

**PERSONAL FINANCIAL PREPARATION
FOR RETIREMENT**

By

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Abstract

The research objective of this study is to investigate the relationship between an individual's involvement and their behaviour to prepare financially for retirement. More particularly, to determine if there is a significant positive relationship between involvement and their financial preparation for retirement, to establish whether the influence of involvement is moderated by an individual's age, income or gender, their level of education or the number of dependants they support, and to explore the role of involvement in how and why individuals form opinions about financial preparation for retirement.

The definition of involvement used states that involvement represents the degree of personal relevance based on inherent needs, values and interests (Zaichkowsky 1985b). The measure used for involvement is a tried and tested scale whilst the measure of financial preparation has been developed for this research and is based on questions used in previous studies of financial preparation for retirement.

A mixed methodology approach using a survey and a case study was adopted enabling the following two goals to be accomplished simultaneously:

- Determine whether increased involvement is positively related to the level of financial preparation undertaken.
- Address exploratory questions about 'how' and 'why' opinions about financial preparation are formed.

The results of the quantitative analysis revealed a substantial relationship between involvement and financial preparation, indicating that subjects who are involved in the decision making process to save for their retirement, will undertake significantly more

financial preparation than those who are not. The results also indicated that while the level of education and the number of dependants do not moderate the influence of involvement, age, gender and level of income do have a moderating affect.

The analysis of the rich descriptions provided by the case study subjects revealed a number of underlying themes in their attitudes towards preparing financially for retirement. The high involvement subjects expressed a firm desire to retain control over their lives in retirement, were aware of the need to act to ensure this occurred and understood the link between current actions and their future life in retirement. The low involvement subjects illustrated little awareness and indicated a willingness to defer action to a later (unspecified) date.

Note: Referencing in this Thesis has been achieved via EndNote (v.9) using the Journal of Marketing referencing style.

Certification

This Thesis is submitted in fulfilment of the requirements of the degree of PhD, in the Macquarie Graduate School of Management, Macquarie University. This represents the original work and contribution of the author, except as acknowledged by general and specific references.

I hereby certify that this has not been submitted for a higher degree to any other university or institution.

Signed

Lester A. Wills

26th July 2006

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Chapter 1

Thesis outline

Introduction and chapter overview

Research has found that the majority of older working Australians have given little or no thought to planning for retirement (Abbot 2003) and only 37% of Australian workers have made any attempt to work out how much they need in retirement (Research 2003).

Approximately a third of the non retired population has not planned for their retirement (Beal and Delpachitra 2003) and only 7% of pre-retirees considered that financial planning for their future was a top priority (Newspoll 2003). Just over 13% of employees aged between 25 & 64 had not bothered with nor thought about superannuation (ABS 2002).

Such research suggests that many Australians are undertaking minimal financial preparation for retirement in an environment where the mandatory system is still immature (IFSA 2003). More recent evidence supports this view indicating that two thirds of Australians are not confident of having enough money to retire comfortably on (Egan 2005). 2006 research found that while Australians under 40s believe they cannot rely on the pension for their retirement and/or have aspirations that will surpass the basic standard of living that the pension affords, they have no plans for, and little hope of adequately saving for their retirement (FINSIA 2006). According to the Mercer Financial Literacy and Retirement Readiness study (Wilkinson 2006) 30% have made little preparation for retirement , while 33% have given it some thought, but admit they have done little in terms of preparation for retirement. Peter Promnitz, the Chief Executive of Mercer, commented that ‘Australians aren’t prepared for retirement’ (Mercer 2006). Evidence of this type has led to concern of economic strains being placed upon society by the ageing population (Commission 2005).

The problem is not unique to Australia as concerns about future retirement income adequacy are increasingly evident around the world (Bateman 2006). With the shift away from Defined Benefit (DB) to Defined Contribution (DC) pension schemes (Altmann 2001; APRA 2001; FSA 2002), the responsibility to save sufficient funds for retirement is increasingly being left to individuals (Dawson 2002) leading to concern that individuals will have little or no wealth when they retire (Lusardi 2003c). Despite this, the process an individual goes through when considering financial preparation for retirement has not been extensively researched, a serious gap as these processes are significant not only for individuals but also for employers and governments (Clarke-Murphy and Gerrans 2001).

This thesis presents empirical research on the involvement of individuals and how this affects the actions that they take to prepare financially for retirement. In particular it examines the relationship between involvement as measured by Zaichkowsky's Revised Personal Involvement Inventory (Zaichkowsky's RPII¹), and financial preparation for retirement as measured by a Financial Preparation for Retirements Scale (FPRS) which was developed during this research project. The Zaichkowsky RPII is a well used and tested measure of involvement that asks questions designed to determine whether a person considers an issue to be important, relevant, boring, needed, etc. with answers recorded on a seven point scale.

The FPRS measured financial preparation by asking questions that have primarily been developed in previous research on financial preparation for retirement (Ameriks et al. 2003; Elder and Rudolph 2000; Institute 2003a; Lusardi 2003a; RCS 2003; Warshawsky and Ameriks 2000). However, this is the first time that these questions have been put

¹ This is referred to as the Zaichkowsky RPII in this research to avoid confusion, as the term RPII has been used to refer to a number of different instruments.

together in a scale. The FPRS asks about activities undertaken by individuals to prepare financially for their retirement, including whether they have:

- thought about retirement
- collected and used any information about retirement
- discussed the issues with anyone and taken action as a result
- attended any seminars and/or meetings and taken action as a result
- considered when they will retire
- thought about how long they may live in retirement and how much money they will need.

The research used both survey and case study methodologies. Survey method was used as it has the capacity to demonstrate a statistical relationship between the chosen variables (Crompton 2001) which can be generalised to a population of interest. Case study methodology was used as it is explanatory in nature and provides the opportunity to answer ‘how’ and ‘why’ questions (Yin 2003), thus providing richer insight into basic theoretical propositions. Consequently the combination of these two methodologies meant that certain values and perspectives of the subjects could be identified in ways that would not be possible with a strictly quantitative strategy (Goodwin and Goodwin 1999). The use of both quantitative and qualitative methodologies facilitated a comprehensive approach, thereby providing methodological triangulation (Morse 1999) with a between-methods triangulation approach adopted (Kimchi et al. 1999).

The definition of ‘involvement’ used in this research complies with the generally accepted definition, i.e. that it relates to personal relevance (Poiesz and de Bont 1995). Understanding the relationship between involvement and financial preparation for retirement, as well as the reasons why people prepare for retirement in the way they do, is

important as the responsibility to save and contribute to a pension is increasingly left to the individual (Lusardi 2003b). Not surprisingly, it has been found that those who planned more for retirement by thinking about it, discussing it with spouses or friends, and attending retirement seminars are more likely to know about their retirement savings situation (Gustman and Steinmeier 2001). Involvement in the retirement-savings decision is therefore an issue of importance as the involvement construct is motivating in nature, i.e. when people are involved, they pay attention, perceive importance and behave in a different manner than when they are not involved (Zaichkowsky 1985b). Involving people in their retirement-savings decision has the potential to increase the level of financial preparation undertaken, yet it has received little attention in the literature.

The involvement construct has been well researched with a common theme emerging that involvement is the perceived importance of the stimulus, either that of the product itself or the purchase decision. Consequently, there is consensus that high involvement means personal relevance or importance (Greenwald and Leavitt 1984). Steinhart (2003a) has summarized a number of the differences between high and low involvement subjects, namely; high involvement subjects are likely to conduct a thorough search for information, as opposed to a minimal (if any) search, will compare attributes and benefits between options, as opposed to undertaking a limited comparison, are likely to perceive differentiation between options, as opposed to perceiving them as similar and will consider a small set of options in depth as opposed to giving low level consideration to a large number².

² These differences are outlined in more detail in Table 2.3

Extrapolating this to financial preparation for retirement, the consequences of a lack of involvement implies that a person considers preparing financially for retirement to be of little importance or relevance. If that is the case there is the potential for low levels of financial preparation, i.e. the individual will not go to relevant seminars/meeting, will not discuss their financial preparation with others (including seeking professional advice), will not consider when they are going to retire, how much money they will need or how long it will have to last etc. On the other hand, a person with high levels of involvement is more likely to undertake such activity. It is therefore important to test whether such a relationship exists. As a result, Hypothesis 1 suggested that a positive relationship exists between involvement and behaviour to prepare financially for retirement.

Previous research has found that financial preparation for retirement can be moderated by a number of variables. Hypothesis 2 therefore considered whether the level of education completed by an individual moderates any affect of involvement, Hypothesis 3 examined whether the age of the individual is a moderator and Hypothesis 4 examined whether the level of income of an individual has a moderating affect. Hypothesis 5 looked at whether the number of dependants a person is responsible for has a moderating influence whilst Hypothesis 6 examined whether gender is a moderating factor.

The case studies enabled a deeper investigation of the ‘how’ and ‘why’ subjects formulated their views and behave in the way they do. Consequently one research question was incorporated into this study. The Research Question considered how and why involvement impacts the attitude of the individual, in particular whether underlying themes can be identified.

The remainder of this chapter is organised in the following manner:

Section 1.2 sets out the social context of financial preparation for retirement in an environment of ageing populations.

Section 1.3 describes literature on financial preparation and points out the ‘gap’ in the literature which is filled by this study.

Section 1.4 outlines the theoretical context for involvement and its measurement.

Section 1.5 provides a model for the research on the relationship between involvement and financial preparation for retirement.

Section 1.6 outlines the major research objectives.

Section 1.7 sets out the significance of the study and the statement of purpose.

Section 1.8 presents the research methodology.

Section 1.9 provides definitions of terms relevant to the thesis.

Section 1.10 states the assumptions and limitations of the study.

Section 1.11 concludes with an overview of the remainder of the thesis.

1.2 The social context of the study

Until the late 1980’s Australia had a voluntary system of retirement savings that relied upon employees making personal contributions to a superannuation fund. Employers could supplement this system with additional contributions. Consequently the system became an incentive by which employers could attract and retain selected employees. The system was backed up by a means tested government aged pension for those with little or no superannuation income or other assets. The approach had many gaps, especially among the ranks of the low paid and part time workers.

The system was open to abuse and became one that provided a method of developing short term savings. Employees who changed jobs were able to cash in their superannuation

entitlements and spend the virtually tax free benefit before starting a new scheme with their next employer. Retirees could also “double dip” by taking their tax effective lump sum, spending it in any way they wished and then signing up for the aged pension. In 1983 legislation took effect to change the tax status of superannuation savings. This was an attempt to ensure that at least some of the funds would be preserved until retirement. 1986 saw the introduction of compulsory superannuation. Intense negotiations between the Australian Council of Trade Unions (ACTU) and the Australian Chamber of Commerce & Industry (ACCI) led to employers granting a pay increase based on improved productivity in the form of a superannuation contribution of 3%.

