Mum&Gdn	14	6.6	6.6	77.0
	3 Dad&Gdn	5	2.3	2.3	79.3
	4 Sngl Mum	28	13.1	13.1	92.5
	5 Sngl Dad	6	2.8	2.8	95.3
	6 Other	10	4.7	4.7	100.0
	Total	213	100.0	100.0	

Q6 F02 Attitude Religion: Mother

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very anti	8	3.8	3.8	3.8
	2 Negative	11	5.2	5.3	9.1
	3 Neutral	80	37.6	38.5	47.6
	4 Positive	76	35.7	36.5	84.1
	5 Very Rel	33	15.5	15.9	100.0
	Total	208	97.7	100.0	
Missing	6 Unknown	2	.9		
	9	3	1.4		
	Total	5	2.3		
Total		213	100.0		

Q7 F03 Attitude Religion: Father

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very anti	9	4.2	4.5	4.5
	2 Negative	12	5.6	6.1	10.6
	3 Neutral	91	42.7	46.0	56.6
	4 Positive	55	25.8	27.8	84.3
	5 Very Rel	31	14.6	15.7	100.0
	Total	198	93.0	100.0	
Missing	6 Unknown	1	.5		
	9	14	6.6		
	Total	15	7.0		
Total		213	100.0		

Q8 F04 Attitude Religion: Self

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very anti	11	5.2	5.2	5.2
	2 Negative	18	8.5	8.5	13.7
	3 Neutral	107	50.2	50.5	64.2
	4 Positive	56	26.3	26.4	90.6
	5 Very Rel	20	9.4	9.4	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q9 F05 Attitude Religion: Older sib

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very anti	6	2.8	4.8	4.8
	2 Negative	13	6.1	10.5	15.3
	3 Neutral	70	32.9	56.5	71.8
	4 Positive	31	14.6	25.0	96.8
	5 Very Rel	4	1.9	3.2	100.0
	Total	124	58.2	100.0	
Missing	6 Unknown	6	2.8		
	9	83	39.0		
	Total	89	41.8		
Total		213	100.0		

Q10 F06 Attitude Religion: Younger sib

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very anti	6	2.8	4.7	4.7
	2 Negative	6	2.8	4.7	9.3
	3 Neutral	73	34.3	56.6	65.9
	4 Positive	38	17.8	29.5	95.3
	5 Very Rel	6	2.8	4.7	100.0
	Total	129	60.6	100.0	
Missing	6 Unknown	7	3.3		
	9	77	36.2		
	Total	84	39.4		
Total		213	100.0		

Q11 F07 Church Attendance Mother

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	38	17.8	18.2	18.2
	2 Rarely	26	12.2	12.4	30.6
	3 Fam.Occas	42	19.7	20.1	50.7
	4 Yearly	25	11.7	12.0	62.7
	5 Monthly	21	9.9	10.0	72.7
	6 Weekly	25	11.7	12.0	84.7
	7 Weekly+	32	15.0	15.3	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

Q12 F08 Church Attendance Father

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	46	21.6	23.4	23.4
	2 Rarely	27	12.7	13.7	37.1
	3 Fam.Occas	44	20.7	22.3	59.4
	4 Yearly	20	9.4	10.2	69.5
	5 Monthly	10	4.7	5.1	74.6
	6 Weekly	22	10.3	11.2	85.8
	7 Weekly+	28	13.1	14.2	100.0
	Total	197	92.5	100.0	
Missing	9	16	7.5		
Total		213	100.0		

Q13 F09 Church Attendance Self

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	33	15.5	15.6	15.6
	2 Rarely	42	19.7	19.8	35.4
	3 Fam.Occas	35	16.4	16.5	51.9
	4 Yearly	23	10.8	10.8	62.7
	5 Monthly	30	14.1	14.2	76.9
	6 Weekly	21	9.9	9.9	86.8
	7 Weekly+	28	13.1	13.2	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

¢

Q14 F10 Church Attendance Older sib

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	28	13.1	21.2	21.2
	2 Rarely	27	12.7	20.5	41.7
	3 Fam.Occas	24	11.3	18.2	59.8
	4 Yearly	17	8.0	12.9	72.7
	5 Monthly	9	4.2	6.8	79.5
	6 Weekly	9	4.2	6.8	86.4
	7 Weekly+	18	8.5	13.6	100.0
	Total	132	62.0	100.0	
Missing	9	81	38.0		
Total		213	100.0		

Q15 F11 Church Attendance Younger sib

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	25	11.7	18.4	18.4
	2 Rarely	20	9.4	14.7	33.1
	3 Fam.Occas	23	10.8	16.9	50.0
	4 Yearly	12	5.6	8.8	58.8
	5 Monthly	14	6.6	10.3	69.1
	6 Weekly	19	8.9	14.0	83.1
	7 Weekly+	23	10.8	16.9	100.0
	Total	136	63.8	100.0	
Missing	9	77	36.2		
Total		213	100.0		

Q16 F12 Happiness home

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very unhappy	10	4.7	4.7	4.7
	2 Unhappy	23	10.8	10.8	15.5
	3 Satisfied	55	25.8	25.8	41.3
	4 Happy	88	41.3	41.3	82.6
	5 Very happy	37	17.4	17.4	100.0
	Total	213	100.0	100.0	

Q17 S01 RE subject

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Study of Rel	111	52.1	52.1	52.1
	2 Rel Ed	102	47.9	47.9	100.0
	Total	213	100.0	100.0	

Q18 S02 Influential subject: RE

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	47	22.1	22.8	22.8
	2 Slightly	116	54.5	56.3	79.1
	3 Very much	43	20.2	20.9	100.0
	Total	206	96.7	100.0	
Missg	9	7	3.3		
Total		213	100.0		

Q18 S03 Influential subject: Soc Ed

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	71	33.3	53.0	53.0
	2 Slightly	49	23.0	36.6	89.6
	3 Very much	14	6.6	10.4	100.0
	Total	134	62.9	100.0	
Missg	9	79	37.1		
Total		213	100.0		

Q18 S04 Influential subject: Eng

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	72	33.8	35.0	35.0
	2 Slightly	103	48.4	50.0	85.0
	3 Very much	31	14.6	15.0	100.0
	Total	206	96.7	100.0	
Missg	9	7	3.3		
Total		213	100.0		

Q18 S05 Influential subject: Math

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	131	61.5	63.9	63.9
	2 Slightly	52	24.4	25.4	89.3
	3 Very much	22	10.3	10.7	100.0
	Total	205	96.2	100.0	
Missg	9	8	3.8		
Total		213	100.0		

Q18 S06 Influential subject: Science

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	74	34.7	47.1	47.1
	2 Slightly	53	24.9	33.8	80.9
	3 Very much	30	14.1	19.1	100.0
	Total	157	73.7	100.0	
Missg	9	56	26.3		
Total		213	100.0		

Q18 S07 Influential subject: Art

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	80	37.6	58.4	58.4
	2 Slightly	38	17.8	27.7	86.1
	3 Very much	19	8.9	13.9	100.0
	Total	137	64.3	100.0	
Missg	9	76	35.7		
Total		213	100.0		

Q18 S08 Influential subject: History

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	72	33.8	53.7	53.7
	2 Slightly	33	15.5	24.6	78.4
	3 Very much	29	13.6	21.6	100.0
	Total	134	62.9	100.0	
Missg	9	79	37.1		
Total		213	100.0		

Q18 S09 Influential subject: Biology

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	70	32.9	47.6	47.6
	2 Slightly	52	24.4	35.4	83.0
	3 Very much	25	11.7	17.0	100.0
	Total	147	69.0	100.0	
Missg	9	66	31.0		
Total		213	100.0		

Q18 S10 Influential subject: Chemistry

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	85	39.9	65.9	65.9
	2 Slightly	29	13.6	22.5	88.4
	3 Very much	15	7.0	11.6	100.0
	Total	129	60.6	100.0	
Missg	9	84	39.4		
Total		213	100.0		

Q18 S11 Influential subject: Physics

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	82	38.5	66.7	66.7
	2 Slightly	22	10.3	17.9	84.6
	3 Very much	19	8.9	15.4	100.0
	Total	123	57.7	100.0	
Missg	9	90	42.3		
Total		213	100.0		

Q18 S12 Influential subject: Geog

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	77	36.2	62.1	62.1
	2 Slightly	30	14.1	24.2	86.3
	3 Very much	17	8.0	13.7	100.0
	Total	124	58.2	100.0	
Missg	9	89	41.8		
Total		213	100.0		

Q18 S13 Influential subject: Other

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Very little	20	9.4	23.8	23.8
	2 Slightly	27	12.7	32.1	56.0
	3 Very much	37	17.4	44.0	100.0
	Total	84	39.4	100.0	
Missg	9	129	60.6		
Total		213	100.0		

Q19 S14 Happiness school

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	12	5.6	5.7	5.7
	2 Prob false	11	5.2	5.2	10.8
	3 Uncertain	38	17.8	17.9	28.8
	4 Prob true	99	46.5	46.7	75.5
	5 True	52	24.4	24.5	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q20 S15 Involved in Retreats

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	9	4.2	4.3	4.3
	2 Rarely	30	14.1	14.3	18.6
	3 Occasional	36	16.9	17.1	35.7
	4 Regular	40	18.8	19.0	54.8
	5 Often	95	44.6	45.2	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

Q21 S16 Involved with Disabled

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	110	51.6	53.1	53.1
	2 Rarely	62	29.1	30.0	83.1
	3 Occasional	20	9.4	9.7	92.8
	4 Regular	8	3.8	3.9	96.6
	5 Often	7	3.3	3.4	100.0
	Total	207	97.2	100.0	
Missing	9	6	2.8		
Total		213	100.0		

Q22 S17 Involved with Aged

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	88	41.3	42.1	42.1
	2 Rarely	64	30.0	30.6	72.7
	3 Occasional	44	20.7	21.1	93.8
	4 Regular	7	3.3	3.3	97.1
	5 Often	6	2.8	2.9	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

Q23 S18 Involved with Poor

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Never	143	67.1	69.1	69.1
	2	Rarely	42	19.7	20.3	89.4
	3	Occasional	13	6.1	6.3	95.7
	4	Regular	3	1.4	1.4	97.1
	5	Often	6	2.8	2.9	100.0
	Total		207	97.2	100.0	
Missing	9		6	2.8		
Total			213	100.0		

Q24 S19 Involved with Children

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Never	72	33.8	34.6	34.6
	2	Rarely	31	14.6	14.9	49.5
	3	Occasional	54	25.4	26.0	75.5
	4	Regular	32	15.0	15.4	90.9
	5	Often	19	8.9	9.1	100.0
	Total		208	97.7	100.0	
Missing	9		5	2.3		
Total			213	100.0		

Q26 S20 Involved with Fund-raising

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Never	25	11.7	11.8	11.8
	2	Rarely	52	24.4	24.6	36.5
	3	Occasional	74	34.7	35.1	71.6
	4	Regular	33	15.5	15.6	87.2
	5	Often	27	12.7	12.8	100.0
	Total		211	99.1	100.0	
Missing	9		2	.9		
Total			213	100.0		

Q27 S21 Involved with Sport

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Never	40	18.8	18.9	18.9
	2	Rarely	35	16.4	16.5	35.4
	3	Occasional	37	17.4	17.5	52.8
	4	Regular	28	13.1	13.2	66.0
	5	Often	72	33.8	34.0	100.0
	Total		212	99.5	100.0	
Missing	9		1	.5		
Total			213	100.0		

Q28 S22 Involved in Performance

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Never	83	39.0	39.3	39.3
	2	Rarely	54	25.4	25.6	64.9
	3	Occasional	33	15.5	15.6	80.6
	4	Regular	17	8.0	8.1	88.6
	5	Often	24	11.3	11.4	100.0
	Total		211	99.1	100.0	
Missing	9		2	.9		
Total			213	100.0		

Q29 S23 Involved in Competitions etc

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	96	45.1	45.9	45.9
	2 Rarely	38	17.8	18.2	64.1
	3 Occasional	30	14.1	14.4	78.5
	4 Regular	13	6.1	6.2	84.7
	5 Often	32	15.0	15.3	100.0
	Total	209	98.1	100.0	
Missing	9	3	1.4		
	System	1	.5		
	Total	4	1.9		
Total		213	100.0		

Q30 V01 Enjoy RE

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	29	13.6	13.7	13.7
	2 Prob false	32	15.0	15.1	28.8
	3 Uncertain	61	28.6	28.8	57.5
	4 Prob true	78	36.6	36.8	94.3
	5 True	12	5.6	5.7	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q31 V02 Religious language lacks meaning

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	30	14.1	14.1	14.1
	2 Prob false	50	23.5	23.5	37.6
	3 Uncertain	69	32.4	32.4	70.0
	4 Prob true	40	18.8	18.8	88.7
	5 True	24	11.3	11.3	100.0
	Total	213	100.0	100.0	

Q32 V03 Science will control world

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	32	15.0	15.0	15.0
	2 Prob false	47	22.1	22.1	37.1
	3 Uncertain	54	25.4	25.4	62.4
	4 Prob true	61	28.6	28.6	91.1
	5 True	19	8.9	8.9	100.0
	Total	213	100.0	100.0	

Q33 V04 Scientific law unchangeable

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	14	6.6	6.6	6.6
	2 Prob false	41	19.2	19.4	26.1
	3 Uncertain	98	46.0	46.4	72.5
	4 Prob true	45	21.1	21.3	93.8
	5 True	13	6.1	6.2	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q34 V05 Believe with proof only

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	52	24.4	24.8	24.8
	2 Prob false	49	23.0	23.3	48.1
	3 Uncertain	38	17.8	18.1	66.2
	4 Prob true	41	19.2	19.5	85.7
	5 True	30	14.1	14.3	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

Q35 V06 Dont understand world

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	7	3.3	3.3	3.3
	2 Prob false	25	11.7	11.8	15.2
	3 Uncertain	59	27.7	28.0	43.1
	4 Prob true	71	33.3	33.6	76.8
	5 True	49	23.0	23.2	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q36 V07 Important things not proved

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	11	5.2	5.2	5.2
	2 Prob false	15	7.0	7.1	12.3
	3 Uncertain	39	18.3	18.5	30.8
	4 Prob true	70	32.9	33.2	64.0
	5 True	76	35.7	36.0	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q37 V08 Religion answers questions

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	32	15.0	15.1	15.1
	2 Prob false	44	20.7	20.8	35.8
	3 Uncertain	59	27.7	27.8	63.7
	4 Prob true	49	23.0	23.1	86.8
	5 True	28	13.1	13.2	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q38 V09 Majority rules

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	113	53.1	53.3	53.3
	2 Prob false	60	28.2	28.3	81.6
	3 Uncertain	32	15.0	15.1	96.7
	4 Prob true	5	2.3	2.4	99.1
	5 True	2	.9	.9	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q39 V10 Church unnecessary

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	10	4.7	4.7	4.7
	2 Prob false	17	8.0	8.0	12.7
	3 Uncertain	26	12.2	12.3	25.0
	4 Prob true	46	21.6	21.7	46.7
	5 True	113	53.1	53.3	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q40 V11 Live Christian values

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	39	18.3	18.7	18.7
	2 Prob false	39	18.3	18.7	37.3
	3 Uncertain	44	20.7	21.1	58.4
	4 Prob true	57	26.8	27.3	85.6
	5 True	30	14.1	14.4	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

Q41 V12 Concern for poor

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	5	2.3	2.4	2.4
	2 Prob false	10	4.7	4.7	7.1
	3 Uncertain	34	16.0	16.1	23.2
	4 Prob true	80	37.6	37.9	61.1
	5 True	82	38.5	38.9	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q42 V13 Believe in God

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	17	8.0	8.1	8.1
	2 Prob false	11	5.2	5.2	13.3
	3 Uncertain	46	21.6	21.9	35.2
	4 Prob true	31	14.6	14.8	50.0
	5 True	105	49.3	50.0	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

Q43 V14 Help lonely

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	3	1.4	1.4	1.4
	2 Prob false	7	3.3	3.3	4.7
	3 Uncertain	24	11.3	11.4	16.1
	4 Prob true	94	44.1	44.5	60.7
	5 True	83	39.0	39.3	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q44 V15 God loves me

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	19	8.9	9.1	9.1
	2 Prob false	6	2.8	2.9	12.0
	3 Uncertain	74	34.7	35.4	47.4
	4 Prob true	38	17.8	18.2	65.6
	5 True	72	33.8	34.4	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

Q45 V16 Concern for world poverty

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	3	1.4	1.4	1.4
	2 Prob false	4	1.9	1.9	3.3
	3 Uncertain	16	7.5	7.6	10.9
	4 Prob true	58	27.2	27.5	38.4
	5 True	130	61.0	61.6	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q46 V17 Life not faith important

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	11	5.2	5.2	5.2
	2 Prob false	12	5.6	5.7	10.9
	3 Uncertain	43	20.2	20.4	31.3
	4 Prob true	57	26.8	27.0	58.3
	5 True	88	41.3	41.7	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q47 V18 Sometimes uncertain about God

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	34	16.0	16.3	16.3
	2 Prob false	23	10.8	11.0	27.3
	3 Uncertain	31	14.6	14.8	42.1
	4 Prob true	51	23.9	24.4	66.5
	5 True	70	32.9	33.5	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

Q48 V19 Felt close to God at times

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	30	14.1	14.3	14.3
	2 Prob false	24	11.3	11.4	25.7
	3 Uncertain	63	29.6	30.0	55.7
	4 Prob true	36	16.9	17.1	72.9
	5 True	57	26.8	27.1	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

Q49 V20 Pattern and Purpose to life

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	2	.9	.9	.9
	2 Prob false	7	3.3	3.3	4.3
	3 Uncertain	56	26.3	26.5	30.8
	4 Prob true	79	37.1	37.4	68.2
	5 True	67	31.5	31.8	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q50 V21 Religion not relevant

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	40	18.8	19.0	19.0
	2 Prob false	50	23.5	23.7	42.7
	3 Uncertain	81	38.0	38.4	81.0
	4 Prob true	28	13.1	13.3	94.3
	5 True	12	5.6	5.7	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q51 V22 Church not relevant

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	16	7.5	7.6	7.6
	2 Prob false	8	3.8	3.8	11.4
	3 Uncertain	39	18.3	18.6	30.0
	4 Prob true	60	28.2	28.6	58.6
	5 True	87	40.8	41.4	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

Q52 E01 Most valuable experience indescribable

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	3	1.4	1.4	1.4
	2 Prob false	8	3.8	3.8	5.2
	3 Uncertain	25	11.7	11.7	16.9
	4 Prob true	72	33.8	33.8	50.7
	5 True	105	49.3	49.3	100.0
	Total	213	100.0	100.0	

Q53 E02 Experienced loneliness or depression

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	15	7.0	7.0	7.0
	2 Prob false	22	10.3	10.3	17.4
	3 Uncertain	23	10.8	10.8	28.2
	4 Prob true	69	32.4	32.4	60.6
	5 True	84	39.4	39.4	100.0
	Total	213	100.0	100.0	

Q54 E03 Experienced evil presence

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	22	10.3	10.4	10.4
	2 Prob false	28	13.1	13.2	23.6
	3 Uncertain	53	24.9	25.0	48.6
	4 Prob true	69	32.4	32.5	81.1
	5 True	40	18.8	18.9	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q55 E04 Experienced powerful presence

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	13	6.1	6.1	6.1
	2 Prob false	15	7.0	7.0	13.1
	3 Uncertain	76	35.7	35.7	48.8
	4 Prob true	62	29.1	29.1	77.9
	5 True	47	22.1	22.1	100.0
	Total	213	100.0	100.0	

Q56 E05 Felt no purpose in life sometimes

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	49	23.0	23.1	23.1
	2 Prob false	31	14.6	14.6	37.7
	3 Uncertain	26	12.2	12.3	50.0
	4 Prob true	50	23.5	23.6	73.6
	5 True	56	26.3	26.4	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

Q57 E06 Sometimes there is a pattern to events

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	9	4.2	4.3	4.3
	2 Prob false	14	6.6	6.6	10.9
	3 Uncertain	60	28.2	28.4	39.3
	4 Prob true	70	32.9	33.2	72.5
	5 True	58	27.2	27.5	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q58 E07 Close awareness of God sometimes

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	32	15.0	15.2	15.2
	2 Prob false	30	14.1	14.2	29.4
	3 Uncertain	55	25.8	26.1	55.5
	4 Prob true	50	23.5	23.7	79.1
	5 True	44	20.7	20.9	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q59 E08 No meaning for life sometimes

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	42	19.7	19.7	19.7
	2 Prob false	26	12.2	12.2	31.9
	3 Uncertain	45	21.1	21.1	53.1
	4 Prob true	46	21.6	21.6	74.6
	5 True	54	25.4	25.4	100.0
	Total	213	100.0	100.0	

Q60 E09 Felt presence of deceased friend or relative

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	40	18.8	19.0	19.0
	2 Prob false	37	17.4	17.5	36.5
	3 Uncertain	56	26.3	26.5	63.0
	4 Prob true	34	16.0	16.1	79.1
	5 True	44	20.7	20.9	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q61 E10 Recognised a sacredness in nature

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	27	12.7	12.8	12.8
	2 Prob false	25	11.7	11.8	24.6
	3 Uncertain	88	41.3	41.7	66.4
	4 Prob true	41	19.2	19.4	85.8
	5 True	30	14.1	14.2	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q62 E11 Found joy and meaning for life

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	28	13.1	13.3	13.3
	2 Prob false	30	14.1	14.2	27.5
	3 Uncertain	73	34.3	34.6	62.1
	4 Prob true	58	27.2	27.5	89.6
	5 True	22	10.3	10.4	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

Q63 P01 Help in Prayer

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	62	29.1	29.7	29.7
	2 Unsure	79	37.1	37.8	67.5
	3 Prob Yes	45	21.1	21.5	89.0
	4 Yes	23	10.8	11.0	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

Q64 P02 Presence of God

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	164	77.0	77.0	77.0
	2 Unsure	35	16.4	16.4	93.4
	3 Prob Yes	9	4.2	4.2	97.7
	4 Yes	5	2.3	2.3	100.0
	Total	213	100.0	100.0	

Q65 P03 Sacredness in Nature

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	51	23.9	23.9	23.9
	2 Unsure	57	26.8	26.8	50.7
	3 Prob Yes	57	26.8	26.8	77.5
	4 Yes	48	22.5	22.5	100.0
	Total	213	100.0	100.0	

Q66 P04 All things are one

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	125	58.7	58.7	58.7
	2 Unsure	53	24.9	24.9	83.6
	3 Prob Yes	24	11.3	11.3	94.8
	4 Yes	11	5.2	5.2	100.0
	Total	213	100.0	100.0	

Q67 P05 Pattern to events

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	49	23.0	23.0	23.0
	2 Unsure	43	20.2	20.2	43.2
	3 Prob Yes	56	26.3	26.3	69.5
	4 Yes	65	30.5	30.5	100.0
	Total	213	100.0	100.0	

Written Accounts

P06 Alone

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Alone	52	24.4	61.2	61.2
	2 In company	33	15.5	38.8	100.0
	Total	85	39.9	100.0	
Missing	9	128	60.1		
Total		213	100.0		

P07 Not told

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Not told	40	18.8	49.4	49.4
	2 Have told	41	19.2	50.6	100.0
	Total	81	38.0	100.0	
Missing	9	132	62.0		
Total		213	100.0		

Word Analysis**Unitive Experience**

U01 Love

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Mention	2	.9	100.0	100.0
Missing	9 Nil	211	99.1		
Total		213	100.0		

U02 Life

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Mention	6	2.8	100.0	100.0
Missing	9 Nil	207	97.2		
Total		213	100.0		

U03 Religious

		Frequency	Pct
Missing	9 Nil	213	100.0

U04 Field

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Mention	2	.9	100.0	100.0
Missing	9 Nil	211	99.1		
Total		213	100.0		

U05 Landscape

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	11	5.2	100.0	100.0
Missing	9	Nil	202	94.8		
Total			213	100.0		

U06 Garden

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	1	.5	100.0	100.0
Missing	9	Nil	212	99.5		
Total			213	100.0		

U07 Valley

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	2	.9	100.0	100.0
Missing	9	Nil	211	99.1		
Total			213	100.0		

U08 River

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	1	.5	100.0	100.0
Missing	9	Nil	212	99.5		
Total			213	100.0		

U09 Universe

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	1	.5	100.0	100.0
Missing	9	Nil	212	99.5		
Total			213	100.0		

U10 Sun

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	5	2.3	100.0	100.0
Missing	9	Nil	208	97.7		
Total			213	100.0		

Other Experiences - Links to Christian Faith

R01 Church

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	3	1.4	100.0	100.0
Missing	9	Nil	210	98.6		
Total			213	100.0		

R02 Prayer

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	2	.9	100.0	100.0
Missing	9	Nil	211	99.1		
Total			213	100.0		

R03 Lord

			Frequency	Pct
Missing	9	Nil	213	100.0

R04 Father

			Frequency	Pct
Missing	9	Nil	213	100.0

R05 Holy

			Frequency	Pct
Missing	9	Nil	213	100.0

R06 Christ

			Frequency	Pct
Missing	9	Nil	213	100.0

T01 God

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	20	9.4	100.0	100.0
Missing	9	Nil	193	90.6		
Total			213	100.0		

T02 Good

			Frequency	Pct
Missing	9	Nil	213	100.0

T03 Jesus

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	3	1.4	100.0	100.0
Missing	9	Nil	210	98.6		
Total			213	100.0		

T04 Death

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Mention	7	3.3	100.0	100.0
Missing	9	Nil	206	96.7		
Total			213	100.0		

Type of Experience

X01 Fearful presence

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	5	2.3	100.0	100.0
Missing	9	Nil	208	97.7		
Total			213	100.0		

X02 Patterning

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	29	13.6	100.0	100.0
Missing	9	Nil	184	86.4		
Total			213	100.0		

X03 Auditory

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	3	1.4	100.0	100.0
Missing	9	Nil	210	98.6		
Total			213	100.0		

X04 Touch

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	4	1.9	100.0	100.0
Missing	9	Nil	209	98.1		
Total			213	100.0		

X05 Awareness of God

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	24	11.3	100.0	100.0
Missing	9	Nil	189	88.7		
Total			213	100.0		

X06 Near death exp

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	3	1.4	100.0	100.0
Missing	9	Nil	210	98.6		
Total			213	100.0		

X07 Peace

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	10	4.7	100.0	100.0
Missing	9	Nil	203	95.3		
Total			213	100.0		

X08 Help in Prayer

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	5	2.3	100.0	100.0
Missing	9	Nil	208	97.7		
Total			213	100.0		

X09 Sacredness in nature

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	11	5.2	100.0	100.0
Missing	9	Nil	202	94.8		
Total			213	100.0		

X10 Presence of other

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	7	3.3	100.0	100.0
Missing	9	Nil	206	96.7		
Total			213	100.0		

X11 Experience of Light

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	2	.9	100.0	100.0
Missing	9	Nil	211	99.1		
Total			213	100.0		

X12 Inexpressible

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1	Yes	2	.9	100.0	100.0
Missing	9	Nil	211	99.1		
Total			213	100.0		

STYPE School Type

			Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1.00	Girls	61	28.6	28.6	28.6
	2.00	Co-Ed	100	46.9	46.9	75.6
	3.00	Boys	52	24.4	24.4	100.0
	Total		213	100.0	100.0	

Initial Analysis of Occurrence of "Limit" Experience

Table 4.5

ETOT - Responses of "4" or "5" to Experience Questions

Value	Freq	Pct	V Pct	Cum Pct
.00	17	8.0	8.0	8.0
1.00	29	13.6	13.6	21.6
2.00	39	18.3	18.3	39.9
3.00	45	21.1	21.1	61.0
4.00	40	18.8	18.8	79.8
5.00	27	12.7	12.7	92.5
6.00	16	7.5	7.5	100.0
Total	213	100.0	100.0	

(Ranges from 0 to the maximum possible with 92% reporting 1 or more)

Table 4.6

PTOT - Responses of "3" or "4" to Personal Experience Narratives

Value	Freq.	Percent	Valid Pct	Cum. Pct
.00	41	19	19.	19.2
1.00	70	32.9	32.9	52.1
2.00	52	24.4	24.4	76.5
3.00	34	16.0	16.0	92.5
4.00	13	6.1	6.1	98.6
5.00	3	1.4	1.4	100.0
Total	213	100.0	100.0	

(Ranges from 0 to the maximum - with 81% reporting 1 or more)

Table 4.7

LIMITOT

Value	Freq	Pct.	Valid Pct	Cum. Pct
.00	9	4.2	4.2	4.2
1.00	18	8.5	8.5	12.7
2.00	20	9.4	9.4	22.1
3.00	38	17.8	17.8	39.9
4.00	25	11.7	11.7	51.6
5.00	23	10.8	10.8	62.4
6.00	31	14.6	14.6	77.0
7.00	18	8.5	8.5	85.4
8.00	12	5.6	5.6	91.1
9.00	11	5.2	5.2	96.2
10.00	6	2.8	2.8	99.1
11.00	2	0.9	.9	100.0
Total	213	100.0	100.0	

(Combining the two types, ranges from 0 to the maximum 96% reporting 1 or more)

Oneway ANOVA (Checking differences in these totals across schools.)

CONTRAST = 2 0 -1 -1 (Girls School cf two co-ed schools)
 CONTRAST = 0 2 -1 -1 (Boys School cf two co-ed schools)
 CONTRAST = 1 -1 0 0 (Girls school cf boys school)

		Sum of Sq.	df	Mean Sq.	F	Sig.
ETOT	Between Groups	3.027	3	1.009	.353	.787
	Within Groups	596.804	209	2.856		
	Total	599.831	212			
PTOT	Between Groups	1.492	3	.497	.332	.802
	Within Groups	313.16	209	1.498		
	Total	314.657	212			
LIMITOT	Between Groups	4.929	3	1.643	.239	.869
	Within Groups	1436.88	209	6.875		
	Total	1441.812	212			

(There are no significant differences across the four schools.)

Contrast Coefficients

	SCHOOL			
Contrast	2	3	4	5
1	2	0	-1	-1
2	0	2	-1	-1
3	1	-1	0	0

Contrast Tests

Contrast	Val.Cont.	S.E.		df	Sig. (2-tail)
ETOT 1	.15	.55	.27	209.00	.79
2	-.48	.58	-.82	209.00	.41
3	.31	.32	.98	209.00	.33
PTOT 1	.39	.40	.98	209.00	.33
2	.22	.42	.52	209.00	.61
3	.09	.23	.38	209.00	.71
LIMITOT 1	.54	.86	.63	209.00	.53
2	-.26	.90	-.29	209.00	.77
3	.40	.49	.81	209.00	.42

Occurrence of Limit Experience: Counting only Full Agreement responses

Table 4.8

ETOT5 Number of "5" responses to 6 "E" items

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	72	33.8	33.8	33.8
1.00	58	27.2	27.2	61.0
2.00	42	19.7	19.7	80.8
3.00	16	7.5	7.5	88.3
4.00	12	5.6	5.6	93.9
5.00	9	4.2	4.2	98.1
6.00	4	1.9	1.9	100.0
Total	213	100.0	100.0	

Table 4.9

PTOT4 Number of "4" responses to 5 "P" items

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	111	52.1	52.1	52.1
1.00	65	30.5	30.5	82.6
2.00	27	12.7	12.7	95.3
3.00	8	3.8	3.8	99.1
4.00	1	.5	.5	99.5
5.00	1	.5	.5	100.0
Total	213	100.0	100.0	

Table 4.10

LIMTOT Number of Full Agreement responses to 11 items (E and P0)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	52	24.4	24.4	24.4
	1.00	54	25.4	25.4	49.8
	2.00	37	17.4	17.4	67.1
	3.00	19	8.9	8.9	76.1
	4.00	19	8.9	8.9	85.0
	5.00	14	6.6	6.6	91.5
	6.00	8	3.8	3.8	95.3
	7.00	4	1.9	1.9	97.2
	8.00	4	1.9	1.9	99.1
	10.00	2	.9	.9	100.0
	Total	213	100.0	100.0	

Crosstabs

E06 Sometimes there is a pattern to events * P05 Pattern to events Crosstabulation

		P05 Pattern to events				Total
		1 Never	2 Un sure	3 Prob Yes	4 Yes	
Count	1 False	3	2	2	2	9
	2 Prob false	6	3	1	4	14
	3 Uncertain	17	19	10	14	60
	4 Prob true	10	13	27	20	70
	5 True	13	6	15	24	58
	Total	49	43	55	64	211
% within	1 False	33.3%	22.2%	22.2%	22.2%	100.0%
E06	2 Prob false	42.9%	21.4%	7.1%	28.6%	100.0%
	3 Uncertain	28.3%	31.7%	16.7%	23.3%	100.0%
	4 Prob true	14.3%	18.6%	38.6%	28.6%	100.0%
	5 True	22.4%	10.3%	25.9%	41.4%	100.0%
	Total	23.2%	20.4%	26.1%	30.3%	100.0%
% within	1 False	6.1%	4.7%	3.6%	3.1%	4.3%
P05	2 Prob false	12.2%	7.0%	1.8%	6.3%	6.6%
	3 Uncertain	34.7%	44.2%	18.2%	21.9%	28.4%
	4 Prob true	20.4%	30.2%	49.1%	31.3%	33.2%
	5 True	26.5%	14.0%	27.3%	37.5%	27.5%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.363(a)	12	.018
Linear-by-Linear Association	8.034	1	.005
N of Valid Cases	211		

Crosstabs

E10 Recognised a sacredness in nature * P03 Sacredness in Nature Crosstabulation

			P03 Sacredness in Nature				Total
			1 Never	2 Unsure	3 Prob Yes	4 Yes	
Count	E10	1 False	13	6	6	2	27
		2 Prob false	8	6	8	3	25
		3 Uncertain	24	29	19	16	88
		4 Prob true	4	9	15	13	41
		5 True	2	6	8	14	30
	Total		51	56	56	48	211
% within E10	E10	1 False	48.1%	22.2%	22.2%	7.4%	100.0%
		2 Prob false	32.0%	24.0%	32.0%	12.0%	100.0%
		3 Uncertain	27.3%	33.0%	21.6%	18.2%	100.0%
		4 Prob true	9.8%	22.0%	36.6%	31.7%	100.0%
		5 True	6.7%	20.0%	26.7%	46.7%	100.0%
	Total		24.2%	26.5%	26.5%	22.7%	100.0%
% within P03	E10	1 False	25.5%	10.7%	10.7%	4.2%	12.8%
		2 Prob false	15.7%	10.7%	14.3%	6.3%	11.8%
		3 Uncertain	47.1%	51.8%	33.9%	33.3%	41.7%
		4 Prob true	7.8%	16.1%	26.8%	27.1%	19.4%
		5 True	3.9%	10.7%	14.3%	29.2%	14.2%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.860 (a)	12	.001
Linear-by-Linear Association	25.632	1	.000
N of Valid Cases	211		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.69. Indicating a stronger relationship for these two variables.