In 1992 the Superannuation Guarantee legislation was introduced. This required employers to make compulsory contributions on behalf of employees and extended coverage to virtually the entire workforce. The 3% contribution was gradually raised to its current level of 9% in mid 2002. The most recently available statistics indicate that as a result of these compulsory arrangements, coverage of the workforce has increased dramatically from just over 4 people out of ten in the workforce in 1987 to approximately 9 out of ten in 2001 (ABS 2001b).

Table 1 Coverage of Superannuation in Australia

Labour Force Status	Covered (millions)	Covered (%)	Not covered	Total (millions)
Total Males Employed	4.33	87.6	0.61	4.94
Males Employed Full Time	3.95	91.2	0.04	3.99
Males Employed Part Time	0.38	62.1	0.23	0.61
Total Females Employed	3.30	85.4	0.56	3.86
Females Employed Full Time	1.99	93.1	0.15	2.14
Females Employed Part Time	1.30	75.9	0.41	1.72
Total Persons Employed	7.63	86.7	1.17	8.80

However, whilst this illustrates the coverage of superannuation in the workforce, it does not provide a true indication of the coverage of superannuation. The Australian Bureau of Statistics has revealed that approximately one quarter of the pre-retired population had no superannuation. The proportion without superannuation varied significantly across parts of the population:

- 48% of people aged 15 to 24 years had no superannuation.
- 55% of unemployed people had no superannuation.
- 70% of those not in the labour force (but not retired) had no superannuation³.

(ABS 2001b)

There are several different types of funds that members could belong to (APRA 2006a):

- Corporate Funds are regulated superannuation entities with greater than four members established for the benefit of employees of a particular entity or group of entities (e.g. a company) with joint member and employer control.
- Industry Funds are regulated superannuation entities with greater than four members that provide for employees working in the same industry⁴.
- Public Sector Funds are superannuation entities with greater than four members that provide benefits for Government employees established by a Commonwealth, State or Territory law.
- Retail Funds are superannuation entities with greater than four members that offer superannuation products to the public on a commercial basis.

³ Based on the superannuation component of the Survey of Employment Arrangements and Superannuation (SEAS) conducted by the ABS throughout Australia in 2000.

⁴ They were originally established by trade unions and as a result a significant proportion of their membership was blue collar. This is now changing as most industry funds have become 'public offer funds' offering superannuation interests to the public on a commercial basis.

- Self-managed Superannuation Funds (SMSFs) are superannuation entities regulated by the Australian Taxation Office that have less than five members, all of whom are trustees or directors of the corporate trustee⁵.

The value of the assets across these types of funds illustrates highly levels of diversity representing the different membership base of these funds. Figures released by the Australian Prudential Regulatory Authority (APRA 2006b) indicate that superannuation assets had grown to approximately A\$913 billion by the end of June 2006.

Table 2 Assets Held by Different Types of Superannuation Funds

Type of Fund	Total Assets	No. of Funds	No. of Accounts
Corporate	54.3	557	0.71
Industry	154.6	84	9.53
Public Sector	152.3	42	2.76
Retail	294.6	187	14.31
Funds with less than 5 members	213.2	326,839	0.6
Balance of Statutory Funds	45		
Total	913.9	327,709	27.89

By way of comparison, superannuation assets were measured at A\$32 billion in June 1983. There has been a significant shift away from DB schemes since the introduction of the Superannuation Guarantee in 1992 and such funds represent less than 7% of the number of funds in operation, hold less than 4% of the assets in superannuation and represent less than 3% of the members.

⁵ Many SMSFs are established by self employed people.

Table 3 Breakdown of Superannuation by Fund Structure

Benefit Structure (funds with more than 4 members)						
Type of Fund	No. Funds	%	No. Member Accounts	%	Assets (A\$bn)	%
DB	88	6.6%	604	2.2%	19.3	3.6%
DC	876	66.2%	17941	65.7%	271	49.9%
Hybrid	360	27.2%	8747	32.0%	253.2	46.6%
Total	1324	100.0%	27292	100.0%	543.5	100.0%

The average account balance illustrates a wide variation in the level of saving that has taken place since the introduction of compulsory superannuation. The overall average account balance has grown by almost 70% in the period from the end of June 1997 to the end of June 2005 (APRA 2006b). However the average figures are not representative as the small funds (those with less than 5 members) hold in excess of \$213 billion spread across 600,000 accounts whilst industry funds, hold less than \$155 billion spread across more than 9.5 million accounts.

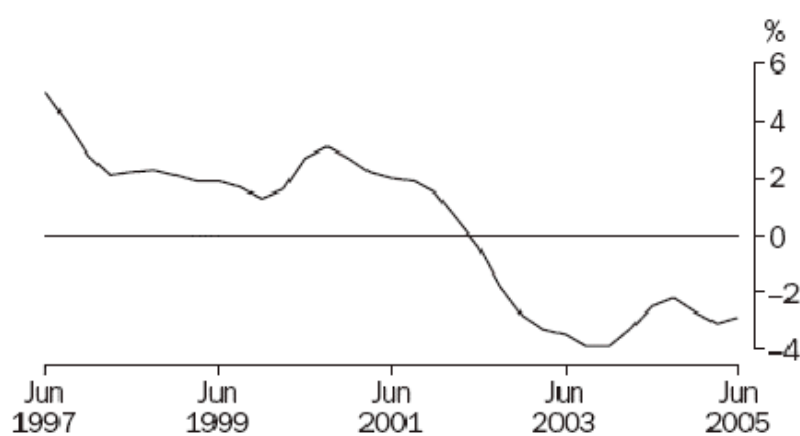
Table 4 Average Account Balances of Different Types of Superannuation Fund

Type of Fund	Average Superannuation Account Balances (A\$ thousands)								
	Jun-05	Jun-04	Jun-03	Jun-02	Jun-01	Jun-00	Jun-99	Jun-98	Jun-97
Corporate	\$ 74.2	\$ 65.2	\$ 62.2	\$ 62.4	\$ 57.8	\$ 56.2	\$ 52.9	\$ 51.1	\$ 48.0
Industry	\$ 12.6	\$ 10.5	\$ 8.8	\$ 8.1	\$ 8.0	\$ 7.0	\$ 6.3	\$ 5.6	\$ 4.9
Public Sector	\$ 46.7	\$ 41.4	\$ 37.4	\$ 37.9	\$ 42.3	\$ 40.2	\$ 33.9	\$ 27.7	\$ 25.2
Retail	\$ 17.0	\$ 15.1	\$ 13.7	\$ 14.1	\$ 14.2	\$ 12.8	\$ 12.1	\$ 11.1	\$ 10.3
Small	\$293.8	\$250.6	\$220.5	\$213.5	\$199.3	\$192.8	\$190.9	\$162.6	\$152.5
Total	\$ 25.8	\$ 25.5	\$ 20.0	\$ 20.0	\$ 20.6	\$ 19.7	\$ 18.6	\$ 16.8	\$ 15.5

Whilst the Australian system has been hailed by the World Bank as a model system (King et al. 2001), questions have been raised as to whether overall household saving has increased since the introduction of the mandatory saving. The Chief Executive of the Australian Chamber of Commerce & Industry has suggested that the Superannuation Guarantee, which was designed to add to Australia's domestic savings, seems to have had the opposite effect. His argument was based upon the fact that savings as a proportion of household disposable

income, had fallen substantially below the level that had existed when the Superannuation Guarantee was first introduced (Hendy 2002). This is supported by figures from the Australian Bureau of Statistics that revealed the household saving ratio has been falling since the mid 1970s and has been negative since 2002-3 (ABS 2006).

Figure 1 Household Saving Ratio



Source: Australian National Accounts: National Income, Expenditure and Product, cat. no. 5206.0.

Savings into superannuation are not included in these figures suggesting that substitution may have been taking place. However, whilst there are incentives for individuals to increase their savings via superannuation, there is a reluctance by many to do so. The 2001 Household Savings Report reported that in excess of 90% of respondents were reluctant to contribute more than the minimum to retirement savings (Research 2001). Potential reasons for this behaviour are discussed below. Notwithstanding any such reasons, superannuation has become the second largest component of household wealth in Australia after ownership of dwellings (Connolly and Kohler 2004). The modelling conducted during that research indicated the mandatory superannuation contributions had in fact been offset by reductions in other savings. More recent research has suggested that gains in the valuation of asset

holdings have been important as a substitute for traditional household saving (Hiebert 2006). Unfortunately, industry research has also found that whilst investing in home ownership may be a significant factor in retirement plans, this is not necessarily translated into utilising funds thus accumulated by realising the asset upon retirement (IFSA 2003). Reasons for not people not wishing to contribute more than the minimum to superannuation are open to conjecture. However, until the Choice of Fund legislation was enacted in mid 2005, many individuals contributing to their prescribed superannuation fund had few if any choices available to them. Further, if any choices were available, it was invariably at the discretion of the employer. Consequently the majority of contributors to retirement-savings funds in the mandatory Australian system had no engagement in:

- the decision to contribute to a retirement-savings fund
- which retirement-savings fund provider would manage the funds
- how much was contributed
- when those contributions were made
- how that money was invested.

This lack of engagement can have significant consequences. Industry research (Wills 2001) found:

- There is a propensity for those who change jobs to leave behind retirement savings.
- It is possible for employees to be unaware that they have retirement savings.⁶

Further support is provided by an Australian survey of adult financial literacy conducted in 2003. This survey found that among those aged over 35 with what were assessed to be

⁶ Lost or unclaimed superannuation in Australia amounts to approximately A\$10 billion and is estimated to be growing by A\$1 billion every year (Find My Super, 2006).

inadequate retirement savings, around 40% believed they would live as comfortably in retirement as they have done whilst working and earning (cited by Research 2003).

The Australian mandatory system is primarily based upon DC funds although large numbers remain in older style DB funds. By definition, any pension scheme incorporates an element of risk. In a DB scheme a significant portion of the risk is borne by the plan provider whereas in a DC scheme the risk is borne by the owner of the assets, usually the individual plan member. However, there has been a strong shift from DB to DC plans in a number of countries (Altmann 2001; APRA 2001; FSA 2002)⁷. In a DB fund, irrespective of involvement by the individual, a retirement income is guaranteed, based

⁷ Several theories have been put forward to explain this shift, including:

The Risk Averse Employer Theory: With increases in volatility in financial markets, the cost of funding retirement benefits has become less predictable than in the past. This lack of predictability presents inherent problems for employers attempting to provide adequate funding for a DB plan. The problems associated with the funding issues are likely to have made employers cognisant with the risk distribution issues between DB and DC plans. In most countries employers generally have control of the type of retirement plan that will be offered to their employees. Consequently, having become aware of the risks associated with offering DB plans, a shift towards DC plans would be expected, especially as employees are likely to less be aware of the risk distribution between the different types of plans.