Crosstabs

E07 Close awareness of God sometimes * P02 Presence of God Crosstabulation

			P02 Presence of God				Total
			1 Never	2 Unsure	3 Prob Yes	4 Yes	
Count	E07	1 False	31			1	32
	Close awareness of God sometimes	2 Prob false	26	3	1		30
		3 Uncertain	45	7	3		55
		4 Prob true	36	13		1	50
		5 True	24	12	5	3	44
	Total		162	35	9	5	211
% within E07	E07	1 False	96.9%			3.1%	100.0%
	Close awareness of God sometimes	2 Prob false	86.7%	10.0%	3.3%		100.0%
		3 Uncertain	81.8%	12.7%	5.5%		100.0%
		4 Prob true	72.0%	26.0%		2.0%	100.0%
		5 True	54.5%	27.3%	11.4%	6.8%	100.0%
	Total		76.8%	16.6%	4.3%	2.4%	100.0%
% within P02	E07	1 False	19.1%			20.0%	15.2%
	Close awareness of God sometimes	2 Prob false	16.0%	8.6%	11.1%		14.2%
		3 Uncertain	27.8%	20.0%	33.3%		26.1%
		4 Prob true	22.2%	37.1%		20.0%	23.7%
		5 True	14.8%	34.3%	55.6%	60.0%	20.9%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.248 (a)	12	.001
Likelihood Ratio	39.614	12	.000
Linear-by-Linear Association	16.614	1	.000
N of Valid Cases	211		

Hypothesis 1

Table 4.12

LIMBIN Limit Experience Binary Form

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
.00 No	52	24.4	24.4	24.4
1.00 Yes	161	75.6	75.6	100.0
Total	213	100.0	100.0	

Hypothesis 2

Table 4.13

Oneway ANOVA (including contrasts

(1) Girls cf. Coed (2) Boys cf. Coed (3) Girls cf. Boys

Descriptives

	School	N	Mean	Std. Deviation	Std. Error
ETOT5 Number of "5" responses to 6 "E" items	2	61	1.62	1.58	.20
	3	52	1.15	1.11	.15
	4	42	1.48	1.47	.23
	5	58	1.48	1.78	.23
	Total	213	1.44	1.52	.10
PTOT4 Number of "4" responses to 5 "P" items	2	61	.84	.92	.12
	3	52	.79	.85	.12
	4	42	.52	.67	.10
	5	58	.66	1.10	.14
	Total	213	.71	.92	.06
LIMTOT Number of Full Agreement responses to 9 items (E and P0)	2	61	2.46	2.13	.27
	3	52	1.94	1.59	.22
	4	42	2.00	1.99	.31
	5	58	2.14	2.67	.35
	Total	213	2.15	2.15	.15

ANOVA

		S.S.	df	M.S.	F	Sig.
ETOT5 Number of "5" responses to 6 "E" items	Between Groups	6.460	3	2.153	.934	.425
	Within Groups	482.056	209	2.306		
	Total	488.516	212			
PTOT4 Number of "4" responses to 5 "P" items	Between Groups	2.917	3	.972	1.164	.325
	Within Groups	174.613	209	.835		
	Total	177.531	212			
LIMTOT Number of Full Agreement responses to 9 items (E and P0)	Between Groups	9.016	3	3.005	.648	.585
	Within Groups	968.871	209	4.636		
	Total	977.887	212			

Contrast Coefficients

	SCHOOL				
Contrast	2	3	4	5	
1	2	0	-1	-1	(School 2 cf. Schools 3 & 4)
2	0	2	-1	-1	(School 3 cf. Schools 3 & 4)
3	1	-1	0	0	(School 1 cf. School 2)

Contrast Tests

	Contrast	Value	Std	t	df	Sig. (2-t)
ETOT5 Number of "5" responses to 6 "E" items	1	.29	.50	.58	209	.56
	2	-.65	.52	-1.25	209	.21
	3	.47	.29	1.64	209	.10
PTOT4 Number of "4" responses to 5 "P" items	1	.49	.30	1.65	209	.10
	2	.40	.31	1.27	209	.21
	3	.05	.17	.28	209	.78
LIMTOT Number of Full Agreement responses to 9 items (E and P0)	1	.78	.70	1.11	209	.27
	2	-.25	.74	-.34	209	.73
	3	.52	.41	1.27	209	.20

STYPE School Type

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
1.00 Girls	61	28.6	28.6	28.6
2.00 Co-Ed	100	46.9	46.9	75.6
3.00 Boys	52	24.4	24.4	100.0
Total	213	100.0	100.0	

Table 4.14

STYPE School Type * LIMBIN Limit Experience Binary Form Crosstabulation

			LIMBIN rm		Total
			.00 No	1.00 Yes	
Count	STYPE	1.00 Girls	10	51	61
	School Type	2.00 Co-Ed	31	69	100
		3.00 Boys	11	41	52
	Total		52	161	213
% within STYPE School Type	STYPE	1.00 Girls	16.4%	83.6%	100.0%
	School Type	2.00 Co-Ed	31.0%	69.0%	100.0%
		3.00 Boys	21.2%	78.8%	100.0%
	Total		24.4%	75.6%	100.0%
% within LIMBIN Limit Experience Binary Form	STYPE	1.00 Girls	19.2%	31.7%	28.6%
	School Type	2.00 Co-Ed	59.6%	42.9%	46.9%
		3.00 Boys	21.2%	25.5%	24.4%
	Total		100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.777	2	.092
N of Valid Cases	213		

Crosstabs: To check gender distribution in the two Co-Ed Schools -

Checking the 2 co-ed schools. Result: They are equivalent (38% and 41% Boys)

B01 Q1 Gender * SCHOOL Crosstabulation

			SCHOOL		Total
			4	5	
Count	B01 Q1 Gender	1 Male	17	22	91
		2 Female	25	36	122
		Total	42	58	213
% within SCHOOL	B01 Q1 Gender	1 Male	40.5%	37.9%	42.7%
		2 Female	59.5%	62.1%	57.3%
		Total	100.0%	100.0%	100.0%

Hypothesis 3

Table 4.15

Crosstabs: Each addresses Hypothesis 3 for one subject

LIMBIN Limit Experience Binary Form * S02 Influential subject: RE

Crosstab

			S02	Influential	subject: RE		Total	
				1 Very little	2 Slightly	3 Very much		
Count	LIMBIN	Limit	.00	No	13	37	1	51
	Experience							
	Binary Form		1.00	Yes	34	79	42	155
			Total		47	116	43	206
% within LIMBIN	LIMBIN	Limit	.00	No	25.5%	72.5%	2.0	100.0%
	Limit Experience							
	Binary Form	Binary Form	1.00	Yes	21.9%	51.0%	27.1%	100.0%
			Total		22.8%	56.3%	20.9%	100.0%
% within S02	LIMBIN	Limit	.00	No	27.7%	31.9%	2.3%	24.8%
	Influential							
	subject: RE	Binary Form	1.00	Yes	72.3%	68.1%	97.7%	75.2%
			Total		100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.002	2	.001
N of Valid Cases	206		

LIMBIN Limit Experience Binary Form * S03 Influential subject: Soc Ed

Crosstab

		S03 Inf subject: Soc Ed						Total
				1 Very Little	2 Slightly	3 Very Much		
Count	LIMBIN Limit Exp. Binary For	.00 No		22	11			33
		1.00 Yes		49	38	14		101
		Total		71	49	14		134
% within LIMBIN Limit Experience Binary Form	LIMBIN Limit Exp. Binary Form	.00 No		66.7%	33.3%			100.0%
		1.00 Yes		48.5%	37.6%	13.9%		100.0%
		Total		53.0%	36.6%	10.4%		100.0%
% within S03 Influential subject: Soc Ed	LIMBIN Limit Exp. Binary Form	.00 No		31.0%	22.4%			24.6%
		1.00 Yes		69.0%	77.6%	100.0%		75.4%
		Total		100.0%	100.0%	100.0%		100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.246(a)	2	.044
N of Valid Cases	134		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.45.

LIMBIN Limit Experience Binary Form * S04 Influential subject: Eng

Crosstab

		S04 Influential subject: Eng						Total
				1 Very little	2 Slightly	3 Very much		
Count	LIMBIN Limit Exp. Binary Form	.00 No		21	24	5		50
		1.00 Yes		51	79	26		156
		Total		72	103	31		206
% within LIMBIN Limit Experience Binary Form	LIMBIN Limit Exp. Binary Form	.00 No		42.0%	48.0%	10.0%		100.0%
		1.00 Yes		32.7%	50.6%	16.7%		100.0%
		Total		35.0%	50.0%	15.0%		100.0%
% within S04 Influential subject: Eng	LIMBIN Limit Exp. Binary Form	.00 No		29.2%	23.3%	16.1%		24.3%
		1.00 Yes		70.8%	76.7%	83.9%		75.7%
		Total		100.0%	100.0%	100.0%		100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.110	2	.348
N of Valid Cases	206		

LIMBIN Limit Experience Binary Form * S05 Influential subject: Math
Crosstab

			S05 Influential subject: Math			Total
			1 V little	2 Slightly	3 Very much	
Count	LIMBIN Limit	.00 No	33	13	3	49
	Exp. Binary Form	1.00 Yes	98	39	19	156
	Total		131	52	22	205
% within LIMBIN Limit Experience Binary Form	LIMBIN Limit	.00 No	67.3%	26.5%	6.1%	100.0%
	Exp. Binary Form	1.00 Yes	62.8%	25.0%	12.2%	100.0%
	Total		63.9%	25.4%	10.7%	100.0%
% within S05 subject: Math	LIMBIN Limit	.00 No	25.2%	25.0%	13.6%	23.9%
	Exp. Binary Form	1.00 Yes	74.8%	75.0%	86.4%	76.1%
	Total		100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.429	2	.490
N of Valid Cases	205		

LIMBIN Limit Experience Binary Form * S06 Influential subject: Science

				S06 Influential subject: Science			
				1 V little	2 Slightly	3 Very much	Total
Count	LIMBIN Limit	.00 No		21	11	2	34
	Exp. Binary Form	1.00 Yes		53	42	28	123
	Total			74	53	30	157
% within LIMBIN	LIMBIN Limit	.00 No		61.8%	32.4%	5.9%	100.0%
Exp.	Exp. Binary Form	1.00 Yes		43.1%	34.1%	22.8%	100.0%
Binary Form	Total			47.1%	33.8%	19.1%	100.0%
% within S06	LIMBIN Limit	.00 No		28.4%	20.8%	6.7%	21.7%
subject: Science	Exp. Binary Form	1.00 Yes		71.6%	79.2%	93.3%	78.3%
	Total			100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.969	2	.051
N of Valid Cases	157		

LIMBIN Limit Experience Binary Form * S07 Influential subject: Art

Crosstab

				S07 Influential subject: Art			Total
				1 V little	2 Slightly	3 Very much	
Count	LIMBIN Limit	.00 No		20	8	4	32
	Exp. Binary Form	1.00 Yes		60	30	15	105
	Total			80	38	19	137
% within LIMBIN	LIMBIN Limit	.00 No		62.5%	25.0%	12.5%	100.0%
Limit Exp	Exp. Binary Form	1.00 Yes		57.1%	28.6%	14.3%	100.0%
Binary Form	Total			58.4%	27.7%	13.9%	100.0%
% within S07	LIMBIN Limit	.00 No		25.0%	21.1%	21.1%	23.4%
subject: ART	Exp. Binary Form	1.00 Yes		75.0%	78.9%	78.9%	76.6%
	Total			100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.290 (a)	2	.865
N of Valid Cases	137		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.44.

LIMBIN Limit Experience Binary Form * S08 Influential subject: History

				S08 Influential subject: History			Total
				1 V little	2 Slightly	3 Very much	
Count	LIMBIN Limit Exp. Binary Form	.00 No		21	8		29
		1.00 Yes		51	25	29	105
	Total			72	33	29	134
%within LIMBIN	LIMBIN Limit Exp. Binary Form	.00 No		72.4%	27.6%		100.0%
Limit		1.00 Yes		48.6%	23.8%	27.6%	100.0%
Exp.							
Binary	Total			53.7%	24.6%	21.6%	100.0%
%within S08	LIMBIN Limit Exp. Binary Form	.00 No		29.2%	24.2%		21.6%
subject		1.00 Yes		70.8%	75.8%	100.0%	78.4%
History							
	Total			100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.545	2	.005
N of Valid Cases	134		

LIMBIN Limit Experience Binary Form * S09 Influential subject: Biology

				S09 Influential subject: Biology			Total
				1 Very little	2 Slightly	3 Very much	
Count	LIMBIN Limit Exp. Binary Form	.00 No		20	12	4	36
		1.00 Yes		50	40	21	111
	Total			70	52	25	147
% within LIMBIN	LIMBIN Limit Exp. Binary Form	.00 No		55.6%	33.3%	11.1%	100.0%
Limit		1.00 Yes		45.0%	36.0%	18.9%	100.0%
Exp.							
Binary	Total			47.6%	35.4%	17.0%	100.0%
% within S09	LIMBIN Limit Exp. Binary Form	.00 No		28.6%	23.1%	16.0%	24.5%
subject		1.00 Yes		71.4%	76.9%	84.0%	75.5%
Biology							
	Total			100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.661	2	.436
N of Valid Cases	147		

LIMBIN Limit Experience Binary Form * S10 Influential subject: Chemistry

				S10 Influential subject: Chemistry			Total
				1 V little	2 Slightly	3 Very much	
Count	LIMBIN Limit	.00 No		24	6	2	32
	Exp. Binary Form						
		1.00 Yes		61	23	13	97
	Total			85	29	15	129
%within	LIMBIN Limit	.00 No		75.0%	18.8%	6.3%	100.0%
LIMBIN	Exp. Binary Form						
Limit		1.00 Yes		62.9%	23.7%	13.4%	100.0%
Exp.							
Binary	Total			65.9%	22.5%	11.6%	100.0%
%within	LIMBIN Limit	.00 No		28.2%	20.7%	13.3%	24.8%
S10	Exp. Binary Form						
subject		1.00 Yes		71.8%	79.3%	86.7%	75.2%
Chem.							
	Total			100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.858(a)	2	.395
N of Valid Cases	129		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.72.