The Excessive Regulation Theory: Governments have passed laws in order to try and ensure that contributions made to pension plans are protected and usually preserved until retirement. This has involved the imposition of strict legal, funding and solvency laws as well as regulations about what types of assets can be included in a pension plan. The laws are made additionally complicated by tax laws concerning deductibility of contributions, as well as regulations concerning who can make contributions and on behalf of whom those contributions are made. In Australia, the superannuation system that exists in 2006 has been pieced together by governments from both sides of politics over the last 15 years. Each successive government has modified the system in some way with the result that retirement savings legislation is unduly complex and difficult to keep up with, even for practitioners. This degree of complexity has recently been increased by the intrusion of family law in the pension system with the introduction of legislation concerning the break-up of marriages or de facto relationships and the division of superannuation fund assets.

The New Economy Theory: Workers today are more mobile and consequently unlikely to retire from the same firm in which they began their careers. For some workers, DC schemes may be an advantage. Compared to DB schemes, which typically re-distribute from leavers to stayers, DC schemes may benefit people who stay with a firm for a relatively short period of time and be better suited to more flexible working practices (FSA, 2002). DB schemes offer an assured income replacement ratio in retirement provided they remain with the same employer for their whole career. This applies to fewer than 5% of workers in the UK as the average worker changes jobs up to six times. In such circumstances that worker could lose 25–30% of their full service pension compared to someone who stays with the same employer for their whole career. Even someone changing jobs once in mid career could lose up to 16% of the full service pension (Blake, 2000).

upon some type of formula⁸. Consequently, for members of DC funds, low involvement can potentially have significant implications as they, and not the employer, bear responsibility for their eventual retirement income. The dynamics of the situation are such that it does require the employee to be cognisant of that responsibility for it to operate.

This is obviously relevant in countries that operate mainly DC schemes. However it is also relevant where a predominant DB culture exists, as many of these countries are also shifting towards a DC system. In such instances more and more individuals are faced with the responsibility to prepare financially for their own retirement irrespective of whether they are aware of that responsibility or not.

1.3 Limitations in the referent literature

The investigation of retirement savings has attracted a great deal of attention over recent years. However many researchers have focused primarily on public policy questions rather than examining such decisions from a personal planning perspective (Elder and Rudolph 1999). The following sections illustrate the gap in studies undertaken on individual decision-making with regard to financial preparation for retirement.

1.3.1 Satisfaction in retirement

A study of the relationship between retirement planning and retirement satisfaction (Elder and Rudolph 1999) found that planning for retirement was positively related to the level of retirement satisfaction. ‘Planning for retirement’ was measured by how much

⁸ Although the superannuant may be aware that they have a guaranteed pension, many of these pensions may actually produce low levels of income. It is questionable whether the superannuants are aware of how much they will receive and whether that will be sufficient to live on.

respondents thought about retirement and whether a person attended retirement planning seminars. Elder and Rudolph argued that the results supported the view that thinking about retirement and attending meetings was positively related to retirement satisfaction.

Although they established the relationship between preparation for and satisfaction in, retirement, Elder and Rudolph did not explore the reasons for the level of financial preparation. In particular they did not consider an individual's level of involvement in the personal retirement-savings decision and its impact upon the degree of financial preparation for retirement.

However, the behaviour of the individuals in the Elder and Rudolph study matches the pattern suggested by involvement theory. Individuals not involved in the retirement-savings decision process may not have paid sufficient attention to understanding the degree to which any pension would provide support upon retirement. Consequently, they may not have realistic expectations regarding their likely standard of living in retirement and the need to accumulate savings to achieve that anticipated standard of living. This study extends the work of Elder and Rudolph by examining whether increased involvement will lead to higher levels of financial preparation.

1.3.2 Expectations in retirement

The question of whether the standard of living expected by individuals is realistic, given accumulated savings and pension plan participation, has also been examined. Elder and Rudolph (2000) noted that previous studies indicated the existence of a significant discrepancy between expectations of economic well-being in retirement and savings behaviour. Elder and Rudolph suggested that this divergence may be due to the failure to perceive the need to accumulate savings (because people expected pensions to 'fill the

gap' and/or had unrealistic expectations concerning their likely standard of living in retirement). They argued that such individuals would have little knowledge of their retirement savings and what could be achieved in terms of producing a retirement income from those savings (a concept that is consistent with low levels of involvement). This notion was supported by Elder and Rudolph who suggested that individuals may not have been certain about what benefits they would actually receive from their retirement savings.

This study extends the work of Elder and Rudolph, by examining the level of involvement and relating that involvement to the financial preparation for retirement undertaken. According to the findings of Elder and Rudolph, this should lead to more realistic expectations of the likely standard of living in retirement, as expectations would be more likely to be based on accumulated rather than assumed knowledge.

1.3.3 Choice within the mandatory system in Australia

Whilst the voluntary retirement-savings system in the US has been the focus of much research, there has been comparatively little research on individual retirement-savings decisions in the mandatory system in Australia. A major superannuation fund in Australia undertook an exercise to provide its members with the opportunity to convert to a DC fund or remain in the traditional DB structure (Clarke-Murphy and Gerrans 2001). The research considered the decision-making process and looked at whether there were gender differences in knowledge of superannuation and who was consulted when trying to decide what to do with the superannuation in the context of this opportunity. It was found that females, younger members and those in the lowest income groups were all significantly more likely to consider themselves to have a lower level of knowledge of superannuation which impacted upon their choice in this matter. Clarke-Murphy and Gerrans also found

that the people least likely to consult with others were the ones who viewed themselves as having the least amount of knowledge about superannuation. As involvement implies increased attention and perceived relevance, low involvement would be consistent with the behaviour found in this study. Without increased involvement, those farthest away from retirement are less likely to perceive the relevance of retirement saving in comparison to those much closer to retirement. Similarly, those with the lowest incomes are more likely to focus on immediate needs and uses of financial resources for the here and now and are less likely to dedicate resources towards potential future needs. Consequently, this study will extend the work of Clark Murphy and Gerrans by examining the relationship between involvement in the personal retirement-savings decision, and financial preparation for retirement including whether individuals are likely to consult others. Clarke-Murphy and Gerrans identified factors such as gender and income as being important in financial preparation for retirement. Consequently these have been included in the model developed in this research.

1.3.4 Future self-image

The question of whether individual retirement-savings practices are affected by personality-based financial savings motives was studied by Neukam and Hersley (2003). Neukam and Hersley argued that, when thinking about retirement, individuals are likely to envision both positive and negative images of the future, and these images are likely to have a significant impact upon their retirement planning and savings tendencies. They suggested that personal images of the future would differentially shape an individual's behavioural motives and thus their savings practices, suggesting that individuals with positive images would be more likely to prepare for their retirement. Neukam and Hersley concluded that planning activities should be better predictors of retirement savings than simply the desire to have financial security after leaving the workforce.

Consequently, developing an understanding of the factors that affect financial preparation for retirement is a key issue. This study therefore extends the work of Neukam and Hersley by examining the impact of involvement in the personal retirement-savings decision on financial preparation for retirement.

1.3.5 Financial education

Bernheim and Garret (2003) studied the affects of employer-based financial education on personal savings. The primary focus of their study concerned the affects of employer-based financial education programs on saving, both in general and for the purposes of retirement. They concluded that financial education significantly stimulates retirement saving among low and moderate savers and this represented a net contribution to total saving rather than substitution. However, why financial education has this affect remains open to debate. Involvement theory suggests that by partaking in financial education, the employee can become more involved in their personal retirement-savings decision. In such circumstances the message is more likely to be perceived as relevant and/or important by the target audience. This is supported by the findings of Hersley et al. (2003) where individuals who were exposed to sessions providing both financial information and goal-setting exercises demonstrated the greatest response in terms of financial preparation. The information on financial planning and investing for retirement was put in context with exercises of how to set goals and targets, thereby creating relevance for the members of the sessions and by definition, increasing the likelihood of involvement.

Like the studies outlined above, this research examines whether, as part of their financial preparation, individuals attend seminars and/or meetings about retirement and whether they collect information regarding living in retirement. However, the current research will

relate these actions to the individuals' level of involvement. Consequently it will extend the work of Bernheim and Garret as well as Hersley et al. This is particularly important as previous findings on financial education have been mixed (Braunstein and Welch 2002) but with little consensus as to the reasons for this.

1.3.6 Choice in retirement savings

As noted earlier, for the majority of people in the mandatory Australian retirement-saving system, choice has been very limited or has not been available. This changed in mid 2005 with the enactment of the Choice of Fund legislation. Papke (2003) investigated the affects of members of retirement-savings plans exercising choice over asset allocation. Papke found that exercising choice could have a significant impact upon:

- participation in the retirement-savings plan
- the amount contributed
- the type of investment used
- the amount accumulated.

Papke speculated as to why choice over the assets in a retirement-savings plan increased participation and contributions. He suggested that having the power to exercise choice causes participants to increase their level of participation since their asset choices would in part determine their return. Papke concluded that allowing participants a choice of investment options may increase retirement saving, a finding consistent with increased involvement. However Papke did not consider involvement as a variable and consequently did not determine the level of involvement of the individuals in this study. Consequently, examining the level of involvement of individuals the actions they take to prepare financially for their retirement will extend the work of Papke.

1.3.7 Personality, involvement and financial preparation

The involvement construct is not one that has received a great deal of attention with respect to financial services. However, Hersley and Mowen (2000) used involvement as one of their measures when examining financial preparation for retirement in association with various personality traits and financial preparation. More particularly Hersley and Mowen examined the relationship between perceived knowledge and financial preparedness as well as looking at individual differences in personality traits and whether these are predictive of financial knowledge and retirement planning. They argued that Future Time Perspective (FTP) results from a combination of cardinal traits, the influence of one's culture and the individual's prior learning history. Such an approach implies that disposition to perform behaviours, such as retirement planning, results from combinations of central and cardinal traits.

However, whilst exploring the relationship between involvement and financial preparation, the measure of involvement used was an untried and untested version of the Zaichkowsky Personal Involvement Inventory as outlined in Section 2.6.4. This current research will extend the work of Hersley and Mowen by examining the role of involvement in financial preparation for retirement. However it will use the Zaichkowsky RPII, as this has been found to be a good measure of involvement (Flynn and Goldsmith 1993) and has exhibited high levels of reliability, convergent and discriminant validity (Foxall and Pallister 1988).

1.4 Theoretical context for involvement

Arguably the origins of research on involvement can be traced back to the '*Social Judgement Theory*' developed by Sherif and Cantril (1947). Over time, the concept of

consumer involvement as described in consumer-behaviour literature changed and became closer in meaning to personal relevance or personal motivation (Kassarjian 1981; Petty and Caioppo 1990; Poiesz and de Bont 1995; Zhang and Markman 2001). Amongst the conclusions drawn was that the requirement for any communication to be seen as relevant in order for the individual to pay attention and as a result be involved (Petty and Caioppo 1981). It was also considered that an individual's personal needs would influence how they perceived the object (Howard and Sheth 1969) and further, that where a purchase was considered to be important the individual would be likely to take time to search for relevant information (Howard and Sheth 1969).

1.4.1 Definition and measurement of involvement

The concepts described above were utilised in the definition developed by Zaichkowsky and illustrated in section 1.1., i.e. that involvement represents the degree of personal relevance based on inherent needs, values and interests (Zaichkowsky 1985b). It is therefore posited that if a person considers preparation for retirement unimportant to their personal needs and as a result not relevant, they are unlikely to pay attention to it as an issue and so will allocate little time to any information search they may undertake. The motivation leading to action is pertinent as retirement itself is not an event that many people look forward to. Retirement may represent a time when individuals are lonely, unattractive and unhealthy (Borsh-Supan and Lusardi 2003). As a result attention paid to the issue will be low in comparison to immediate needs and issues considered to be of greater relevance.

A number of researchers have focused on methods of determining the level of involvement in a variety of circumstances developing and subsequently modifying a number of measures in the process. The Zaichkowsky Personal Involvement Inventory

(Zaichkowsky PII) was developed by Zaichkowsky (1994) and subsequently used in a number of studies where satisfaction was expressed with the reliability and predictive validity of the scale and its capacity to discriminate across products and situations. However, criticisms of the scale were expressed by a number of researchers with a number of alternate versions of the scale developed. As a result Section 2.6 outlines the development of the original Zaichkowsky Personal Involvement Inventory and attempts to modify it by other researchers. Section 3.4 provides details of the subsequent development work by Zaichkowsky to improve her original scale which led to the Zaichkowsky Revised Personal Involvement Inventory (Zaichkowsky RPII) and outlines why that measure was chosen for this study.

1.4.2 Involvement and financial preparation for retirement

Findings from ‘involvement research’ provide explanations for behaviour in the fields of advertising, product class and purchase decisions. However, only one US based study was located that applied the involvement construct to financial preparation for retirement (Hersley and Mowen 2000) and the authors described their work as exploratory. Consequently, this current study will extend our knowledge in the following ways:

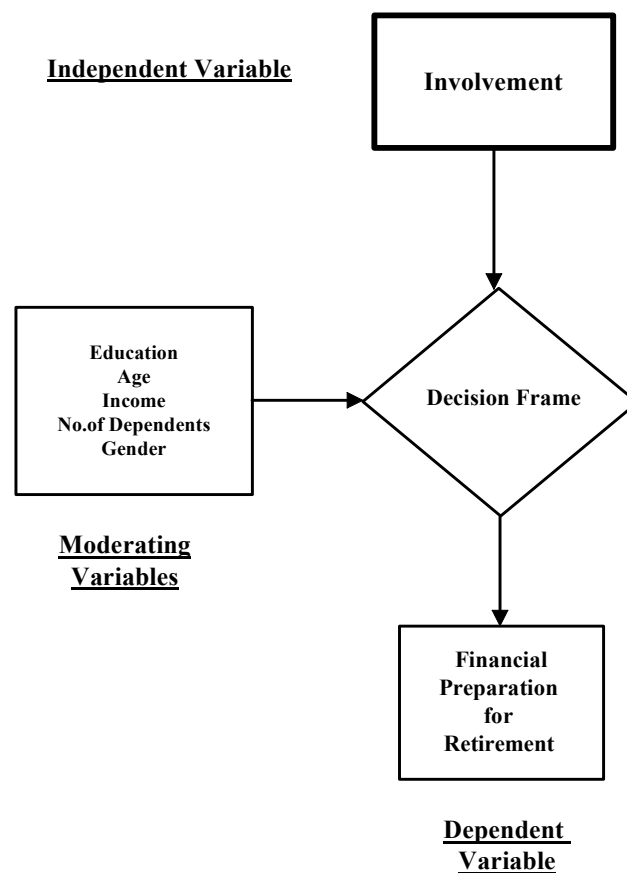
- It will be the first time that any possible relationship between involvement and behaviour to prepare financially for retirement has been examined in a mandatory retirement-savings system.
- It will use a measure of involvement that has previously demonstrated high levels of validity and reliability.
- It will examine whether any affects of involvement on financial preparation are moderated by the variables specified in Section 1.5.
- It will investigate what involvement means to individuals and examine if there are any underlying themes.

- It will investigate whether involvement has any influence on financial preparation behaviour.

1.5 A model of personal financial preparation for retirement

The current model sets out the relationships posited to exist between involvement of the individual in the personal retirement-savings decision and their preparation for retirement. The model also includes the five moderating variables, *viz* the level of education completed, a person's age, their income, the number of dependants they support and their gender. These variables were expected to moderate the influence of involvement in the personal retirement-savings decision on financial preparation for retirement. The relationships posited to exist between the variables are set out in the model in Figure 1.5 below:

Figure 2 A Model of Personal Financial Preparation for Retirement



The variables set out in the model are described below.

A. Involvement in the personal retirement-savings decision

Involvement has been outlined in Section 1.4 and is explained in further detail in Section 2.2. The model measures involvement through the use of the Zaichkowsky RPII. The rationale for using a version of the original Zaichkowsky measure is discussed in Section 2.6 and in Chapter 3 where details of the development of the revised scale are provided.

B. Moderating variables

These variables have been incorporated into the model based upon findings of previous research and are discussed in Section 2.7. The methods used to determine if they moderate the influence of involvement on financial preparation are outlined in Chapter 3.

C. Decision frame

The level of involvement causes individuals to work through the decision process in slightly different ways (outlined in Section 2.3). Differences can occur in the level of the information search undertaken, the number and types of comparisons that are made, whether there is a perceived difference in terms of the options available, the number of options that are actually considered and the manner in which they are considered (Steinhart 2003a).

D. Financial preparation for retirement

The questions that constitute the FPRS are based on issues raised in previous research on financial preparation for retirement with many of the questions taken from research on the

Health and Retirement Survey (HRS⁹). However, this is the first time that the issues have been put together into a scale in this manner and then correlated with involvement. The use of these variables in the FPRS is discussed in Section 2.8 and rationale for including them in the FPRS is outlined in Chapter 3.

1.5.1 Relationships set out in the model

The involvement construct suggests that a higher level of involvement in the personal retirement-savings decision could lead to higher levels of financial preparation for retirement. Consequently, the establishment of whether there is a connection between the level of involvement in the personal retirement-savings decision and an individual's financial preparation for retirement will provide an indication of the potential application of involvement in this field of study.

1.6 Major research objectives

The discussion of the literature in Section 1.3 supports inquiry into a number of areas relevant to this thesis. As a result, the major research objectives which address these deficiencies are set out in the paragraphs below.

1.6.1 First research objective

To establish if there is a positive relationship between involvement and financial preparation for retirement, and if so, whether that relationship is significant ($p < 0.05$).

⁹ The University of Michigan Health and Retirement Study (HRS) surveys more than 22,000 Americans over the age of 50 every two years. Supported by the National Institute on Aging, the study paints an emerging portrait of an aging America's physical and mental health, insurance coverage, financial status, family support systems, labour market status, and retirement planning.

1.6.2 Second research objective

To establish whether education, age, income, number of dependants or gender, moderate any influence of involvement in the personal retirement-savings decision on a person's financial preparation behaviour ($p < 0.05$).

1.6.3 Third research objective

To explore how and why involvement impacts upon an individual's financial preparation for retirement and whether any underlying themes can be identified.

1.7 Significance of study and statement of purpose

How involvement impacts upon the actions taken by people to prepare financially and whether increased financial preparation can be encouraged by utilising the involvement construct are issues of significant social importance. Section 1.7.1 explains the significance of this study in furthering knowledge of these issues. The statement of purpose, which is set out in Section 1.7.2 follows this.

1.7.1 Significance

The issues relating to ageing populations have slowly been gaining prominence around the world. Blackburn (2002) noted that whilst rising longevity and falling birthrates have begun to transform the age structure of society, the real impact will become apparent in this century on a global scale. The situation was succinctly summarized in an article in *The Economist*:

‘Something unprecedented and irreversible is happening to humanity. This year, or next, the proportion of people aged over 60 will surpass the proportion of under-fives. For the rest of history, there are unlikely ever again to be more toddlers than gray heads. Already those aged 65 or over, who throughout recorded time have

rarely accounted for more than 2–3% of most countries' people, make up 15% of the rich world's inhabitants.' (Burns and Kotlikoff 2004)

The publication of the 1994 World Bank Report 'Averting The Old Aged Crisis' was an early indication of the potential problems that could result from the change in the demographic structures of many countries and the lack of financial preparation being undertaken. George Vojta, President of the Financial Services Forum, took up the theme in 2003 when he declared:

'What is coming to the fore now is a sense that considerable damage will be wreaked on major economies of the world from the implications and consequences of ageing. The equation for global prosperity is at risk.'
(Council 2003).

The situation in Australia was put succinctly by Beal & Delpachitra (2003):

'At the same time as the age structure of the population has changed, successive Australian Governments have signified that they are worried by an increasing dependency rate and have put in place a comprehensive retirement incomes policy. However, anecdotally there is a significant sector of the population which has not attempted to come to grips with the problem of their post retirement incomes and has neither planned nor started pre-retirement wealth accumulation'.

This theme was explored with the release of a paper on Australia's Demographic Challenges that stated that the ageing of Australia's population will have a profound affect on the economy and, potentially, on the living standards of every Australian (Australia 2004a). Further evidence as to the importance of the issue was the commissioning of a research study by the Productivity Commission into the economic and fiscal implications of the future ageing of Australia's population (Australia 2004d). The Australian Federal Government has attempted to raise public awareness with the launch of the discussion paper from the Consumer and Financial Literacy Taskforce (Australia 2004c). The discussion paper itself noted that Australians spend approximately A\$29 billion in financial services each year (Australia 2004b). However, despite this expenditure, the generation about to retire will find that their private financial resources are not sufficient

to provide them with the lifestyle they expect in retirement. This is because ‘many have planned inadequately for their retirement, and have limited savings outside of owning their own home’ (IFSA 2003).