LIMBIN Limit Experience Binary Form * S11 Influential subject: Physics

Crosstab

				S11 Influential subject: Physics			Total
				1 Very little	2 Slightly	3 Very much	
Count	LIMBIN Limit	.00 No		26	4	1	31
	Exp. Binary Form						
		1.00 Yes		56	18	18	92
	Total			82	22	19	123
%within	LIMBIN Limit	.00 No		83.9%	12.9%	3.2%	100.0%
LIMBIN	Exp. Binary Form						
Limit		1.00 Yes		60.9%	19.6%	19.6%	100.0%
Exp.							
Binary	Total			66.7%	17.9%	15.4%	100.0%
%within	LIMBIN Limit	.00 No		31.7%	18.2%	5.3%	25.2%
S11	Exp. Binary Form						
subject		1.00 Yes		68.3%	81.8%	94.7%	74.8%
Physics							
	Total			100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.423(a)	2	.040
N of Valid Cases	123		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.79.

LIMBIN Limit Experience Binary Form * S12 Influential subject: Geog

Crosstab

			S12 Influential subject: Geog			Total
			1 V. little	2 Slightly	3 Very much	
Count	LIMBIN Limit Exp. Binary Form	.00 No 1.00 Yes	24 53	8 22	2 15	34 90
	Total		77	30	17	124
%within LIMBIN Limit Exp. Binary	LIMBIN Limit Exp. Binary Form	.00 No 1.00 Yes	70.6% 58.9%	23.5% 24.4%	5.9% 16.7%	100.0% 100.0%
	Total		62.1%	24.2%	13.7%	100.0%
% within subject GEOG	LIMBIN Limit Exp. Binary Form	.00 No 1.00 Yes	31.2% 68.8%	26.7% 73.3%	11.8% 88.2%	27.4% 72.6%
	Total		100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.646(a)	2	.266
N of Valid Cases	124		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.66.

LIMBIN Limit Experience Binary Form * S13 Influential subject: Other

			S13 Influential subject: Other			Total
			1 V little	2 Slightly	3 Very much	
Count	LIMBIN Limit Exp. Binary Form	.00 No 1.00 Yes	8 12	4 23	6 31	18 66
	Total		20	27	37	84
%within LIMBIN Limit Exp. Binary	LIMBIN Limit Exp. Binary Form	.00 No 1.00 Yes	44.4% 18.2%	22.2% 34.8%	33.3% 47.0%	100.0% 100.0%
	Total		23.8%	32.1%	44.0%	100.0%
%within subject: other	LIMBIN Limit Exp. Binary Form	.00 No 1.00 Yes	40.0% 60.0%	14.8% 85.2%	16.2% 83.8%	21.4% 78.6%
	Total		100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.395(a)	2	.067
N of Valid Cases	84		

a 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.29.

Hypothesis 4**S15 Involved in Retreats**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	9	4.2	4.3	4.3
	2 Rarely	30	14.1	14.3	18.6
	3 Occasional	36	16.9	17.1	35.7
	4 Regular	40	18.8	19.0	54.8
	5 Often	95	44.6	45.2	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.		
	Total	213	100.0		

S16 Involved with Disabled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	110	51.6	53.1	53.1
	2 Rarely	62	29.1	30.0	83.1
	3 Occasional	20	9.4	9.7	92.8
	4 Regular	8	3.8	3.9	96.6
	5 Often	7	3.3	3.4	100.0
	Total	207	97.2	100.0	
Missing	9	6	2.8		
Total		213	100.0		

S17 Involved with Aged

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	88	41.3	42.1	42.1
	2 Rarely	64	30.0	30.6	72.7
	3 Occasional	44	20.7	21.1	93.8
	4 Regular	7	3.3	3.3	97.1
	5 Often	6	2.8	2.9	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

S18 Involved with Poor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	143	67.1	69.1	69.1
	2 Rarely	42	19.7	20.3	89.4
	3 Occasional	13	6.1	6.3	95.7
	4 Regular	3	1.4	1.4	97.1
	5 Often	6	2.8	2.9	100.0
	Total	207	97.2	100.0	
Missing	9	6	2.8		
Total		213	100.0		

S19 Involved with Children

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	72	33.8	34.6	34.6
	2 Rarely	31	14.6	14.9	49.5
	3 Occasional	54	25.4	26.0	75.5
	4 Regular	32	15.0	15.4	90.9
	5 Often	19	8.9	9.1	100.0
	Total	208	97.7	100.0	
Missing	9	5	2.3		
Total		213	100.0		

S20 Involved with Fund-raising

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	25	11.7	11.8	11.8
	2 Rarely	52	24.4	24.6	36.5
	3 Occasional	74	34.7	35.1	71.6
	4 Regular	33	15.5	15.6	87.2
	5 Often	27	12.7	12.8	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

S21 Involved with Sport

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	40	18.8	18.9	18.9
	2 Rarely	35	16.4	16.5	35.4
	3 Occasional	37	17.4	17.5	52.8
	4 Regular	28	13.1	13.2	66.0
	5 Often	72	33.8	34.0	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

S22 Involved in Performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	83	39.0	39.3	39.3
	2 Rarely	54	25.4	25.6	64.9
	3 Occasional	33	15.5	15.6	80.6
	4 Regular	17	8.0	8.1	88.6
	5 Often	24	11.3	11.4	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

S23 Involved in Competitions etc

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	96	45.1	45.9	45.9
	2 Rarely	38	17.8	18.2	64.1
	3 Occasional	30	14.1	14.4	78.5
	4 Regular	13	6.1	6.2	84.7
	5 Often	32	15.0	15.3	100.0
	Total	209	98.1	100.0	
Missing	9	3	1.4		
	System	1	.5		
	Total	4	1.9		
Total		213	100.0		

Crosstabs

LIMBIN Limit Experience Binary Form * SCHOOL Crosstabulation

			SCHOOL				Total
			2	3	4	5	
Count	LIMBIN Limit	No	10	11	12	19	52
	Experience Binary Form	Yes	51	41	30	39	161
	Total		61	52	42	58	213
% within SCHOOL	LIMBIN Limit	No	16.4%	21.2%	28.6%	32.8%	24.4%
	Experience Binary Form	Yes	83.6%	78.8%	71.4%	67.2%	75.6%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.008	3	.171
N of Valid Cases	213		

Table 4.16

T-Test: For Hypothesis 4; "Social Responsibility Involvement"

Group Statistics

	LIMBIN	Limit Experience Binary Form	N	Mean	S.D.	S.E.
S15 Involved in Retreats	.00 No		51	3.82	1.21	.17
	1.00 Yes		159	3.88	1.27	.10
S16 Involved with Disabled	.00 No		51	1.78	.99	.14
	1.00 Yes		156	1.73	1.02	.08
S17 Involved with Aged	.00 No		51	1.96	1.02	.14
	1.00 Yes		158	1.94	1.01	.08
S18 Involved with Poor	.00 No		50	1.50	.89	.13
	1.00 Yes		157	1.48	.91	.07
S19 Involved with Children	.00 No		50	2.52	1.28	.18
	1.00 Yes		158	2.49	1.37	.11
S20 Involved with Fund-raising	.00 No		50	3.08	1.23	.17
	1.00 Yes		161	2.88	1.16	.09

Independent Samples Test: (Levene's Test not significant in all cases. Standard t-test applies)

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
S15 Involved in Retreats	-.282	208	.778
S16 Involved with Disabled	.327	205	.744
S17 Involved with Aged	.147	207	.883
S18 Involved with Poor	.108	205	.914
S19 Involved with Children	.149	206	.881
S20 Involved with Fund-raising	1.038	209	.301

Oneway Anova

Table 4.17

Descriptives

		N	Mean	S.D.
S15	2	59	3.17	1.35
Involvement in	3	52	3.88	1.28
Retreats	4	42	4.26	1.01
	5	57	4.28	.96
	Total	210	3.87	1.25
S16	2	60	1.43	.83
with	3	52	2.06	1.07
Disabled	4	40	1.90	1.13
	5	55	1.67	.96
	Total	207	1.74	1.01
S17	2	60	1.75	.95
Involvement	3	52	2.35	.95
with Aged	4	41	1.80	1.08
	5	56	1.88	1.01
	Total	209	1.94	1.01
S18	2	60	1.35	.95
Involvement	3	52	1.65	.90
with Poor	4	40	1.50	1.01
	5	55	1.47	.74
	Total	207	1.49	.90
S19	2	60	2.40	1.38
Involvement	3	52	2.40	1.26
with	4	41	2.41	1.38
Children	5	55	2.75	1.36
	Total	208	2.50	1.34
S20	2	61	2.87	1.16
Involvement	3	52	3.00	1.19
with	4	42	2.90	1.16
Fund Raising	5	56	2.95	1.23
	Total	211	2.93	1.18

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S15	Between Groups	45.026	3	15.009	10.916	.000
Involvement in	Within Groups	283.241	206	1.375		
Retreats	Total	328.267	209			
S16	Between Groups	12.161	3	4.054	4.129	.007
with Disabled	Within Groups	199.269	203	.982		
	Total	211.430	206			
S17	Between Groups	11.728	3	3.909	3.976	.009
with Aged	Within Groups	201.583	205	.983		
	Total	213.311	208			
S18	Between Groups	2.591	3	.864	1.062	.366
with Poor	Within Groups	165.128	203	.813		
	Total	167.720	206			
S19	Between Groups	4.688	3	1.563	.863	.461
with Children	Within Groups	369.307	204	1.810		
	Total	373.995	207			
S20	Between Groups	.524	3	.175	.124	.946
Fund-raising	Within Groups	291.409	207	1.408		
	Total	291.934	210			

T-Test: Second group for Hypothesis 4 (School Involvement)

Table 4.18

Group Statistics

		Limit Experience Binary	N	Mean	S.D.
S21 Involved with Sport	No		51	3.55	1.30
	Yes		161	3.18	1.59
S22 Involved in Performance	No		51	1.88	1.11
	Yes		160	2.39	1.41
S23 Involved in Competitions etc	No		51	2.12	1.48
	Yes		158	2.32	1.47

Independent Samples Test

Levene's Test for Equality of Variances				t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)	
S21 Involved Sport	Equal variances assumed 9.593	.002	1.668	101.578	.098	
	not assumed					
S22 Involved Performance	Equal variances assumed 10.289	.002				
	Equal variances not assumed 10.289	.002	-2.648	105.759	.009	
S23 Involved Competition	Equal variances assumed .471	.493	-.838	207	.403	

Oneway

Table 4.19

Descriptives

		N	Mean	S.D.
S21 Involved with Sport	2	61	2.87	1.45
	3	52	4.13	1.24
	4	42	2.88	1.56
	5	57	3.19	1.55
	Total	212	3.27	1.53
S22 Involved in Performance	2	61	2.36	1.33
	3	52	1.83	1.04
	4	41	2.10	1.24
	5	57	2.68	1.58
	Total	211	2.27	1.35
S23 Involved in Competitions etc.	2	61	2.18	1.45
	3	50	2.28	1.46
	4	41	1.80	1.03
	5	57	2.68	1.68
	Total	209	2.27	1.47

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S21 Involved with Sport	Between Groups	55.384	3	18.461	8.721	.000
	Within Groups	440.290	208	2.117		
	Total	495.675	211			
S22 Involved in Performance	Between Groups	21.704	3	7.235	4.121	.007
	Within Groups	363.433	207	1.756		
	Total	385.137	210			
S23 Involved in Competitions etc	Between Groups	19.144	3	6.381	3.029	.030
	Within Groups	431.851	205	2.107		
	Total	450.995	208			

Hypothesis 5

Crosstabs: for Hypothesis 5 November 17th

Tables 4.20 and 4.21

F09 Church Attendance Self * LIMBIN Limit Experience Binary Form Crosstabulation

			LIMBIN Limit Experience Binary Form		Total
			.00 No	1.00 Yes	
Count	F09	1 Never	12	21	33
	Church				
	Attendance	2 Rarely	7	35	42
	Self				
		3 Fam.Occas	5	30	35
		4 Yearly	10	13	23
		5 Monthly	5	25	30
		6 Weekly	6	15	21
		7 Weekly+	6	22	28
	Total		51	161	212
%within	F09	1 Never	36.4%	63.6%	100.0%
F09	Church				
Church	Attendance	2 Rarely	16.7%	83.3%	100.0%
Attend.	Self				
Self		3 Fam.Occas	14.3%	85.7%	100.0%
		4 Yearly	43.5%	56.5%	100.0%
		5 Monthly	16.7%	83.3%	100.0%
		6 Weekly	28.6%	71.4%	100.0%
		7 Weekly+	21.4%	78.6%	100.0%
	Total		24.1%	75.9%	100.0%
%within	F09	1 Never	23.5%	13.0%	15.6%
LIMBIN	Church				
Limit	Attendance	2 Rarely	13.7%	21.7%	19.8%
Exp.e	Self				
Binary		3 Fam.Occas	9.8%	18.6%	16.5%
		4 Yearly	19.6%	8.1%	10.8%
		5 Monthly	9.8%	15.5%	14.2%
		6 Weekly	11.8%	9.3%	9.9%
		7 Weekly+	11.8%	13.7%	13.2%
	Total		100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.806	6	.066
N of Valid Cases	212		

Table 4.22

F12 Happiness home * LIMBIN Limit Experience Binary Form Crosstabulation

			LIMBIN Limit Experience Binary Form		Total
			.00 No	1.00 Yes	
Count	F12 Happiness home	1 Very unhappy	10	10	10
		2 Unhappy	4	19	23
		3 Satisfied	12	43	55
		4 Happy	23	65	88
		5 Very happy	13	24	37
	Total		52	161	213
				100.0%	100.0%
%within	F12 Happiness home	1 Very unhappy			
F12		2 Unhappy	17.4%	82.6%	100.0%
		3 Satisfied	21.8%	78.2%	100.0%
		4 Happy	26.1%	73.9%	100.0%
		5 Very happy	35.1%	64.9%	100.0%
	Total		24.4%	75.6%	100.0%
%within	LIMBIN Limit Binary	1 Very unhappy		6.2%	4.7%
LIMBIN		2 Unhappy	7.7%	11.8%	10.8%
Limit		3 Satisfied	23.1%	26.7%	25.8%
Binary		4 Happy	44.2%	40.4%	41.3%
		5 Very happy	25.0%	14.9%	17.4%
	Total		100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.492 (a)	4	.165
N of Valid Cases	213		

a 1 cells (10.0%) had an expected count less than 5. The minimum expected count is 2.44.

Table 4.23

Crosstabs: for Hypothesis 6

F01 Parents * LIMBIN Limit Experience Binary Form Crosstabulation

			LIMBIN Limit Experience Binary Form		Total
			.00 No	1.00 Yes	
Count	F01	1 Mum&Dad	40	110	150
		2 Mum&Gdn	2	12	14
		3 Dad&Gdn	1	4	5
		4 Sngl Mum	7	21	28
		5 Sngl Dad		6	6
		6 Other	2	8	10
	Total		52	161	213
% within Parents	F01	1 Mum&Dad	26.7%	73.3%	100.0%
		2 Mum&Gdn	14.3%	85.7%	100.0%
		3 Dad&Gdn	20.0%	80.0%	100.0%
		4 Sngl Mum	25.0%	75.0%	100.0%
		5 Sngl Dad		100.0%	100.0%
		6 Other	20.0%	80.0%	100.0%
	Total		24.4%	75.6%	100.0%
% within Limit Binary	F01	1 Mum&Dad	76.9%	68.3%	70.4%
		2 Mum&Gdn	3.8%	7.5%	6.6%
		3 Dad&Gdn	1.9%	2.5%	2.3%
		4 Sngl Mum	13.5%	13.0%	13.1%
		5 Sngl Dad		3.7%	2.8%
		6 Other	3.8%	5.0%	4.7%
	Total		100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.292(a)	5	.655
N of Valid Cases	213		

a 6 cells (50.0%) have expected count less than 5. The minimum expected count is 1.22.

Factor Analysis

Factor Analysis: Factors (repeated) V01 to V22 minus V04,V06,V18)

Communalities

		Initial	Extraction
V01	Enjoy RE	1.000	.328
V02	Religious language lacks meaning	1.000	.478
V03	Science will control world	1.000	.587
V05	Believe with proof only	1.000	.549
V07	Important things not proved	1.000	.346
V08	Religion answers questions	1.000	.585
V09	Majority rules	1.000	.324
V10	Church unnecessary	1.000	.359
V11	Live Christian values	1.000	.579
V12	Concern for poor	1.000	.587
V13	Believe in God	1.000	.702
V14	Help lonely	1.000	.646
V15	God loves me	1.000	.629
V16	Concern for world poverty	1.000	.668
V17	Life not faith important	1.000	.404
V19	Felt close to God at times	1.000	.690
V20	Pattern and Purpose to life	1.000	.633
V21	Religion not relevant	1.000	.461
V22	Church not relevant	1.000	.466

Extraction Method: Principal Component Analysis.

Total Variance Explained

Initial Eigenvalues				Ext. S. S. Loadings			Rotation
							SS (a)
Comp.	Total	% of Var.	Cum. %	Total	% of Var.	Cum. %	Total
1	4.840	25.474	25.474	4.840	25.474	25.474	4.163
2	2.576	13.558	39.031	2.576	13.558	39.031	3.058
3	1.412	7.429	46.460	1.412	7.429	46.460	2.477
4	1.195	6.292	52.752	1.195	6.292	52.752	1.849
5	.969	5.100	57.852				
6	.961	5.060	62.912				
7	.912	4.800	67.713				
8	.812	4.272	71.984				
9	.784	4.128	76.112				
10	.709	3.733	79.845				
11	.621	3.267	83.112				
12	.565	2.971	86.083				
13	.508	2.675	88.759				
14	.466	2.454	91.212				
15	.429	2.258	93.470				
16	.412	2.167	95.637				
17	.328	1.728	97.365				
18	.311	1.637	99.002				
19	.190	.998	100.000				

Extraction Method: Principal Component Analysis.

a When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 4.24

Pattern Matrix(a)

		Component			
		1	2	3	4
V13	Believe in God	.781			
V11	Live Christian values	.738			
V15	God loves me	.712			
V19	Felt close to God at times	.580			.510
V02	Religious language lacks meaning	-.579			.321
V08	Religion answers questions	.579			
V21	Religion not relevant	-.572			
V10	Church unnecessary	-.506			
V14	Help lonely		.804		
V16	Concern for world poverty		.794		
V12	Concern for poor		.783		
V09	Majority rules		-.454		
V22	Church not relevant	-.389	.401	-.370	
V01	Enjoy RE		.357		
V03	Science will control world			.756	
V05	Believe with proof only			.689	
V07	Important things not proved			-.453	
V20	Pattern and Purpose to life				.765
V17	Life not faith important		.442		-.490

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a Rotation converged in 7 iterations.

Component Correlation Matrix

Component	1.000	2.000	3.000	4.000
1	1.000	.085	-.216	.206
2	.085	1.000	-.317	.180
3	-.216	-.317	1.000	-.132
4	.206	.180	-.132	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Factor Analysis

Communalities

	Initial	Extraction
E01 Most valuable experience indescribable	1.000	.705
E02 Experienced loneliness or depression	1.000	.555
E03 Experienced evil presence	1.000	.604
E04 Experienced powerful presence	1.000	.532
E05 Felt no purpose in life sometimes	1.000	.754
E06 Sometimes there is a pattern to events	1.000	.509
E07 Close awareness of God sometimes	1.000	.653
E08 No meaning for life sometimes	1.000	.686
E09 Felt presence of deceased friend or relative	1.000	.438
E10 Recognised a sacredness in nature	1.000	.577
E11 Found joy and meaning for life	1.000	.547
P01 Help in Prayer	1.000	.729
P02 Presence of God	1.000	.455
P03 Sacredness in Nature	1.000	.462
P04 All things are one	1.000	.603
P05 Pattern to events	1.000	.266

Extraction Method: Principal Component Analysis.

Total Variance Explained

Initial Eigenvalues				Ext. S.S. Loadings			Rot.SS
Comp.	Total	% of Var	Cum. %	Total	% of Var	Cum. %	Total
1	4.356	27.225	27.225	4.356	27.225	27.225	2.780
2	2.434	15.214	42.439	2.434	15.214	42.439	3.296
3	1.181	7.381	49.820	1.181	7.381	49.820	3.249
4	1.103	6.895	56.714	1.103	6.895	56.714	2.902
5	.973	6.084	62.798				
6	.839	5.243	68.042				
7	.774	4.839	72.881				
8	.699	4.367	77.248				
9	.670	4.189	81.437				
10	.592	3.703	85.140				
11	.523	3.268	88.408				
12	.440	2.750	91.158				
13	.420	2.626	93.784				
14	.396	2.475	96.259				
15	.335	2.097	98.356				
16	.263	1.644	100.000				

Extraction Method: Principal Component Analysis.

a When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix(a)

		Component			
		1	2	3	4
E08	No meaning for life sometimes	.851			
E05	Felt no purpose in life sometimes	.849			
E11	Found joy and meaning for life	-.675			.362
E02	Experienced loneliness or depression	.497			.442
P04	All things are one		.881		
E09	Felt presence of deceased friend or relative		.645		
P03	Sacredness in Nature		.583		
E10	Recognised a sacredness in nature		.555		
P05	Pattern to events		.441		
E07	Close awareness of God sometimes			.863	
P01	Help in Prayer			.862	
P02	Presence of God		.316	.538	
E03	Experienced evil presence	.411		.502	
E01	Most valuable experience indescribable				.963
E06	Sometimes there is a pattern to events				.571
E04	Experienced powerful presence			.327	.340

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a Rotation converged in 6 iterations.

Component Correlation Matrix

Component	1	2	3	4
1	1.000	.155	.162	.297
2	.155	1.000	.497	.422
3	.162	.497	1.000	.425
4	.297	.422	.425	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

Factor Analysis

Communalities

		Initial	Extraction
E02	Experienced loneliness or depression	1.000	.504
E03	Experienced evil presence	1.000	.602
E04	Experienced powerful presence	1.000	.518
E05	Felt no purpose in life sometimes	1.000	.746
E06	Sometimes there is a pattern to events	1.000	.388
E07	Close awareness of God sometimes	1.000	.653
E08	No meaning for life sometimes	1.000	.642
E09	Felt presence of deceased friend or relative	1.000	.395
E10	Recognised a sacredness in nature	1.000	.580
E11	Found joy and meaning for life	1.000	.438
P01	Help in Prayer	1.000	.704
P02	Presence of God	1.000	.332
P03	Sacredness in Nature	1.000	.455
P04	All things are one	1.000	.542
P05	Pattern to events	1.000	.269

Extraction Method: Principal Component Analysis.

Total Variance Explained

Comp.	Initial Eigenvalues			Ext S.S. Loadings			Rot. SS(a)
	Total	% of Var	Cum %	Total	% of Var	Cum %	Total
1	4.232	28.216	28.216	4.232	28.216	28.216	3.015
2	2.434	16.228	44.444	2.434	16.228	44.444	3.356
3	1.103	7.355	51.799	1.103	7.355	51.799	3.307
4	.990	6.600	58.399				
5	.896	5.976	64.375				
6	.806	5.373	69.748				
7	.773	5.152	74.900				
8	.693	4.622	79.521				
9	.653	4.355	83.877				
10	.536	3.576	87.453				
11	.446	2.976	90.429				
12	.430	2.865	93.294				
13	.400	2.666	95.959				
14	.339	2.257	98.216				
15	.268	1.784	100.000				

Extraction Method: Principal Component Analysis.

a When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 4.25

Pattern Matrix(a)

	Component		
	1	2	3
E05	.878		
E08	.823		
E02	.663		
E11	-.532	.444	
E06	.386		
P04		.833	
P03		.662	
E09		.602	
E10		.586	
P05		.465	
E07			.890
P01			.850
E03	.511		.567
P02			.441
E04	.377		.413

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a Rotation converged in 4 iterations.

Component Correlation Matrix

Component	1	2	3
1	1.000	.202	.205
2	.202	1.000	.541
3	.205	.541	1.000

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.

Table 4.26

Correlations

	EXPFAITH	SOCARE	SCEPTIC	IMPFAITH	DEPRESS	MYSTICEX	NUMINOUS
Pearson Correlation							
EXPFAITH	1.000	.155(*)	.162(*)	.297(**)	.980(**)	.097	.120
SOCARE	.155(*)	1.000	.497(**)	.422(**)	.233(**)	.988(**)	.510(**)
SCEPTIC	.162(*)	.497(**)	1.000	.425(**)	.223(**)	.509(**)	.992(**)
IMPFAITH	.297(**)	.422(**)	.425(**)	1.000	.481(**)	.526(**)	.511(**)
DEPRESS	.980(**)	.233(**)	.223(**)	.481(**)	1.000	.202(**)	.205(**)
MYSTICEX	.097	.988(**)	.509(**)	.526(**)	.202(**)	1.000	.541(**)
NUMINOUS	.120	.510(**)	.992(**)	.511(**)	.205(**)	.541(**)	1.000
Sig. (2-tailed)							
EXPFAITH	.	.028	.022	.000	.000	.170	.091
SOCARE	.028	.	.000	.000	.001	.000	.000
SCEPTIC	.022	.000	.	.000	.001	.000	.000
IMPFAITH	.000	.000	.000	.	.000	.000	.000
DEPRESS	.000	.001	.001	.000	.	.004	.004
MYSTICEX	.170	.000	.000	.000	.004	.	.000
NUMINOUS	.091	.000	.000	.000	.004	.000	.
N							
EXPFAITH	200	200	200	200	200	200	200
SOCARE	200	200	200	200	200	200	200
SCEPTIC	200	200	200	200	200	200	200
IMPFAITH	200	200	200	200	200	200	200
DEPRESS	200	200	200	200	200	200	200
MYSTICEX	200	200	200	200	200	200	200
NUMINOUS	200	200	200	200	200	200	200

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

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

4.5.2 Relationships between Scales and Data

T-Test: December 10, Gender Differences on Factor Scores
Group Statistics

	B01 Q1 Gender	N	Mean	S. D.
EXPFAITH Exp. Faith	1 Male	82	-.19	1.00
	2 Female	118	.13	.98
SOCAREWARE Social Awareness	1 Male	82	-.15	.90
	2 Female	118	.10	1.05
SCEPTIC Scepticism	1 Male	82	.07	.93
	2 Female	118	-.05	1.05
IMPFAITH Implicit Faith	1 Male	82	-.10	.85
	2 Female	118	.07	1.09
DEPRESS Depression - Elation	1 Male	82	-.21	1.01
	2 Female	118	.14	.97
MYSTICEX Mystic Experience	1 Male	82	-.15	.90
	2 Female	118	.10	1.05
NUMINOUS Numinous Experience	1 Male	82	.05	.92
	2 Female	118	-.04	1.05

Independent Samples Test

Levene's Test			t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2-tail)	Mean Diff	Std. Error Diff.	
EXPFAITH	Equal variances assumed	.120	.729	-2.262	198	.025	-.322	.142
	not assumed			-2.255	172.568	.025	-.322	.143
SOCAREWARE	Equal variances assumed	2.375	.125	-1.778	198	.077	-.254	.143
	not assumed			-1.827	189.227	.069	-.254	.139
SCEPTIC	Equal variances assumed	1.507	.221	.766	198	.444	.110	.144
	not assumed			.784	187.097	.434	.110	.141
IMPFAITH	Equal variances assumed	1.747	.188	-1.224	198	.222	-.176	.144
	not assumed			-1.278	194.950	.203	-.176	.138
DEPRESS	Equal variances assumed	.000	.984	-2.458	198	.015	-.349	.142
	not assumed			-2.442	170.360	.016	-.349	.143
MYSTICEX	Equal variances assumed	2.644	.106	-1.775	198	.077	-.254	.143
	not assumed			-1.826	189.717	.069	-.254	.139
NUMINOUS	Equal variances assumed	1.495	.223	.619	198	.537	.089	.144
	not assumed			.634	188.014	.527	.089	.140

Oneway: School Differences on Factor Schools (4 schools)

Descriptives

		N	Mean	S. D.	S. E.	Min	Max
EXPFAITH Exp. Faith	2	59	.185	1.060	.138	-2.011	2.019
	3	46	-.176	1.013	.149	-2.693	1.831
	4	39	.212	.994	.159	-2.075	1.819
	5	56	-.198	.880	.118	-1.963	1.736
	Total	200	.000	1.000	.071	-2.693	2.019
SOCAWARE Social Awareness	2	59	.215	1.070	.139	-1.789	2.899
	3	46	-.084	.850	.125	-1.702	2.131
	4	39	-.184	.890	.142	-2.085	1.500
	5	56	-.029	1.092	.146	-1.809	3.005
	Total	200	.000	1.000	.071	-2.085	3.005
SCEPTIC Scepticism	2	59	-.241	.936	.122	-2.042	1.968
	3	46	.082	.941	.139	-1.989	2.232
	4	39	.114	.981	.157	-1.408	2.313
	5	56	.106	1.102	.147	-2.049	2.820
	Total	200	.000	1.000	.071	-2.049	2.820
IMPFAITH Implicit Faith	2	59	.104	.979	.128	-2.881	1.666
	3	46	-.064	.831	.123	-1.745	1.459
	4	39	.021	.972	.156	-3.219	1.578
	5	56	-.071	1.170	.156	-3.615	1.812
	Total	200	.000	1.000	.071	-3.615	1.812
DEPRESS Depression - Elation	2	59	.204	1.018	.133	-2.039	1.973
	3	46	-.186	1.029	.152	-2.597	1.865
	4	39	.198	.981	.157	-2.169	1.828
	5	56	-.200	.923	.123	-1.947	1.725
	Total	200	.000	1.000	.071	-2.597	1.973
MYSTICEX Mystic Experience	2	59	.211	1.072	.140	-2.085	2.611
	3	46	-.085	.820	.121	-1.655	2.045
	4	39	-.187	.879	.141	-2.151	1.497
	5	56	-.022	1.115	.149	-2.202	2.780
	Total	200	.000	1.000	.071	-2.202	2.780
NUMINOUS Numinous Experience	2	59	-.222	.953	.124	-2.363	2.108
	3	46	.070	.926	.136	-1.916	2.124
	4	39	.103	.962	.154	-1.421	2.143
	5	56	.104	1.116	.149	-2.407	2.874
	Total	200	.000	1.000	.071	-2.407	2.874

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
EXPFAITH	Between Groups	7.404	3	2.468	2.525	.059
Exp. Faith	Within Groups	191.596	196	.978		
	Total	199.000	199			
SOCARE	Between Groups	4.416	3	1.472	1.483	.220
Social Awareness	Within Groups	194.584	196	.993		
	Total	199.000	199			
SCEPTIC	Between Groups	4.866	3	1.622	1.638	.182
Scepticism	Within Groups	194.134	196	.990		
	Total	199.000	199			
IMPFATH	Between Groups	1.126	3	.375	.372	.773
Implicit Faith	Within Groups	197.874	196	1.010		
	Total	199.000	199			
DEPRESS	Between Groups	7.836	3	2.612	2.678	.048
Depression - Elation	Within Groups	191.164	196	.975		
	Total	199.000	199			
MYSTICEX	Between Groups	4.332	3	1.444	1.454	.228
Mystic Experience	Within Groups	194.668	196	.993		
	Total	199.000	199			
NUMINOUS	Between Groups	4.160	3	1.387	1.395	.246
Numinous Experience	Within Groups	194.840	196	.994		
	Total	199.000	199			

Post Hoc Tests (No significant Pairwise differences)

Oneway Analyses of differences by School Type

Descriptives

			N	Mean	S. D.	Std. Error	Min	Max
EXPFAITH Exp. Faith	1.00 Girls		59	.185	1.060	.138	-2.011	2.019
	2.00 Co-Ed		95	-.030	.945	.097	-2.075	1.819
	3.00 Boys		46	-.176	1.013	.149	-2.693	1.831
	Total		200	.000	1.000	.071	-2.693	2.019
SOCAWARE Social Awareness	1.00 Girls		59	.215	1.070	.139	-1.789	2.899
	2.00 Co-Ed		95	-.093	1.012	.104	-2.085	3.005
	3.00 Boys		46	-.084	.850	.125	-1.702	2.131
	Total		200	.000	1.000	.071	-2.085	3.005
SCEPTIC Scepticism	1.00 Girls		59	-.241	.936	.122	-2.042	1.968
	2.00 Co-Ed		95	.109	1.049	.108	-2.049	2.820
	3.00 Boys		46	.082	.941	.139	-1.989	2.232
	Total		200	.000	1.000	.071	-2.049	2.820
IMPFATH Implicit Faith	1.00 Girls		59	.104	.979	.128	-2.881	1.666
	2.00 Co-Ed		95	-.033	1.088	.112	-3.615	1.812
	3.00 Boys		46	-.064	.831	.123	-1.745	1.459
	Total		200	.000	1.000	.071	-3.615	1.812
DEPRESS Depression - Elation	1.00 Girls		59	.204	1.018	.133	-2.039	1.973
	2.00 Co-Ed		95	-.037	.962	.099	-2.169	1.828
	3.00 Boys		46	-.186	1.029	.152	-2.597	1.865
	Total		200	.000	1.000	.071	-2.597	1.973
MYSTICEX Mystic Experience	1.00 Girls		59	.211	1.072	.140	-2.085	2.611
	2.00 Co-Ed		95	-.090	1.023	.105	-2.202	2.780
	3.00 Boys		46	-.085	.820	.121	-1.655	2.045
	Total		200	.000	1.000	.071	-2.202	2.780
NUMINOUS Numinous Experience	1.00 Girls		59	-.222	.953	.124	-2.363	2.108
	2.00 Co-Ed		95	.104	1.050	.108	-2.407	2.874
	3.00 Boys		46	.070	.926	.136	-1.916	2.124
	Total		200	.000	1.000	.071	-2.407	2.874