An investigation of financial preparation for retirement has the potential to provide valuable input into policy decisions going forward. In particular, an examination of whether involvement of the individual in the decision-making process is significant may provide lessons that could be utilised in the development of communication programs to encourage financial preparation for retirement. Such knowledge is of increasing importance as illustrated by the Financial Planning Association of Australia and the National Centre for Social and Economic Modelling. They have argued that unless the savings levels are addressed, the retirement incomes of the baby boomers and younger Australians are going to put enormous fiscal strains on future federal budgets (Modelling 2002).

This current study is also significant as it is the first time in which involvement in the retirement-savings decision is being investigated in Australia. Only one previous study was located that utilised the involvement construct with regard to financial preparation for retirement and that was in the US. This study will extend that work and will add to knowledge of the impact of involvement on the personal retirement-savings decision. Not only did it examine the significance of the relationship between involvement and financial preparation for retirement, it also investigated the experience of people and the meaning they make of that experience (Seidman 1998) in terms of their involvement and financial preparation for retirement. No evidence has been found in the literature that financial preparation for retirement has been investigated in this manner before, either in Australia

or elsewhere. Consequently, it will add to the bank of knowledge of retirement-savings behaviour in an area that has major implications for society.

This study also has significance beyond Australia as the shift in retirement-savings schemes from DB to DC funds which leaves more to the discretion of the individual, may actually result in a reduction in pension income (Uccello 2001). This issue is of importance not only to advance our knowledge of saving, but also to inform the current debate on the effectiveness of savings incentives (Lusardi 2002a). Involvement in the personal retirement-savings decision has not been extensively researched. Therefore an investigation of the nature of its impact upon actions to prepare financially for retirement and the nature of what involvement means in terms of any underlying themes, has the potential to change the nature of savings incentives. Since pension income is often the fault line that divides the impoverished from those with adequate income in retirement, participation and contribution decisions are extremely important (Munnell et al. 2001) and therefore, any approach that has the potential to increase financial preparation for retirement is of significance.

1.7.2 Purpose of the study

The purpose of the study was to examine the relationship between involvement and financial preparation for retirement through the use of a tried and tested measure of involvement. The statistical analysis enabled the size and direction of that relationship to be measured and can provide predictive potential. The case study analysis provided information on whether there are common themes relating to involvement and financial preparation behaviour. This has value on three levels:

a) Societal

The increasing shift towards individual responsibility for the provision of financial preparation for retirement demonstrates the requirement to encourage increased participation by individuals. This is particularly relevant in societies that are likely to encounter the problems raised by an ageing population¹⁰. Finding ways of stimulating increased activity is an area of significance for policy formulation.

b) Managerial

Despite the expenditure of significant sums of money on advertising and the promotion of savings products, it is questionable as to its effectiveness:

‘There is currently substantial information asymmetry in DC pension provision with those involved not being offered sufficient information, education or guidance as regards the contributions they need to make, investment policies or options they should be considering, or annuities to buy at the end. Survey evidence suggests that people think they will be able to achieve a reasonable level of income in retirement from their DC pension plan, but they have not been shown how to plan the pension and retirement process properly in order to meet these expectations’
(Altmann 2001).

¹⁰ Population ageing is affecting many countries around the world. In such circumstances the working-age population that has traditionally supported the retired population through unfunded government pension schemes is declining as a proportion of the population. Currently there are 4.5 workers supporting every retiree but that is expected to drop to 2.5 by 2050 according to United Nations forecasts (Division, 2003). To put this in perspective, in 2003 in the developed world there were 30 pension eligible elders for every 100 working age adults. By the year 2040, there will be 70. In Italy, Japan and Spain, the fastest ageing countries, there will be 100, i.e. as many retirees as people in the work force.

Of all the changes that are projected to occur in Australia’s population, ageing is the most dramatic resulting in major changes to the age structure of the population particularly in the first 50 years of the 21st century (ABS, 2000c). At the turn of the 20th century, the median age of the Australian population was 22.6. As at June 2000 this had increased to 34.9 (ABS, 2000b) and increased further to 35.4 by June 2001 (ABS, 2001). This trend is expected to continue with the median age rising to between 40.3 and 41.5 in 2021 and between 43.6 and 46.5 by 2051. The proportion of population within Australia aged 65 and over is forecast to increase from 12% in 2003 to 22% by 2031 and to 26% by 2051. Consequently, the number of people aged 65 years and over in Australia could triple in size from its levels in 1999 to the projected level in 2051(ABS, 2000a).

More than 80% of Australians over 65 receive age pension or equivalent payments such as service pensions (Bishop, 1999). Pressure will consequently increase on income support programs as a greater proportion of the population reaches retirement age and more retirees live longer.

Many workers simply do not possess the information necessary for making savings decisions (Lusardi 2001), despite the quantity of promotion and information available. Consequently, examining ways to improve the effectiveness of communication about preparing for retirement has obvious benefits to the financial services industry.

c) Academic

The review of the literature has illustrated a gap in knowledge with regard to involvement in the personal retirement-savings decision and preparation for retirement. This study will therefore build upon and extend the knowledge gained in the research outlined in Section 1.3.

1.8 Research methodology

When considering the epistemology of the approach adopted, it was important to reaffirm that the approach for this research was not experimental i.e. the respondents were not being manipulated in any manner. The approach was strictly non-interventionist with the researcher remaining a critical but detached observer throughout, consistent with the positivist philosophy detailed by (Lin 1998). She argued that the positivist approach seeks to identify qualitative data with propositions that can be tested or identified in other cases, as opposed to the interpretative approach that seeks to combine data into systems of belief whose manifestations are specific to a case. Consequently the philosophy embedded in this research was consistent with positivist approach as indicated by Lin and supported by Easterby-Smith et al. (2002), who argued that in the positivist paradigm the observer is independent and focuses on facts, looking for causality and formulating hypotheses which are subsequently tested.

To ensure that the approach remained value free, it was essential that the industry partner remained at arms length. Consequently they had no input into the development of any of the hypotheses or the research question being investigated, the instruments used, let alone the design of the research methodology. Indeed the industry partner was chosen as a conduit to an extensive database, containing in excess of 1 million members, from a wide range of social and education backgrounds, occupations and ages. It also helped establish credibility when contacting the respondents to the study thereby helping encourage participation. The industry partner also played no part in the collection or analysis of the data, or the formulation of any of the conclusions.

In terms of the exact methodology used, literature varies as to whether methodology should refer to the approach of data collection, or data analysis (Fowler 2002) . As a result, the methodology adopted in this research can either be described as a mixed-method design, utilising survey and case study methods of data collection, or it can be described as a correlation-method, utilising regression analysis to examine the quantitative data collected combined with qualitative analysis of rich case study data to determine if there are common themes. The term correlational design occurs in older methodological literature, most often to refer to efforts at causal inference based on measures taken all at one time, and measuring the differential levels of both affects and exposures to presumed causes, as they occur naturally, without any experimental intervention. However, it is suggested that this is misleading as the method of statistical analysis is not the issue (Cook and Campbell 1979). Survey research is a general label applied to a variety of different research methods that share a common purpose. Survey research involves obtaining information directly from a group of individuals (Dane 1990); their answers constitute the data to be analysed (Fowler 2002). In terms of whether data collection or data analysis should frame the description of the method, the following sums up the debate:

‘Those who equate design and statistical analysis should be reminded that researchers in the physical sciences, upon whom we have relied for a model of scientific method, often find little or no use for statistical procedures. The statistical analyses that are chosen should depend first upon their relevance to the theoretical issues being addressed and second upon the nature of the design’.
(Pettigrew et al. 2003)

Consequently, the manner in which the methodology used in this study is described is framed by the method of data collection.

The research objectives set out in Section 1.6 are addressed by a mixed-method approach. The research was conducted in two parts with the first relating to a survey conducted via a self-administered questionnaire, whilst the second related to a series of case studies. This approach was adopted for the following reasons:

- The integrating of quantitative and qualitative data collection and analysis can yield a more complete analysis (Creswell et al. 2004).
- Such an approach can provide additional perspectives and insights beyond the scope of any single technique, as well as offering the combination of generalisability and contextual interpretive relevance (Borkan 2004).
- A mixed-method approach can also provide the opportunity for stronger inferences and greater diversity of viewpoints (Shoveller 2004).
- The quantitative methodology meant that the information accumulated via the survey could be used to establish the size and direction of the correlation between involvement and financial preparation. It also provided the means to examine the constraining influence of the moderating variables on the influence of involvement.
- The use of qualitative methodology via case studies meant that certain values and perspectives of the subjects with regard to involvement and financial preparation

could be examined in ways that would not be possible with a strictly quantitative strategy (Goodwin and Goodwin 1999).

- The use of both quantitative and qualitative methodologies facilitated a comprehensive approach to the issue of involvement and financial preparation, thereby providing a between methods triangulation of evidence (Kimchi et al. 1999) in support of the theoretical basis of the study.

1.8.1 Survey

The purpose of a survey is to produce statistics, that is quantitative or numerical descriptions about some aspect of the study population (Fowler 2002). Such a quantitative approach can provide internal validity (such as statistical conclusions validity, construct validity and causal validity) as well as external validity (generalisability) (Shoveller 2004). Johnson and Christensen (2003) identify several major types of external validity that the quantitative approach used in this study will be able to address:

- **Population validity** – generalising to and across populations

The sample was compared to the general Australian population, thereby enabling the generalisation of the results to the overall population.

- **Ecological validity** - generalising across settings

In the narrowest sense, the findings are restricted to the mandatory DC scheme operating in Australia. However, with reports that similar problems are being found across the world (Associates 2004; Farrell et al. 2005; Highland 2005; HSBC 2005a; Prudential 2004) in both DC and DB schemes as well as mandatory and voluntary schemes, the findings may be of relevance to any of these configurations.

- **Temporal validity** – generalising across time

The findings are based upon the reactions of the subjects in late 2004. However, with reports that few people have actually taken advantage of the choice of fund (ASFA

2005; Kelly 2006), the environment has not changed substantially in Australia and therefore the results are still able to be generalised.

In this instance the survey method is used to examine the correlation between involvement in the personal retirement-savings decision and actions that constitute financial preparation for retirement. The major advantage of correlational research relates to it being a method where the free variation of both variables of interest enable the degree of the relationship between them to be determined without the loss of information inherent in an experimental design (Crano and Brewer 2002). In this research, the variables in question are the involvement of the individual and their financial preparation for retirement, neither of which are manipulated.