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
EXPFAITH Exp. Faith	Between Groups	3.541	2	1.771	1.785	.171
	Within Groups	195.459	197	.992		
	Total	199.000	199			
SOCAWARE Social Awareness	Between Groups	3.858	2	1.929	1.947	.145
	Within Groups	195.142	197	.991		
	Total	199.000	199			
SCEPTIC Scepticism	Between Groups	4.864	2	2.432	2.468	.087
	Within Groups	194.136	197	.985		
	Total	199.000	199			
IMPFAITH Implicit Faith	Between Groups	.933	2	.466	.464	.629
	Within Groups	198.067	197	1.005		
	Total	199.000	199			
DEPRESS Depression - Elation	Between Groups	4.185	2	2.093	2.116	.123
	Within Groups	194.815	197	.989		
	Total	199.000	199			
MYSTICEX Mystic Experience	Between Groups	3.710	2	1.855	1.871	.157
	Within Groups	195.290	197	.991		
	Total	199.000	199			
NUMINOUS Numinous Experience	Between Groups	4.160	2	2.080	2.103	.125
	Within Groups	194.840	197	.989		
	Total	199.000	199			

Post Hoc Tests

Homogeneous Subsets: No pairwise significant differences

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
LIMTOT Number of Full Agreement responses to 9 items	2.195	2.193	200
EXPFAITH Exp. Faith	.000	1.000	200
SOCAWARE Social Awareness	.000	1.000	200
SCEPTIC Scepticism	.000	1.000	200
IMPFAITH Implicit Faith	.000	1.000	200

c

Table 4.27
Correlations

		LIMTOT	EXPFAITH	SOCARE	SCEPTIC	IMPFAITH
Pearson Correlation	LIMTOT	1.000	.352	.713	.588	.572
	EXPFAITH	.352	1.000	.155	.162	.297
	SOCARE	.713	.155	1.000	.497	.422
	SCEPTIC	.588	.162	.497	1.000	.425
	IMPFAITH	.572	.297	.422	.425	1.000
Sig. (1-tailed)	LIMTOT	.	.000	.000	.000	.000
	EXPFAITH	.000	.	.014	.011	.000
	SOCARE	.000	.014	.	.000	.000
	SCEPTIC	.000	.011	.000	.	.000
	IMPFAITH	.000	.000	.000	.000	.
N	LIMTOT	200	200	200	200	200
	EXPFAITH	200	200	200	200	200
	SOCARE	200	200	200	200	200
	SCEPTIC	200	200	200	200	200
	IMPFAITH	200	200	200	200	200

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	SOCARE Social Awareness	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	IMPFAITH Implicit Faith	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	SCEPTIC Scepticism	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	EXPFAITH Exp. Faith	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.713(a)	.509	.506	1.5414	.509	204.938	1	198	.000
2	.773(b)	.598	.594	1.3982	.089	43.632	1	197	.000
3	.797(c)	.636	.630	1.3337	.038	20.518	1	196	.000
4	.815(d)	.664	.657	1.2849	.028	16.192	1	195	.000

a Predictors: (Constant), SOCARE Social Awareness

b Predictors: (Constant), SOCARE Social Awareness, IMPFAITH Implicit Faith

c Predictors: (Constant), SOCARE Social Awareness, IMPFAITH Implicit Faith, SCEPTIC Scepticism

d Predictors: (Constant), SOCARE Social Awareness, IMPFAITH Implicit Faith, SCEPTIC Scepticism, EXPFAITH Exp. Faith

ANOVA (e)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	486.940	1	486.940	204.938	.000 (a)
	Residual	470.455	198	2.376		
	Total	957.395	199			
2	Regression	572.243	2	286.122	146.348	.000 (b)
	Residual	385.152	197	1.955		
	Total	957.395	199			
3	Regression	608.742	3	202.914	114.071	.000 (c)
	Residual	348.653	196	1.779		
	Total	957.395	199			
4	Regression	635.473	4	158.868	96.232	.000 (d)
	Residual	321.922	195	1.651		
	Total	957.395	199			

¢

a Predictors: (Constant), SOCAWARE Social Awareness

b Predictors: (Constant), SOCAWARE Social Awareness, IMPFAITH Implicit Faith

c Predictors: (Constant), SOCAWARE Social Awareness, IMPFAITH Implicit Faith, SCEPTIC Scepticism

d Predictors: (Constant), SOCAWARE Social Awareness, IMPFAITH Implicit Faith, SCEPTIC Scepticism, EXPFAITH Exp. Faith

e Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Table 4.28

Coefficients(a)

Model		Unstandardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.195	.109	20.138		.000
	SOCAWARE Social Awareness	1.564	.109	.713	14.316	.000
2	(Constant)	2.195	.099		22.201	.000
	SOCAWARE Social Awareness	1.259	.109	.574	11.517	.000
	IMPFAITH Implicit Faith	.722	.109	.329	6.605	.000
3	(Constant)	2.195	.094		23.275	.000
	SOCAWARE Social Awareness	1.061	.113	.484	9.376	.000
	IMPFAITH Implicit Faith	.588	.108	.268	5.423	.000
	SCEPTIC Scepticism	.513	.113	.234	4.530	.000
4	(Constant)	2.195	.091		24.160	.000
	SOCAWARE Social Awareness	1.052	.109	.480	9.649	.000
	IMPFAITH Implicit Faith	.483	.108	.220	4.487	.000
	SCEPTIC Scepticism	.500	.109	.228	4.580	.000
	EXPFAITH Exp. Faith	.384	.095	.175	4.024	.000

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Home Background Analysis

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
LIMTOT			
Number of Full Agreement responses to 9 items (E and P)	2.1563	2.1087	192
F02 Attitude Religion: Mother	3.60	.93	192
F03 Attitude Religion: Father	3.44	.98	192
F04 Attitude Religion: Self	3.27	.93	192
F07 Church Attendance Mother	3.87	2.07	192
F08 Church Attendance Father	3.50	2.10	192
F09 Church Attendance Self	3.71	2.00	192

¢

Correlations

	LIMTOT	F02Mother	F03Father	F04 Self	F07 Mother	F08 Father	F09 Self
Pearson							
Correlation							
LIMTOT	1.000	.112	.053	.191	.068	.038	.051
F02 Attitude Religion							
Mother	.112	1.000	.483	.403	.617	.471	.417
F03 Attitude Religion							
Father	.053	.483	1.000	.412	.316	.655	.336
F04 Attitude Religion							
Self	.191	.403	.412	1.000	.350	.359	.491
F07 Church Attendance							
Mother	.068	.617	.316	.350	1.000	.726	.794
F08 Church Attendance							
Father	.038	.471	.655	.359	.726	1.000	.690
F09 Church Attendance							
Self	.051	.417	.336	.491	.794	.690	1.000
Sig.							
(1-tailed) LIMTOT	.	.061	.234	.004	.173	.301	.243
F02 Attitude Religion							
Mother	.061	.	.000	.000	.000	.000	.000
F03 Attitude Religion							
Father	.234	.000	.	.000	.000	.000	.000
F04 Attitude Religion							
Self	.004	.000	.000	.	.000	.000	.000
F07 Church Attendance							
Mother	.173	.000	.000	.000	.	.000	.000
F08 Church Attendance							
Father	.301	.000	.000	.000	.000	.	.000
F09 Church Attendance							
Self	.243	.000	.000	.000	.000	.000	.
N							
LIMTOT	192	192	192	192	192	192	192
F02 Attitude Religion							
Mother	192	192	192	192	192	192	192
F03 Attitude Religion							
Father	192	192	192	192	192	192	192
F04 Attitude Religion							
Self	192	192	192	192	192	192	192
F07 Church Attendance							
Mother	192	192	192	192	192	192	192
F08 Church Attendance							
Father	192	192	192	192	192	192	192
F09 Church Attendance							
Self	192	192	192	192	192	192	192

¢

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	F04 Attitude Religion: Self	.	Stepwise (Criteria: Probability-of-F-to-enter<= .050, Probability-of-F-to-remove >= .100).

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F change
1	.191(a)	.036	.031	2.0755	.036	7.166	1	190	.008

a Predictors: (Constant), F04 Attitude Religion: Self

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.868	1	30.868	7.166	.008(a)
	Residual	818.445	190	4.308		
	Total	849.313	191			

¢

a Predictors: (Constant), F04 Attitude Religion: Self

b Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Coefficients(a)

Model		Unstandardized Coefficients			Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.	
1	(Constant)	.737	.551		1.338	.182	
	F04 Attitude Religion: Self	.435	.162	.191	2.677	.008	

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 11 items (E and P)

Excluded Variables(b)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1						
	F02 Attitude Religion: Mother	.042(a)	.536	.592	.039	.837
	F03 Attitude Religion: Father	-.031(a)	-.398	.691	-.029	.830
	F07 Church Attendance Mother	.002(a)	.026	.979	.002	.878
	F08 Church Attendance Father	-.035(a)	-.461	.645	-.034	.871
	F09 Church Attendance Self	-.057(a)	-.695	.488	-.050	.758

¢

a Predictors in the Model: (Constant), F04 Attitude Religion: Self

b Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Influence of School Subjects

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
LIMTOT Number of Full Agreement responses to 9 items (E and P)	2.2126	2.2839	127
S02 Influential subject: RE	1.97	.69	127
S03 Influential subject: Soc Ed	1.57	.68	127
S04 Influential subject: Eng	1.87	.69	127
S05 Influential subject: Math	1.49	.69	127
S06 Influential subject: Science	1.74	.80	127

¢

Correlations

	LIMTOT	S02 RE	S03 Soc Ed	S04 Eng	S05 Math	S06 Science
Pearson Correlation						
LIMTOT	1.000	.428	.266	.153	.085	.209
S02 Influential subject:RE	.428	1.000	.224	.207	-.101	.028
S03 Influential :Soc Ed	.266	.224	1.000	.230	.141	.391
S04 Influential : Eng	.153	.207	.230	1.000	.387	.366
S05 Influentialt: Math	.085	-.101	.141	.387	1.000	.492
S06 Influential : Science	.209	.028	.391	.366	.492	1.000
Sig. (1-tailed)						
LIMTOT	.	.000	.001	.043	.171	.009
S02 Influential subject:RE	.000	.	.006	.010	.129	.376
S03 Influential : Soc Ed	.001	.006	.	.005	.057	.000
S04 Influential : Eng	.043	.010	.005	.	.000	.000
S05 Influential : Math	.171	.129	.057	.000	.	.000
S06 Influential : Science	.009	.376	.000	.000	.000	.
N						
LIMTOT	127	127	127	127	127	127
S02 Influential subject:RE	127	127	127	127	127	127
S03 Influential : Soc Ed	127	127	127	127	127	127
S04 Influential : Eng	127	127	127	127	127	127
S05 Influential : Math	127	127	127	127	127	127
S06 Influential : Science	127	127	127	127	127	127

¢

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	S02 Influential subject: RE	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	S06 Influential subject: Science	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 11 items (E and P)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	R Square Change	F Change	df1	df2	Sig. F Change
1	.428(a)	.183	.176	2.0727		.183	27.989	1	125	.000
2	.471(b)	.222	.209	2.0311		.039	6.173	1	124	.014

¢

a Predictors: (Constant), S02 Influential subject: RE

b Predictors: (Constant), S02 Influential subject: RE, S06 Influential subject: Science

ANOVA (c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	120.246	1	120.246	27.989	.000(a)
	Residual	537.014	125	4.296		
	Total	657.260	126			
2	Regression	145.711	2	72.855	17.660	.000(b)
	Residual	511.549	124	4.125		
	Total	657.260	126			

¢

a Predictors: (Constant), S02 Influential subject: RE

b Predictors: (Constant), S02 Influential subject: RE, S06 Influential subject: Science

c Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Coefficients (a)

Model		Unstandardized Coefficients			Standardized Coefficients	
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.577	.558		-1.033	.303
	S02 Influential subject: RE	1.417	.268	.428	5.291	.000
2	(Constant)	-1.520	.666		-2.283	.024
	S02 Influential subject: RE	1.399	.263	.422	5.327	.000
	S06 Influential subject: Science	.563	.227	.197	2.485	.014

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Excluded Variables(c)

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
1					Tolerance
S03 Influential subject: Soc Ed	.180(a)	2.200	.030	.194	.950
S04 Influential subject: Eng	.068(a)	.818	.415	.073	.957
S05 Influential subject: Math	.129(a)	1.603	.111	.142	.990
S06 Influential subject: Science	.197(a)	2.485	.014	.218	.999
2					
S03 Influential subject: Soc Ed	.118(b)	1.342	.182	.120	.802
S04 Influential subject: Eng	-.007(b)	-.084	.933	-.008	.827
S05 Influential subject: Math	.041(b)	.447	.656	.040	.745

c

a Predictors in the Model: (Constant), S02 Influential subject: RE

b Predictors in the Model: (Constant), S02 Influential subject: RE, S06 Influential subject: Science

c Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Influence of School Level Involvement

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
LIMTOT Number of Full Agreement responses to 9 items (E and P)	2.1675	2.1608	209
F12 Happiness home	3.56	1.05	209
S01 RE subject	1.48	.50	209
S14 Happiness school	3.79	1.06	209
S15 Involved in Retreats	3.86	1.25	209

c

Correlations

	LIMTOT	F12Happiness home	S01 RE subject	S14 Happiness school	S15 Retreats
Pearson Correlation					
LIMTOT	1.000	-.128	-.106	.104	.030
F12Happiness home	-.128	1.000	-.060	.320	.052
S01REsubject	-.106	-.060	1.000	-.147	.138
S14Happiness school	.104	.320	-.147	1.000	.185
S15 Involved Retreats	.030	.052	.138	.185	1.000
Sig. (1-tailed)					
LIMTOT	.	.033	.063	.068	.334
F12Happiness home	.033	.	.196	.000	.228
S01REsubject	.063	.196	.	.017	.023
S14Happiness school	.068	.000	.017	.	.004
S15 Involved Retreats	.334	.228	.023	.004	.
N	LIMTOT	209	209	209	209
F12Happiness home	209	209	209	209	209
S01REsubject	209	209	209	209	209
S14Happiness school	209	209	209	209	209
S15 Involved Retreats	209	209	209	209	209

Variables Entered/Removed(a)

| a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
LIMTOT Number of Full Agreement responses to 9 items (E and P)	2.1724	2.1766	203
S15 Involved in Retreats	3.88	1.25	203
S16 Involved with Disabled	1.72	.98	203
S17 Involved with Aged	1.92	1.00	203
S18 Involved with Poor	1.50	.91	203
S19 Involved with Children	2.51	1.35	203
S20 Involved with Fund-raising	2.95	1.19	203
S21 Involved with Sport	3.30	1.54	203
S22 Involved in Performance	2.26	1.35	203
S23 Involved in Competitions etc	2.30	1.48	203

c

Correlations

	LIMTOT	S15	S16	S17	S18	S19	S20	S21	S22	S23
Pearson Correlation										
LIMTOT	1.000	.031	.043	.100	.027	.041	-.073	-.167	.240	.099
S15Involved Retreats	.031	1.000	.101	.123	.146	.207	.266	.284	.189	.186
S16Involved Disabled	.043	.101	1.000	.630	.410	.442	.200	.261	.117	.067
S17Involved Aged	.100	.123	.630	1.000	.410	.552	.302	.241	.111	.083
S18Involved Poor	.027	.146	.410	.410	1.000	.386	.190	.295	.013	.115
S19Involved Children	.041	.207	.442	.552	.386	1.000	.323	.209	.255	.175
S20InvolvedFundraise	-.073	.266	.200	.302	.190	.323	1.000	.361	.207	.238
S21Involved Sport	-.167	.284	.261	.241	.295	.209	.361	1.000	.025	.297
S22InvolvedPerformce	.240	.189	.117	.111	.013	.255	.207	.025	1.000	.369
S23InvolvedCompetitn	.099	.186	.067	.083	.115	.175	.238	.297	.369	1.000
Sig. (1-tailed)										
LIMTOT	.	.328	.270	.078	.354	.282	.150	.008	.000	.079
S15InvolvedRetreats	.328	.	.075	.040	.019	.002	.000	.000	.003	.004
S16Involved Disabled	.270	.075	.	.000	.000	.000	.002	.000	.048	.172
S17Involved Aged	.078	.040	.000	.	.000	.000	.000	.000	.058	.120
S18Involved Poor	.354	.019	.000	.000	.	.000	.003	.000	.429	.052
S19Involved Children	.282	.002	.000	.000	.000	.	.000	.001	.000	.006
S20InvolvedFundraise	.150	.000	.002	.000	.003	.000	.	.000	.002	.000
S21Involved Sport	.008	.000	.000	.000	.000	.001	.000	.	.363	.000
S22InvolvedPerformce	.000	.003	.048	.058	.429	.000	.002	.363	.	.000
S23InvolvedCompetitn	.079	.004	.172	.120	.052	.006	.000	.000	.000	.
N										
LIMTOT	203	203	203	203	203	203	203	203	203	203
S15Involved Retreats	203	203	203	203	203	203	203	203	203	203
S16Involved Disabled	203	203	203	203	203	203	203	203	203	203
S17Involved Aged	203	203	203	203	203	203	203	203	203	203
S18Involved Poor	203	203	203	203	203	203	203	203	203	203
S19Involved Children	203	203	203	203	203	203	203	203	203	203
S20InvolvedFundraise	203	203	203	203	203	203	203	203	203	203
S21Involved Sport	203	203	203	203	203	203	203	203	203	203
S22InvolvedPerformce	203	203	203	203	203	203	203	203	203	203
S23InvolvedCompetitn	203	203	203	203	203	203	203	203	203	203

¢

Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method
1	S22 Involved in Performance	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	S21 Involved with Sport	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square change	F Change	df1	df2	Sig.F change
1	.240 (a)	.057	.053	2.1183	.057	12.261	1	201	.001
2	.296 (b)	.088	.078	2.0895	.030	6.587	1	200	.011

¢

a Predictors: (Constant), S22 Involved in Performance

b Predictors: (Constant), S22 Involved in Performance, S21 Involved with Sport

ANOVA (c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.017	1	55.017	12.261	.001(a)
	Residual	901.948	201	4.487		
	Total	956.966	202			
2	Regression	83.775	2	41.888	9.594	.000(b)
	Residual	873.190	200	4.366		
	Total	956.966	202			

¢

a Predictors: (Constant), S22 Involved in Performance

b Predictors: (Constant), S22 Involved in Performance, S21 Involved with Sport

c Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Coefficients (a)

Model	Unstandardized Coefficients			Standardized Coefficients	
	B	Std. Error	Beta	t	Sig.
1 (Constant)	1.298	.291		4.470	.000
S22 Involved in Performance	.387	.111	.240	3.502	.001
2 (Constant)	2.090	.421		4.964	.000
S22 Involved in Performance	.394	.109	.244	3.612	.000
S21 Involved with Sport	-.245	.095	-.173	-2.566	.011

¢

a Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Excluded Variables (c)

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1					
S15 Involved in Retreats	-.014(a)	-.206	.837	-.015	.964
S16 Involved Disabled	.015(a)	.221	.825	.016	.986
S17 Involved with Aged	.074(a)	1.077	.283	.076	.988
S18 Involved with Poor	.023(a)	.342	.733	.024	1.000
S19 Involved Children	-.022(a)	-.305	.761	-.022	.935
S20 Involved Fundraise	-.128(a)	-1.842	.067	-.129	.957
S21 Involved with Sport	-.173(a)	-2.566	.011	-.179	.999
S23 Involved Competition	.013(a)	.171	.865	.012	.864
2					
S15 Involved in Retreats	.039(b)	.541	.589	.038	.886
S16 Involved Disabled	.065(b)	.924	.357	.065	.920
S17 Involved with Aged	.123(b)	1.767	.079	.124	.931
S18 Involved with Poor	.082(b)	1.158	.248	.082	.913
S19 Involved Children	.017(b)	.233	.816	.017	.894
S20 Involved Fund-raise	-.073(b)	-.991	.323	-.070	.831
S23 Involved Competition	.078(b)	1.019	.309	.072	.781

¢

a Predictors in the Model: (Constant), S22 Involved in Performance

b Predictors in the Model: (Constant), S22 Involved in Performance, S21 Involved with Sport

c Dependent Variable: LIMTOT Number of Full Agreement responses to 9 items (E and P)

Individual Items on Factor Scales

EXPFAITH

1. Factor 0.78

Q42 V13 Believe in God

Mean = 3.93

s.d. 1.29

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	17	8.0	8.1	8.1
	2 Prob false	11	5.2	5.2	13.3
	3 Uncertain	46	21.6	21.9	35.2
	4 Prob true	31	14.6	14.8	50.0
	5 True	105	49.3	50.0	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

2. Factor 0.74

Q40 V11 Live Christian values

Mean = 3.00

s.d. 1.34

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	39	18.3	18.7	18.7
	2 Prob false	39	18.3	18.7	37.3
	3 Uncertain	44	20.7	21.1	58.4
	4 Prob true	57	26.8	27.3	85.6
	5 True	30	14.1	14.4	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

3. Factor 0.71

Q44 V15 God loves me

Mean = 3.66

s.d. 1.23

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	19	8.9	9.1	9.1
	2 Prob false	6	2.8	2.9	12.0
	3 Uncertain	74	34.7	35.4	47.4
	4 Prob true	38	17.8	18.2	65.6
	5 True	72	33.8	34.4	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

4. Factor 0.58**IMPFAITH Factor 0.51 (2 of 4)**

Q48 V19 Felt close to God at times			Mean = 3.31		s.d. 1.36	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	30	14.1	14.3	14.3	
	2 Prob false	24	11.3	11.4	25.7	
	3 Uncertain	63	29.6	30.0	55.7	
	4 Prob true	36	16.9	17.1	72.9	
	5 True	57	26.8	27.1	100.0	
	Total	210	98.6	100.0		
Missing	9	3	1.4			
Total		213	100.0			

5. Factor -0.58**IMPFAITH Factor +0.32 (4 of 4)**

Q31 V02 Religious language lacks meaning			Mean = 2.90		s.d. 1.20	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	30	14.1	14.1	14.1	
	2 Prob false	50	23.5	23.5	37.6	
	3 Uncertain	69	32.4	32.4	70.0	
	4 Prob true	40	18.8	18.8	88.7	
	5 True	24	11.3	11.3	100.0	
	Total	213	100.0	100.0		

6. Factor +0.58

Q37 V08 Religion answers questions			Mean = 2.99		s.d. 1.26	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	32	15.0	15.1	15.1	
	2 Prob false	44	20.7	20.8	35.8	
	3 Uncertain	59	27.7	27.8	63.7	
	4 Prob true	49	23.0	23.1	86.8	
	5 True	28	13.1	13.2	100.0	
	Total	212	99.5	100.0		
Missing	9	1	.5			
Total		213	100.0			

7. Factor - 0.58

Q50 V21 Religion not relevant			Mean = 2.63		s.d. 1.11	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	40	18.8	19.0	19.0	
	2 Prob false	50	23.5	23.7	42.7	
	3 Uncertain	81	38.0	38.4	81.0	
	4 Prob true	28	13.1	13.3	94.3	
	5 True	12	5.6	5.7	100.0	
	Total	211	99.1	100.0		
Missing	9	2	.9			
Total		213	100.0			

8. Factor -0.51

Q39 V10 Church unnecessary			Mean = 4.11		s.d. 1.18	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	10	4.7	4.7	4.7	
	2 Prob false	17	8.0	8.0	12.7	
	3 Uncertain	26	12.2	12.3	25.0	
	4 Prob true	46	21.6	21.7	46.7	
	5 True	113	53.1	53.3	100.0	
	Total	212	99.5	100.0		
Missing	9	1	.5			
Total		213	100.0			

9. Factor -0.39 SOCAWARE Factor +0.40 (6 of 7) SCEPTIC Factor -0.37 (4 of 4)

Q51 V22 Church not relevant			Mean = 3.92		s.d. 1.20	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	16	7.5	7.6	7.6	
	2 Prob false	8	3.8	3.8	11.4	
	3 Uncertain	39	18.3	18.6	30.0	
	4 Prob true	60	28.2	28.6	58.6	
	5 True	87	40.8	41.4	100.0	
	Total	210	98.6	100.0		
Missing	9	3	1.4			
Total		213	100.0			

DEPRESS

1. Factor 0.88

Q56 E05 Felt no purpose in life sometimes Mean = 3.16 s.d. 1.53

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	49	23.0	23.1	23.1
	2 Prob false	31	14.6	14.6	37.7
	3 Uncertain	26	12.2	12.3	50.0
	4 Prob true	50	23.5	23.6	73.6
	5 True	56	26.3	26.4	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

2. Factor 0.82

Q59 E08 No meaning for life sometimes Mean = 3.21 s.d. 1.45

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	42	19.7	19.7	19.7
	2 Prob false	26	12.2	12.2	31.9
	3 Uncertain	45	21.1	21.1	53.1
	4 Prob true	46	21.6	21.6	74.6
	5 True	54	25.4	25.4	100.0
	Total	213	100.0	100.0	

3. Factor 0.66

Q53 E02 Experienced loneliness or depression Mean = 3.87 s.d. 1.24

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	15	7.0	7.0	7.0
	2 Prob false	22	10.3	10.3	17.4
	3 Uncertain	23	10.8	10.8	28.2
	4 Prob true	69	32.4	32.4	60.6
	5 True	84	39.4	39.4	100.0
	Total	213	100.0	100.0	

4. Factor -0.53**MYSTICEX Factor 0.44 (6 of 6)**

Q62 E11 Found joy and meaning for life Mean = 3.08 s.d. 1.17

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	28	13.1	13.3	13.3
	2 Prob false	30	14.1	14.2	27.5
	3 Uncertain	73	34.3	34.6	62.1
	4 Prob true	58	27.2	27.5	89.6
	5 True	22	10.3	10.4	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		

Total		213	100.0		
5. Factor 0.51 NUMINOUS Factor 0.57 (3 of 5)					
Q54 E03 Experienced evil presence		Mean = 3.36 s.d. 1.23			
		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	22	10.3	10.4	10.4
	2 Prob false	28	13.1	13.2	23.6
	3 Uncertain	53	24.9	25.0	48.6
	4 Prob true	69	32.4	32.5	81.1
	5 True	40	18.8	18.9	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

6. Factor 0.39

Q57 E06 Sometimes there is a pattern to events		Mean = 3.73 s.d. 1.07			
		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	9	4.2	4.3	4.3
	2 Prob false	14	6.6	6.6	10.9
	3 Uncertain	60	28.2	28.4	39.3
	4 Prob true	70	32.9	33.2	72.5
	5 True	58	27.2	27.5	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

7. Factor 0.38 NUMINOUS Factor 0.41 (5 of 5)

Q55 E04 Experienced powerful presence		Mean = 3.54 s.d. 1.10			
		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	13	6.1	6.1	6.1
	2 Prob false	15	7.0	7.0	13.1
	3 Uncertain	76	35.7	35.7	48.8
	4 Prob true	62	29.1	29.1	77.9
	5 True	47	22.1	22.1	100.0
	Total	213	100.0	100.0	

SOCAWARE

1. Factor 0.80

Q43 V14 Help lonely

Mean = 4.17

s.d. 0.86

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	3	1.4	1.4	1.4
	2 Prob false	7	3.3	3.3	4.7
	3 Uncertain	24	11.3	11.4	16.1
	4 Prob true	94	44.1	44.5	60.7
	5 True	83	39.0	39.3	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

2. Factor 0.79

Q45 V16 Concern for world poverty

Mean = 4.46

s.d. 0.83

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	3	1.4	1.4	1.4
	2 Prob false	4	1.9	1.9	3.3
	3 Uncertain	16	7.5	7.6	10.9
	4 Prob true	58	27.2	27.5	38.4
	5 True	130	61.0	61.6	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

3. Factor 0.78

Q41 V12 Concern for poor

Mean = 4.06

s.d. 0.98

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	5	2.3	2.4	2.4
	2 Prob false	10	4.7	4.7	7.1
	3 Uncertain	34	16.0	16.1	23.2
	4 Prob true	80	37.6	37.9	61.1
	5 True	82	38.5	38.9	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

4. Factor 0.44

Q46 V17 Life not faith important			Mean = 3.94		s.d. 1.15	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	11	5.2	5.2	5.2	
	2 Prob false	12	5.6	5.7	10.9	
	3 Uncertain	43	20.2	20.4	31.3	
	4 Prob true	57	26.8	27.0	58.3	
	5 True	88	41.3	41.7	100.0	
	Total	211	99.1	100.0		
Missing	9	2	.9			
Total		213	100.0			

5. Factor -0.40

Q38 V09 Majority rules			Mean = 1.69		s.d. 0.88	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	113	53.1	53.3	53.3	
	2 Prob false	60	28.2	28.3	81.6	
	3 Uncertain	32	15.0	15.1	96.7	
	4 Prob true	5	2.3	2.4	99.1	
	5 True	2	.9	.9	100.0	
	Total	212	99.5	100.0		

6. Factor 0.40 EXPFAITH Factor -0.39 (6 of 7) IMPFAITH Factor -0.49 (3 of 4)

Q51 V22 Church not relevant			Mean = 3.92		s.d. 1.20	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	16	7.5	7.6	7.6	
	2 Prob false	8	3.8	3.8	11.4	
	3 Uncertain	39	18.3	18.6	30.0	
	4 Prob true	60	28.2	28.6	58.6	
	5 True	87	40.8	41.4	100.0	
	Total	210	98.6	100.0		
Missing	9	3	1.4			
Total		213	100.0			

7. Factor 0.36

Q30 V01 Enjoy RE

Mean = 3.06

s.d. 1.14

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	29	13.6	13.7	13.7
	2 Prob false	32	15.0	15.1	28.8
	3 Uncertain	61	28.6	28.8	57.5
	4 Prob true	78	36.6	36.8	94.3
	5 True	12	5.6	5.7	100.0
	Total	212	99.5	100.0	
Missing	9	1	.5		
Total		213	100.0		

MYSTICEX

1. Factor 0.83

Q66 P04 All things are one

Mean = 1.63

s.d. 0.88

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	125	58.7	58.7	58.7
	2 Unsure	53	24.9	24.9	83.6
	3 Prob Yes	24	11.3	11.3	94.8
	4 Yes	11	5.2	5.2	100.0
	Total	213	100.0	100.0	

2. Factor 0.66

Q65 P03 Sacredness in Nature

Mean = 2.48

s.d. 1.08

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	51	23.9	23.9	23.9
	2 Unsure	57	26.8	26.8	50.7
	3 Prob Yes	57	26.8	26.8	77.5
	4 Yes	48	22.5	22.5	100.0
	Total	213	100.0	100.0	

3. Factor 0.60

Q60 E09 Felt presence of deceased friend or relative

Mean = 3.02

s.d. 1.39

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	40	18.8	19.0	19.0
	2 Prob false	37	17.4	17.5	36.5
	3 Uncertain	56	26.3	26.5	63.0
	4 Prob true	34	16.0	16.1	79.1
	5 True	44	20.7	20.9	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

4. Factor 0.59

Q61 E10 Recognised a sacredness in nature

Mean = 3.10

s.d. 1.18

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	27	12.7	12.8	12.8
	2 Prob false	25	11.7	11.8	24.6
	3 Uncertain	88	41.3	41.7	66.4
	4 Prob true	41	19.2	19.4	85.8
	5 True	30	14.1	14.2	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

5. Factor 0.46

Q67 P05 Pattern to events

Mean = 2.64

s.d. 1.14

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	49	23.0	23.0	23.0
	2 Unsure	43	20.2	20.2	43.2
	3 Prob Yes	56	26.3	26.3	69.5
	4 Yes	65	30.5	30.5	100.0
	Total	213	100.0	100.0	

6. Factor 0.44**DEPRESS -0.53 (4 of 7)**

Q62 E11 Found joy and meaning for life

Mean = 3.08

s.d. 1.17

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	28	13.1	13.3	13.3
	2 Prob false	30	14.1	14.2	27.5
	3 Uncertain	73	34.3	34.6	62.1
	4 Prob true	58	27.2	27.5	89.6
	5 True	22	10.3	10.4	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

SCEPTIC

1. Factor 0.76

Q32 V03 Science will control world

Mean = 2.94

s.d. 1.21

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	32	15.0	15.0	15.0
	2 Prob false	47	22.1	22.1	37.1
	3 Uncertain	54	25.4	25.4	62.4
	4 Prob true	61	28.6	28.6	91.1
	5 True	19	8.9	8.9	100.0
	Total	213	100.0	100.0	