The survey was enacted via a self-administered mailed questionnaire. As a result, it was possible to obtain a relatively large dispersed sample and keep sampling error to acceptable levels. The questionnaire also facilitated the collection of large amounts of information relating to the activities of those people who had time to consider their answers, whilst retaining their anonymity (Fowler 2002; Roberts 1999). The questionnaire was piloted with a small group of candidates from an Australian superannuation fund and then, after refinement, used with a larger sample. The information from the self-administered questionnaire was then examined by the use of regression analysis to determine the strength of the relationship between involvement in the personal retirement-savings decision and financial preparation for retirement.

In the self-administered survey questionnaire, the first segment was based upon the Zaichkowsky Revised Personal Involvement Inventory to establish the level of involvement of the individual in retirement savings. The second segment was designed to

establish behaviour relating to the dependant variable – financial preparation for retirement. The third segment aimed to provide insight into the influence of the moderating variables. This approach is consistent with guidelines developed by Gendell (1998) with respect to the layout and ordering of the questions of the self-administered questionnaire.

1.8.2 Case studies

Case study research utilises an iterative parallel methodology, considering a relatively small number of selected cases, observed in their natural context in an open-ended manner (Verschuren 2003). A case study approach is appropriate when the research seeks to answer ‘how’ and ‘why’ questions and the researcher has little control over events being studied, as well as when it is desirable to use multiple sources of evidence (Schwandt 1997). Such a description matches this study and as a result, the case study approach was used to provide further depth in determining the relative importance of the drivers of personal financial preparation for retirement behaviour as case studies can be used to examine in greater detail some of the issues already identified (Poulson and Avramadis 2003). The case study subjects were all required to answer the questionnaire that was used in the survey stage of the study and were then asked a series of questions in an attempt to illuminate their perception of ‘involvement’ – what it meant to them, why they were taken, how they were implemented and with what result (Schramm 1971 cited in Yin 2003). As case study research can be used to develop social theories and suggest cause (Crompton 2001), the case study methodology was used to investigate the presumed causal links that led to the financial preparation of the respondents and the real life context in which it occurred.

1.9 Definitions

The definitions in this section indicate the meaning of terms used in this thesis:

Accumulation stage

The phase where money is built up in a pension fund by the addition of contributions. Investment earnings and/or interest earnings on those contributions are added to the fund. Fees, charges and/or taxes may also be deducted from the fund during this period.

Defined contribution fund

A retirement-savings fund that has regular contributions paid to it, either by the employer and/or the employee, at predetermined rates in respect of an individual employee. The final size of the account available at retirement will be determined by the amount of contributions paid, the investment returns earned along with deduction of any fees, charges and /or taxes paid by the fund during the accumulation phase. The amount paid into the fund and earnings generated can be identified for each individual employee. Consequently, when an employee leaves the fund, the amount paid will generally consist of the member's own contributions (if any) with earnings and an entitlement to contributions made by the employer on the employee's behalf. These latter contributions may or may not be affected by a vesting scale in proportion to the years of service.

Defined benefit fund

The definition used is based upon that provided by Leow & Murphy (2001/2002):

Some or all of the contributions (out of which, together with earnings on those contributions, the benefits are to be paid), are not paid into or accumulated in a fund in respect of any individual member, but are paid into and accumulated in a fund in the form of an aggregate amount. The employer's contributions to the fund vary periodically, depending upon actuarial advice, so as to ensure that there will be sufficient money in the fund to meet any expected liabilities for benefits. Where a member withdraws from the fund before retirement age, the withdrawal may be based on salary (or average salary) at the time of withdrawal or on the member's own contributions (if any), or some amount representing accumulated earnings on those contributions, plus a portion of employee-financed benefits. Fees, charges and /or taxes may be paid by the fund during the accumulation phase.

Pension fund

The term ‘pension fund’ is used to refer to a fund that is used as an investment vehicle into which contributions are made. The purpose of making the contributions is to attempt to accumulate sufficient capital to secure an income stream upon retirement with a view to providing financial security in the latter stages of life.

Saving

This is the use of discretionary income to provide a benefit at a later date. The investment earnings and/or interest earned on the savings are added to the capital and/or regular contributions made into the savings pool.

Superannuation fund

The term ‘superannuation fund’ is the Australian vernacular for what is internationally known as a pension fund. An explanation for the use of this term was provided by (Scheiwe 1999):

The term ‘superannuation fund’ is used in Australia because (a) many Australians take their superannuation benefits in the form of a lump sum rather than as a pension. The term ‘pension’ was usually used in reference to the raft of non-contributory payments by the government to aged persons, war veterans, invalids, etc., and (c) the term ‘annuity’ was used instead of ‘pension’ to refer to regular payments from a contributory pension scheme. It has also become politically correct in Australia to refer to most social security payments, including unemployment payments, as ‘pensions’.

1.10 Assumptions and limitations of the study

The following assumptions and limitations apply to this study:

1.10.1 Assumptions of the study

In the study, it is assumed that all people taking part in the study have some ability to save for their retirement, albeit affected to some degree by the moderating variables. As the study is based in Australia and the sample are all members of a superannuation fund, it is

also assumed that the individuals are all affected by the mandatory retirement scheme that operates with Australia and already have some retirement savings, irrespective of whether they are aware of that fact or not.

1.10.2 Limitations of the study

Three types of limitations apply to this study. They are limitations in scope, design and application as set out in the following sections:

Limitations in scope

There are a number of limitations in the scope of this study:

- a) The Australian system is predominantly but not exclusively DC in nature. However, all subjects used in this study are members of a DC retirement-savings scheme.
- b) It has been found that financial preparation for and satisfaction in retirement are positively related (Elder and Rudolph 1999). Whilst involvement and financial preparation will be tested in this research, the relationship between involvement in the decision to save for retirement and satisfaction in retirement will not be tested. Whilst it can be posited that a positive relationship exists between these two factors, a longitudinal study would be required in order to examine levels of involvement prior to retirement and subsequent levels of satisfaction once retired. Such a study is beyond the scope of this research.
- c) The type of information that is available to researchers in Australia is limited. By contrast, in the US regular surveys of consumer finances and retirement issues are undertaken and data made available to researchers (Beal and Delpachitra 2002). By way of example, the ABS does not produce an Australian equivalent of the Health and Retirement Study which includes questions on retirement planning, pension participation, net worth, income and employment history, as well as health status and familial

relationships and covers a broad range of respondents. Consequently, the information is limited to that provided by various bodies, i.e.:

- population information from the Australian Bureau of Statistics
- financial reporting information from industry bodies such as the Australian Prudential Regulatory Authority
- information made available through various industry and/or academic studies relating to the original study.

d) Whilst the discrepancy between expectations of economic well-being in retirement and financial preparation (Elder and Rudolph 2000) matches the relationship posited to exist between involvement in the personal retirement-savings decision and financial preparation, this study will be limited in its ability to explore the relationship between expectations of life in retirement and involvement. Such a relationship will be examined in the context of the case studies but cannot be explored via the survey due to limitations in budget and time.

e) A relationship between future self-image and financial preparation for retirement has been found (Neukam and Hersley 2003) that is consistent with the posited relationship between involvement and financial preparation. However, it is beyond the scope of this study to examine the implied correlation between future self-image and involvement in the personal retirement-savings decision.

f) The relationship between Future Time Perspective, the ‘surface personality trait’ of involvement, and retirement planning has been investigated (Hersley and Mowen 2000). Unfortunately it is beyond the scope of this study to test involvement and financial preparation for retirement in the context of Future Time Perspective.

Limitations in design

There are a number of limitations with the design of the study:

- a) The use of a self-administered questionnaire has certain disadvantages. The information that is collected may be affected by the characteristics of the respondents, namely their memory, knowledge, experience, motivation and personality. The researcher is also reliant upon the respondent accurately reporting their beliefs and attitudes and there is the danger of a socially desirability bias.
- b) The survey via the self-administered questionnaire also requires a limit on the number and type of questions that can be asked and therefore limits the issues that can be examined.
- c) The semi-structured interview method also has disadvantages as the information collected can be affected by the characteristics of the interviewer. The interaction of the interviewer and the interviewee can affect the nature of the information collected. The respondents can also have some doubt about their anonymity being maintained and therefore may not be as forthcoming as they might in more obviously anonymous circumstances.
- d) The use of a correlation study also limited the design of the research as it meant the independent and dependent variables could not be manipulated.
- e) Case study research has distinct limitations, not least of which is the limitation in the number of subjects that can be interviewed within the parameters of this research. Section 3.3.4 outlines the prime limitations of case study research including potential reactive effects as the subjects attempt to demonstrate what they perceive to be socially acceptable and any investigator effects where the biases of the investigator can distort the data collection and/or analysis.

Limitations in application

The study is restricted to Australia and as a result the subjects are all members of the Australian mandatory retirement-savings system. It should be noted that whilst it is a

mandatory system, not all workers in Australia are members of the scheme, for example some part-time, casual and low paid workers are exempt.

Given the limitations listed above, caution must be exercised in applying this study's findings to other-than-Australian members of retirement-savings schemes. The Australian superannuation system is one that has evolved through legislative changes by a variety of governments. It can be argued that financial preparation for retirement involves consideration of similar if not the identical issues, irrespective of whether the individual is a member of a mandatory or voluntary retirement-savings scheme. Consequently, the degree to which discrepancies arise between financial preparation behaviour in the Australian environment and that evidenced in other countries is expected to be limited.

1.11 Overview of the remainder of the thesis

Chapter Two provides a detailed discussion of the extant literature relevant to involvement and retirement savings. Chapter Three sets out the hypotheses and research questions as well as the research methodology. Chapter Four provides details of the results from both the quantitative and quantitative research. Chapter Five reviews the results in the light of the extant literature and presents conclusions as well as setting out limitations of the study and suggestions for further research.

Chapter 2

Literature review

2.1 Introduction and chapter overview

Chapter 2 reviews the extant literature relevant to this study. Literature is considered regarding the independent variable – ‘involvement’, the moderating variables, (age, education, income, number of dependants and gender), and the dependent variable, financial preparation for retirement.

The chapter is organized as follows:

Section 2.2 outlines research on involvement, including its origins.

Section 2.3 considers the involvement decision process and how it differs in high and low involvement individuals.

Section 2.4 looks at the antecedents and possible results of involvement.

Section 2.5 puts these in the context of the personal retirement-savings decision.

Section 2.6 outlines various measures of involvement.

Section 2.7 reviews literature concerning the moderating variables.

Section 2.8 outlines literature about the dependent variable – financial preparation for retirement.