2. Factor 0.69

Q34 V05 Believe with proof only

Mean = 2.75

s.d. 1.39

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	52	24.4	24.8	24.8
	2 Prob false	49	23.0	23.3	48.1
	3 Uncertain	38	17.8	18.1	66.2
	4 Prob true	41	19.2	19.5	85.7
	5 True	30	14.1	14.3	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

3. Factor -0.45

Q36 V07 Important things not proved

Mean = 3.88

s.d. 1.14

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	11	5.2	5.2	5.2
	2 Prob false	15	7.0	7.1	12.3
	3 Uncertain	39	18.3	18.5	30.8
	4 Prob true	70	32.9	33.2	64.0
	5 True	76	35.7	36.0	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

4. Factor -0.37 EXPFAITH Factor -0.39 (9 of 9) SOCAWARE Factor 0.40 (6 of 7)

Q51 V22 Church not relevant

Mean = 3.92

s.d. 1.20

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	16	7.5	7.6	7.6
	2 Prob false	8	3.8	3.8	11.4
	3 Uncertain	39	18.3	18.6	30.0
	4 Prob true	60	28.2	28.6	58.6
	5 True	87	40.8	41.4	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

NUMINOUS

1. Factor 0.89

Q58 E07 Close awareness of God sometimes

Mean = 3.21

s.d. 1.34

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	32	15.0	15.2	15.2
	2 Prob false	30	14.1	14.2	29.4
	3 Uncertain	55	25.8	26.1	55.5
	4 Prob true	50	23.5	23.7	79.1
	5 True	44	20.7	20.9	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

2. Factor 0.85

Q63 P01 Help in Prayer

Mean = 2.14

s.d. 0.97

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 Never	62	29.1	29.7	29.7
	2 Unsure	79	37.1	37.8	67.5
	3 Prob Yes	45	21.1	21.5	89.0
	4 Yes	23	10.8	11.0	100.0
	Total	209	98.1	100.0	
Missing	9	4	1.9		
Total		213	100.0		

3. Factor 0.57 DEPRESS 0.51 (5 of 7)

Q54 E03 Experienced evil presence			Mean = 3.36		s.d. 1.23	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	22	10.3	10.4	10.4	
	2 Prob false	28	13.1	13.2	23.6	
	3 Uncertain	53	24.9	25.0	48.6	
	4 Prob true	69	32.4	32.5	81.1	
	5 True	40	18.8	18.9	100.0	
	Total	212	99.5	100.0		
Missing	9	1	.5			
Total		213	100.0			

4. Factor 0.44

Q64 P02 Presence of God			Mean = 1.32		s.d. 0.67	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 Never	164	77.0	77.0	77.0	
	2 Unsure	35	16.4	16.4	93.4	
	3 Prob Yes	9	4.2	4.2	97.7	
	4 Yes	5	2.3	2.3	100.0	
	Total	213	100.0	100.0		

5. Factor 0.41 DEPRESS 0.38 (7 of 7)

Q55 E04 Experienced powerful presence			Mean = 3.54		s.d. 1.10	
		Frequency	Pct	Valid Pct	Cumulative Pct	
Valid	1 False	13	6.1	6.1	6.1	
	2 Prob false	15	7.0	7.0	13.1	
	3 Uncertain	76	35.7	35.7	48.8	
	4 Prob true	62	29.1	29.1	77.9	
	5 True	47	22.1	22.1	100.0	
	Total	213	100.0	100.0		

IMPFAITH

1. Factor 0.77

Q49 V20 Pattern and Purpose to life

Mean = 3.96

s.d. 0.90

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	2	.9	.9	.9
	2 Prob false	7	3.3	3.3	4.3
	3 Uncertain	56	26.3	26.5	30.8
	4 Prob true	79	37.1	37.4	68.2
	5 True	67	31.5	31.8	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

2. Factor 0.51**EXPFAITH Factor +0.58 (4 of 9)**

Q48 V19 Felt close to God at times

Mean = 3.31

s.d. 1.36

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	30	14.1	14.3	14.3
	2 Prob false	24	11.3	11.4	25.7
	3 Uncertain	63	29.6	30.0	55.7
	4 Prob true	36	16.9	17.1	72.9
	5 True	57	26.8	27.1	100.0
	Total	210	98.6	100.0	
Missing	9	3	1.4		
Total		213	100.0		

3. Factor -0.49**SOC-AWARE Factor 0.40 (6 of 7)**

Q46 V17 Life not faith important

Mean = 3.94

s.d. 1.15

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	11	5.2	5.2	5.2
	2 Prob false	12	5.6	5.7	10.9
	3 Uncertain	43	20.2	20.4	31.3
	4 Prob true	57	26.8	27.0	58.3
	5 True	88	41.3	41.7	100.0
	Total	211	99.1	100.0	
Missing	9	2	.9		
Total		213	100.0		

4. Factor 0.32**EXPFAITH Factor -0.58 (4 of 9)**

Q31 V02 Religious language lacks meaning

Mean = 2.90

s.d. 1.20

		Frequency	Pct	Valid Pct	Cumulative Pct
Valid	1 False	30	14.1	14.1	14.1
	2 Prob false	50	23.5	23.5	37.6
	3 Uncertain	69	32.4	32.4	70.0
	4 Prob true	40	18.8	18.8	88.7
	5 True	24	11.3	11.3	100.0
	Total	213	100.0	100.0	

Written Accounts – Gender analysis

P07 Not told * B01 Q1 Gender Crosstabulation

		B01 Q1 Gender		
		1 Male	2 Female	Total
Count	1 Not told	19	21	40
	2 Have told	16	25	41
	Total	35	46	81
% within P07 Not told	1 Not told	47.5%	52.5%	100.0%
	2 Have told	39.0%	61.0%	100.0%
	Total	43.2%	56.8%	100.0%
% within B01 Q1 Gender	1 Not told	54.3%	45.7%	49.4%
	2 Have told	45.7%	54.3%	50.6%
	Total	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-side d)
Pearson Chi-Square	.593 ^b	1	.441		
Continuity Correction ^a	.298	1	.585		
Likelihood Ratio	.593	1	.441		
Fisher's Exact Test				.505	.293
Linear-by-Linear Association	.585	1	.444		
N of Valid Cases	81				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.28.

Appendix C

Ethical Clearance The Survey Questionnaire

SURVEY QUESTIONNAIRE



AUSTRALIAN CATHOLIC UNIVERSITY

Experience of the Spiritual among Senior High School students

Dear student

You are invited to assist in a survey of values, opinions and experiences. This is currently being carried out in some schools in Brisbane. The survey is part of a program endorsed by the Australian Catholic University Research Projects Ethics Committee.

This survey asks you what you think about various issues and invites you to reflect on what may be a hidden part of your life – the feelings, experiences and attitudes that may be difficult for you to put into words.

We would like to hear from you - your hopes, fears, aspirations and beliefs. In the questions which follow and the sections where you are invited to write a response, there are no right or wrong answers; the best answer is your personal opinion and your own experience of life. You are invited to express this freely and in confidence.

Some of the words used may be interpreted differently by individuals. In this survey it is **your** interpretation in which we are interested, so please follow your own direction when answering the questions.

The replies you make are strictly **CONFIDENTIAL**. Unless you wish to take up the invitation to talk further about your ideas, no attempt will be made to identify individual students. The data from this survey may be used in aggregated form in publications and shared with other researchers.

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SECTION 1 - BACKGROUND

This section seeks some details about you and your experience of life in general.

PERSONAL DETAILS

B01

1. Gender

☐ Male

☐ Female

B02

2. Current Year level in High School

☐ Year 11

☐ Year 12

B03

3. Religion

☐ Uniting

☐ Lutheran

☐ Catholic

☐ Anglican

☐ No Religion

☐ Other religion

(specify) _____

4. Cultural background

Level of influence of cultural traditions in your family background

B04

Australian



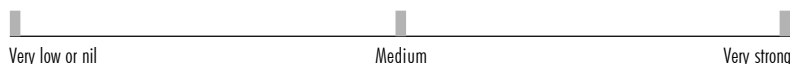
B05

Other English speaking country
(England, NZ, USA etc.)



B06

European



B07

Asian



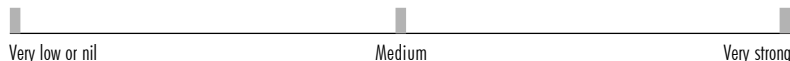
B08

Pacific Island



B09

South American



B10

Other (specify) _____



FAMILY DETAILS

F01

5. Parent relationship in my present home

☐ Biological Mother & Father at home

☐ Biological Mother / Male Guardian at home

☐ Biological Father / Female Guardian at home

☐ Mother – Single Parent

☐ Father – Single Parent

☐ Other

(specify) _____

Attitude to religion at home

Please tick the appropriate box –

		Very Anti-Religion	Somewhat Anti-Religion	Neutral	Quite Religious	Very Religious	Not known for this person
F02	6. Mother/Female Guardian						
F03	7. Father/Male Guardian						
F04	8. Self						
F05	9. Older Brother/Sister (leave blank if not applicable)						
F06	10. Younger Brother/Sister (leave blank if not applicable)						

Frequency of church attendance at home

		Never	Rarely	On family occasions only eg. Weddings	About once a year	About once a month	About weekly	Every week at least
F07	11. Mother/Female Guardian							
F08	12. Father/Male Guardian							
F09	13. Self							
F10	14. Older Brother/Sister (leave blank if not applicable)							
F11	15. Younger Brother/Sister (leave blank if not applicable)							

16. Your personal happiness at home



SCHOOL LIFE

17. My Year 12 subjects include

S01

- ☐ Study of Religion
or
☐ Religious Education

18. The extent to which each subject has made you feel deeply about life is

S02

S03

S04

S05

S06

S07

S08

S09

S10

S11

S12

S13

	Very Little	Slightly	Very Much
Religious Education			
Social Science			
English			
Mathematics			
Science			
Art			
History			
Biology			
Chemistry			
Physics			
Geography			
Other Subject:			

19. On the whole, I am happy at this school

S14



My involvement in school activities

S15

S16

S17

S18

S19

S20

	Never	Rarely – once or twice only	Occasionally	Regularly	Often
20. School Retreats/Camps					
21. Work with disabled people					
22. Work with old people					
23. Work with the poor or homeless					
24. Work with children					
26. Work with fund-raising					

Sporting Activities

S21

	Never	Rarely – once or twice only	Occasionally	Regularly	Often
27. Represented the school in sport					

Cultural Activities

		Never	Rarely – once or twice only	Occasionally	Regularly	Often
S22	28. Participated in public performances e.g. Plays, music concerts, public speaking.					
S23	29. Participated in clubs/competitions e.g. Chess, debating.					

Values and Attitudes

		Certainly false	Probably false	Uncertain	Probably true	Certainly true
V01	30. On the whole, I enjoy the classes in Religious Education.					
V02	31. The way most religious people talk today does not mean much to me.					
V03	32. Science will eventually give us complete control over our world.					
V04	33. The laws of nature discovered by Science will never be changed.					
V05	34. We should not believe anything until it is actually proved to be true.					
V06	35. The most important thing we learn from Science is how little we really understand of the world.					
V07	36. Some of the most important things in life can never be proved.					
V08	37. Religion helps me answer real questions about the meaning of life.					
V09	38. It is alright to do something if everyone else is doing it.					
V10	39. You don't need to go to church to live a good and meaningful life.					
V11	40. As far as I can, I tend to base my life on Christian values.					
V12	41. I am concerned about justice to poor and disadvantaged people in our society today.					
V13	42. I believe in God.					
V14	43. I try to be friendly and helpful to others who feel lonely or who are rejected.					
V15	44. God loves me very much.					
V16	45. It concerns me that a large part of the world suffers from hunger and malnutrition.					
V17	46. It does not matter so much what you believe so long as you lead a morally good life.					
V18	47. I experience times when I am uncertain about whether God exists or not.					

		Certainly false	Probably false	Uncertain	Probably true	Certainly true
V19	48. I have experienced times in my life when I have felt close to God.					
V20	49. I believe there is a pattern and purpose to human existence.					
V21	50. Religion today has nothing to say about the most important issues in life.					
V22	51. You can be religious without belonging to any religious organisation.					

Experiences in living

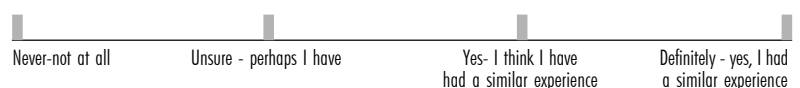
		Certainly false	Probably false	Uncertain	Probably true	Certainly true
E01	52. Some of the most valuable experiences we have are the ones we find hardest to put into words.					
E02	53. At times I have experienced loneliness and severe depression.					
E03	54. At times I have been aware of an evil 'presence' beyond myself.					
E04	55. At times I have been aware of a presence or power which seems to be beyond and different to my everyday self.					
E05	56. At times I have felt that there is no purpose or reason for living.					
E06	57. At times I have felt that the events of life seem to have a mysterious plan or pattern about them.					
E07	58. At times I have felt a very close awareness of God in my life.					
E08	59. There are times when life has no meaning.					
E09	60. Sometimes I have felt a guiding presence from a friend or relative who has died.					
E10	61. Sometimes I have recognised a 'sacred presence' in the patterns of nature.					
E11	62. I have discovered a joy and meaning for my own life now and am satisfied and at peace.					

Some Personal Experiences

The passages below are some people's description of a particular time in their lives when they had a significant or unusual experience.

- P01 63. 'At times of great difficulty or danger in my life I have felt I could always pray to God and get help. One night we were in a traffic accident and I was very frightened, and I prayed. Somehow I knew there was someone else with us, a presence of some kind; and I escaped with just a few bruises. At other times, too, when I have felt very depressed I have had this same feeling of being given strength and hope.'

Have you ever had a similar experience yourself?



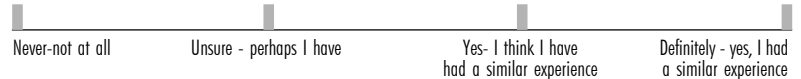
P02 64. 'It was about mid-morning, I came from the kitchen into the bedroom, sat at my dressing table, opened a drawer and began to do something quite ordinary, I can't remember what, when I was absolutely overwhelmed by the presence of God. I was absolutely astounded. I hadn't known there was a God at all... I was pretty much an atheist or agnostic and had no interest in religion. I had no such thoughts at the time, however, I was just shattered, shaken to the roots of my being'.

Have you ever had a similar experience yourself?



P03 65. '... as I sat thinking, looking at the beauty of the valley below, I felt as if the whole scene became luminous, I was aware of the tremendous intensity of colour – I felt intensely happy, for no reason at all. I suddenly felt at one with the very life force of creation, whatever that is. I felt part of it. I felt caught up in a tremendous theme of praise... the feeling of elation lasting for some time...'

Have you ever had a similar experience yourself?



P04 66. 'I was standing alone on the edge of a low cliff, overlooking a small valley leading to the sea. It was late afternoon or early evening and there were birds swooping in the sky – possibly swallows. Suddenly my mind 'felt' as though it had changed gear or twitched into another view of things. I still saw the birds and everything around me but instead of standing looking at them, I was them and they were me.'

Have you ever had a similar experience yourself?



P05 67. 'A feeling that has happened to me a number of times in my life is that of knowing something will happen before it actually does. I remember playing in a cricket match at school once and fielding at about mid-on. The ball had not come my way for ages, but all of a sudden, before the bowler had even turned on his run, I felt I knew the next ball would be a catch coming my way. It did, for no apparent reason, the batsman hit it straight to me. Another time, only recently, I walked by a raffle wheel in a shopping centre – 'only two tickets left before we spin' the seller was shouting. Suddenly, the thought came to me – 'buy a ticket, because you will win this.' I bought only one and walked on to do some shopping, but I knew I would win. Nothing was more certain. When I returned, sure enough, my ticket was on the board as the winner.'

Have you ever had a similar experience yourself?



THANK YOU FOR COMPLETING THE SURVEY TO THIS POINT

Some people refer to the experiences above as 'spiritual experiences'. If you believe you have had your own 'spiritual' experience in your life you are invited to describe your life experience briefly in the section below. Please do this only if you wish to do so. Be assured that your response, as for the survey questions, will remain confidential, unless you wish to talk further about it.

ABOUT THE EXPERIENCE

P06 The experience I had of this occurred when I was ☐ alone ☐ in company with others.

P07 ☐ I have previously told ☐ never previously told anyone else about this.

My experience was like this.....

More writing space overleaf...

Invitation to talk further

All of your responses to this survey are confidential. However, if you have had a 'spiritual' experience in your life and would like to talk about it in confidence, please fill in your name below. Everything will remain confidential but we will need your name to arrange time to talk later.

Yes – I would like to talk about the experience I have had.

My name is_____

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