Section 2.9 details the relationship of the study to the extant literature and details the need for the investigation undertaken in this study.

2.2 The independant variable – Involvement

‘Social Judgement Theory’ argues that an individual’s attitude is assumed to produce latitudes of acceptance, rejection and non-commitment. Communication would then be judged according to these principles. Attitude change results from a judged difference between the position held by the receiver and that of a persuasive communication. Ego-involvement was a central concept in Social Judgement Theory as it was assumed to have an affect on the width of the three latitudes (acceptance, rejection, non commitment) and consequently the probability of attitude change. ‘Ego-involved’ attitudes were identified as those that ‘have been learned, largely as social values; that the individual identifies himself with, and makes part of himself’ (Sherif and Cantril 1947). It was suggested that a major consequence of being involved was that the intensity of attitudes will determine which attitudes the individual will cling to, how annoyed or frustrated they will feel when these attitudes are challenged, what actions they might undertake to further their point of view (Munson and McQuarrie 1987). Individuals who are highly involved with an issue were thought to have large ‘latitudes of rejection’ and would be more likely to reject a persuasive message on that issue (Mitchell 1981). This would suggest that those involved with their retirement savings would be more likely to reject arguments counter to their views about preparing for retirement than people with low levels of involvement. The early research on involvement focused on these aspects of whether individuals exhibited high or low involvement. Indeed much of this early work stemmed from an article by Krugman in which he stated:

‘The significance of conditions of low or high involvement is not that one is better than the other, but that the processes of communication impact are different. That is there is a difference in the change processes that are at work. Thus, with low involvement one might look for gradual shifts in perceptual structure, aided by repetition, activated by behavioural choice situations and followed at some time by attitude change.’
(Krugman 1965)

Researchers in the field of persuasion emphasised the need to distinguish between high and low involvement situations (Petty and Caioppo 1981). There was general agreement that in high involvement situations, the persuasive message was one that had a high degree of personal relevance to the recipient whilst in low involvement situations, the personal relevance of the message was limited. In the social psychology field however, it was argued that high involvement occurred when a message had ‘intrinsic importance’ (Sherif and Hovland 1961), or personal meaning (Petty and Caioppo 1981).

Research on involvement subsequently moved away from this emphasis on high and low involvement and focused on three areas: involvement with a product, involvement with advertisements and involvement in the purchase decision. However, difficulties arose due to a lack of a common understanding of what involvement actually was.

2.2.1 Differences in definition

Differences emerged on how to define ‘involvement’. Whilst there was general agreement on the potential importance of the construct of involvement as a mediator of consumer behaviour, there was little agreement on what involvement was or how it should be measured. For example, researchers in the field of consumer psychology defined ‘involvement’ as the number of ‘personal references’ that recipients made between the message and their own lives (Petty and Caioppo 1981). By the late 1970s two different types of definitions of ‘involvement’ emerged. In one ‘involvement’ was viewed as a state variable, whilst the other view viewed ‘involvement’ as a process (Mitchell 1979).

Lack of clarity over the concept was further illustrated as ‘involvement’ was studied as a person specific variable, a situation specific variable, a type of cognitive processing and a behavioural variable (Bonfield 1983). Another redefinition of the concept emerged

suggesting it was a state of perceived importance or a state of interest evoked by the stimulus and the situation (Rothschild 1984).

Further research attempted to separate the various interpretations of the concept in terms of whether it should be considered:

- a stimulus centred variable (i.e. a characteristic of a product)
- a subject centred concept (i.e. individual consumers vary in ‘involvement’)
- a response-centred variable (i.e. ‘involvement’ being an information processing characteristic).

(Finn 1983).

The construct of ‘involvement’ emerged as an important factor in studying the effectiveness of advertising (Zaichkowsky 1986). However, in such studies ‘involvement’ was considered to refer to a mediating variable in determining if the advertisement was affectively relevant to the receiver. Researchers also used the term ‘involvement’ to refer to the relationship between a person and a product (Zaichkowsky 1986). The level of interest was also viewed as a cause of ‘involvement’ (Laaksonen 1994). Another area of research was based on involvement with purchase decisions (Zaichkowsky 1985b).

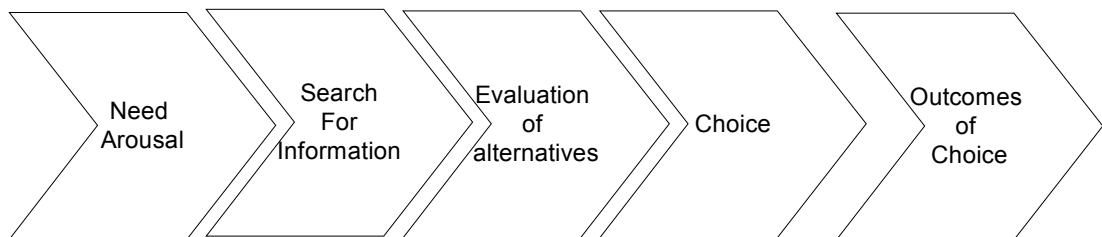
It was also argued that there were undeniable differences between individuals which, regardless of the product or situation, made some people more interested, concerned or involved in the consumer decision process (Slama and Tashchian 1985). It was suggested that a consumer’s involvement with purchasing, influences their purchasing behaviour, and that different consumer types (market segments) could be identified on the basis of their involvement. Despite differences in emphasis and preferences, a generic definition of ‘involvement’ emerged, namely that involvement was an unobservable state of

motivation, arousal or interest. It was evoked by a particular stimulus or situation. It had drive properties: its consequences were types of searching, information processing and decision making (Rothschild 1984).

2.3 The involvement decision process

A five step decision process emerged to explain the different decision processes that take place when high or low involvement degrees are stimulated (Engel et al. 1995).

Figure 3 **Five Step Decision Process**



Source: (Steinhart 2003b)

In the model, individuals in the high or low involvement scenarios work through the process in slightly different ways: The process for an individual with low involvement can be summarised as follows:

- The need arousal step stimulates little incentive for dedicating efforts to the decision-making process.
- The search for information step includes a minimal search of information concerning the target product etc. which may be as simple as a cursory scan of alternatives offered on the shelves.

- The evaluation of alternatives step encompasses a poor comparison between the set of options derived from the second step.
- The choice step is based on the limited evaluation in the second step.
- The outcomes of the choice made in step four may include a minimal evaluation of the purchase decision, if any is made at all.

The process for high involvement decisions is different, with a thorough inspection of the relevant information and much more seriousness attributed to the decision (Engel et al. 1995; Kapferer and Laurent 1993; Zaichkowsky 1985a). The process can be summarised as:

- The decision process is activated due to a perceived difference between the desired state of affairs and the actual situation, probably as an evoked need (Steinhart 2003b).
- In the second step the individual is likely to explore existing options and aim to satisfy the need, including a comprehensive information search which may include reading brochures, requesting further information from relevant people. There is evidence of a widespread search of information that relates from high degrees of involvement (Zhang and Markman 2001) where it was found that high involvement causes consumers to go beyond the scope of information that is easily available.
- In the third step the consumer evaluates the range of options determined in step two, using indicators to assess the viability of the various alternatives
- In the fourth step, the consumer decides upon the best option based on the indicators used in step three.
- In the fifth step a decision is made. If that decision is not to proceed with the alternatives discovered through the previous steps, but the evoked need still exists, the consumer is likely to restart the decision-making process. If the decision is to

proceed, the consumer invokes an emotional evaluation of the purchase e.g. satisfaction or distress due to the chosen option.

(Steinhart 2003a).

A related but slightly different aspect of different levels of consumer involvement is illustrated in Sherif's Social Judgement Theory (Sherif and Hovland 1961). This approach suggested that when high consumer involvement is stimulated, the number of alternatives is limited in the final set of options, but the number of criteria for comparing and choosing between them is large. For a low involvement consumer on the other hand the number of alternatives at the final stage is large but the number of criteria for comparing and choosing between them is small (Foxall and Pallister 1988; Schneider and Rodgers 1996; Zaichkowsky 1989).

Consumers exhibiting high degrees of involvement may carry out the following actions:

- Pay more attention to the search for information.
- Conduct a careful comparison of a small set of options.
- Perceive a great deal of difference between various brands.
- Award greater significance to a brand and express strong feelings of satisfaction or dissatisfaction following the decision.

(Steinhart 2003b). These indicators are illustrated in table 2.5.

Table 5 Differences in the Decision Process for High and Low Involvement Individuals

High level of consumer involvement	Low level of consumer involvement
Thorough search for information about the product	Minimal if any search for information on the product
Comparison of attributes and benefits between relevant options	Limited comparison
Perceived differentiation between relevant options	Perception of similarity between options
Preference for a specific brand	No particular brand preference
Strong post purchase appraisal of the product	Little if any post purchase evaluation
Small set of options considered in detail (depth as opposed to breadth)	Low level consideration of a large set of options (breadth rather than depth)

Source: (Steinhart 2003a)

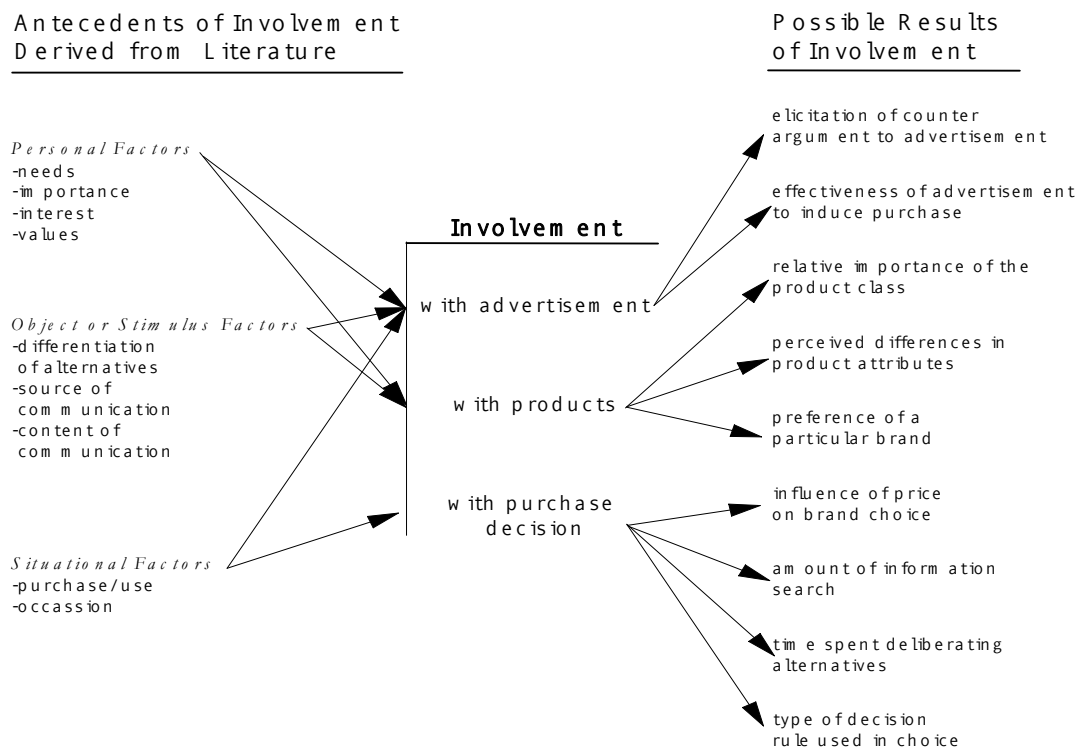
The motivating nature of the involvement construct was summarised by Zaichkowsky (1985b):

‘Involvement is a general construct which is more than just importance. Involvement also implies the emotional or ego aspects of the early work of Sherif (1947). The involvement construct is motivating in nature. When we are involved, we pay attention, perceive importance and behave in a different manner than when we are not involved’.

2.4 Antecedents and possible results of involvement

The debate on involvement continued to evolve and eventually the concept was illustrated by Zaichkowsky (1986) with a number of behaviours that were proposed to result from involvement:

Figure 4 Antecedents and Results of Involvement



Source: (Zaichkowsky 1986)

The studies from advertising research concluded that personal involvement or relevance of the object in the communication is required for there to be active attention. Further it was argued that:

- Where strong personal involvement exists, the arguments presented must contain good quality statements to suppress counter arguments and convince the recipient.
- The level of involvement will determine the types of cues used by the recipient to evaluate the message.

(Petty and Caioppo 1981)

Literature on products and involvement suggested that there were two underlying factors that influence whether a product would be considered high or low involving:

- The personal needs, values and relevance within the individual determine how they perceive the object (Howard and Sheth 1969; Hupfer & Gardener 1971 cited in Zaichkowsky 1986).
- The level of distinction in a product class. High involvement individuals being less susceptible to changes in evaluation after discrepant information as beliefs about the product appear to be firmly held and are only influenced by high quality arguments. Low involvement individuals on the other hand do not appear to have strongly held beliefs and consequently are more easily influenced. Such findings supported the work of Petty and Cacioppo in advertising quality and attitude change (Korgaonkar and Moschis 1982).

Purchase decision research concluded that when the purchase was seen as important, the consumer is likely to expend effort to obtain relevant information with a view to reducing uncertainty. It was considered this was achieved in two ways:

- The willingness to perceive information to which they are subjected.
- An extensive search for relevant information.

(Howard and Sheth 1969)

The literature indicates that these three areas researching involvement, i.e. advertising, product class and purchase decision, are related to each other in the sense of their personal relevance (Aldlaigan and Buttle 2001) and there is a general agreement that involvement relates to personal relevance (Poiesz and de Bont 1995).

2.5 The involvement and the retirement-savings decision

The involvement construct potentially has significant implications for the personal retirement-savings decision in relation to an individual's financial preparation for

retirement. Each of the items in the model illustrated in Figure 2.4 is discussed below in the context involvement and its potential impact upon financial preparation behaviour. They are also relevant in terms of the measure of financial preparation as they can trigger the various aspects of financial preparation used in the Financial Preparation for Retirement Scale. This is illustrated in more detail in Section 3.4.3

2.5.1 Antecedents of involvement

The model of involvement as developed by Zaichkowsky outlined three broad categories of antecedents of involvement: Personal factors, Object or Stimulus factors and Situational factors. Zaichkowsky (1986) summarised the three factors and argued that the first one relates to the characteristics of the person. This suggests that a person's inherent value system, along with their unique experiences, determines whether they are involved with something. The object-related factor is in reference to the physical characteristics of the stimulus. This might pertain to the different types of media involved in the message and their diverse characteristics, or the content of the communication itself. The third factor outlined by Zaichkowsky impacting upon involvement is the varying situation. By way of example, a person might react differently to an advertisement relating to a particular issue if they are already considering that issue, compared to the way another person might react who is not considering that issue. These factors are discussed in more detail below:

Personal factors – Needs

A recognition of the need for adequate financial preparation for retirement is one of the critical requirements in an environment where there has been a significant shift of responsibility to the individual (Clark et al. 2003; Lusardi 2003b). This means that the individual has to attempt to formulate a balance between present and future needs. A

person who is involved is likely to understand the need to prepare financially for retirement whereas a person who has little involvement may not appreciate the need. Given that retirement is not something that everyone looks forward to, individuals may also have to face the stress of dealing with what they consider to be an unpleasant event. Social and emotional pressure can be placed on individuals as society places great significance on occupational status. This is illustrated by a description of retirement as a functionless situation, with the retiree cut off from participation in the most important interests and activities of society (Parsons 1942).

The notion that for some, retirement would conjure up negative images of the future (e.g. financial dependence or ill health) that may be psychologically threatening and thus anxiety provoking, is utilised in a study that looks at financial preparation and self image (Neukam and Hersley 2003). The study found that those with a negative self-image were less likely to focus upon retirement, consistent with low levels of involvement. Those with a positive self-image were more likely to consider the issue of financial preparation, consistent with high levels of involvement as the individuals would ascertain relevant information to reduce uncertainty regarding their future life (Howard and Sheth 1969). Consequently it could be argued that without actually testing for involvement, Neukam and Hersley were investigating whether increased involvement would lead to higher levels of financial preparation for retirement. This is supported by Neukam and Hersley's view that financial preparation would be strongest amongst those likely to envision rich and positive images of life after their departure from the workforce. These visions would serve to define specific retirement goals and these goals should serve to stimulate appropriate financial savings activities, allowing individuals to meet their long-term objectives.

Personal factors – Importance

Unless detailed consideration is given to specific future goals, it is natural that the individual is going to consider immediate issues to be of higher importance than remote, potentially undefined future issues. Not many people in today's society are prone to accept the concept of a payoff in the distant future when societal norms are based on instant gratification (Selnow 2003). However, if the individual gains some awareness of the need to save for their retirement by appreciating just how much or how little they have saved for their life in retirement, the relative importance of the future will change. This is consistent with the findings from the 2001 Retirement Confidence Survey which found that half of the respondents who had reported having made calculations of retirement savings needs subsequently changed their savings behaviour (RCS 2001). Such a process requires that the individual consciously considers future needs over present activities and in turn considers the relative importance of each.

This is supported by the work of Neukam and Hersley (2003) who found those with high levels of goals-based motives had higher levels of voluntary savings contributions than those with low goal savings motives. This is also consistent with findings from research on involvement as those who had goals-based motives, would by definition, have had to be more involved than those who had not set goals and thereby have placed importance on the need to prepare. Further support is provided by a study that found many do not consider longevity a significant financial risk in terms of preparing for their retirement (Institute 2002) and therefore do not appreciate the importance of financial preparation for retirement.

Personal factors – Interest

The level of interest and a person's involvement in that issue are closely related (Laaksonen 1994). The consequences of involvement relate to types of searching, information processing and decision making (Rothschild 1984). Preparing financially for retirement is also a gamble as there are no guarantees that money set aside for the future will actually come back. However, the decision not to save yields instant gains. Consequently it is not surprising that significant numbers of people who plan to retire, have hardly thought about retirement (Lusardi 2003c). Retirement, it would appear, is of little interest in comparison to other more immediate issues. For a person's interest to be focused on a specific issue, it requires some degree of involvement. An individual who is highly involved will conduct a more thorough inspection of relevant information. As a result they will attribute much more seriousness to any subsequent decision (Engel et al. 1995; Kapferer and Laurent 1993).

Neukam and Hersley (2003) also argued that when thinking about retirement, individuals are likely to envision both positive and negative images of the future, and these images are likely to have a significant impact upon their retirement planning and savings tendencies. One of the working assumptions used in the study was that both positive and negative images of the future would differentially shape an individual's behavioural motives and thus their savings practices. Such an approach utilises the same reasoning that argues that involvement in the retirement-savings decision would influence financial preparation for retirement.

Personal factors – Values

Many personal values are related to the needs and interests of the individual. As Selnow (2003) has argued, with societal norms geared towards instant gratification, the focus of

attention is likely to be on relatively short-term ends that are supportive of a person's perceived needs and interests. Consequently, if there is a lack of involvement, the values of the individual are likely to be centred around more immediate needs. As Clark et al. (2003) reported, many fail to adequately balance spending in the present with what will be needed in the future. The focus on a short-term value system combined with a lack of involvement can divert attention away from future consequences, to the point where some do not accept that they may need to work longer before being able to receive a pension (Robinson 2005). This was illustrated by industry research that asked people currently in the workforce about their expected lifestyle and income in retirement with the report describing respondents as 'living in a fantasy land' (Prudential 2004) due to their unrealistic expectations. This is further supported by research based on the HILDA¹¹ data that revealed that there is a significant gap between the expectations of those not yet retired and the experiences of those already retired (McAlister et al. 2005).

The research of Neukam and Hersley (2003) considered fear-based motives, which are commonly associated with patterns of behavioural avoidance, and goal-based motives, which are typically associated with achievement-orientated behaviours. The findings from this body of work suggested that individuals who possess an achievement orientation tend to focus on the future by setting goals, whereas those driven by their fears seek to avoid thoughts of the future so as not to envision anticipated negative events. This is consistent with behaviour suggested by involvement theory.

¹¹ Household Income and Labour Dynamics in Australia survey

Object or stimulus factors – Differentiation of alternatives

An individual with a high level of involvement is likely to have considered the alternatives available. This may relate to types of product, asset mix or contribution level, etc. Those with low levels of involvement on the other hand, are less likely to have made such efforts. In order to combat this, financial services companies undertake significant amounts of advertising and promotional activity about their products and in particular retirement savings. However, despite this promotional effort, research has found that many workers do not possess the information necessary for making retirement-savings decisions (Lusardi 2003c). Many are not aware of what benefits they may or may not be entitled to (Gustman and Steinmeier 2001).

Several studies show that workers are all too often ill-equipped to make savings plans (Bernheim 1998). This is supported by research indicating that many employees are confident that they will do well in retirement, yet express concern and lack of confidence in the choices they are making (Associates 2004). A lack of financial education may cause workers to start saving too late in life to realise their stated retirement goals. As a result they may fail to achieve an optimal balance between current consumption while working, and future consumption in retirement (Clark et al. 2003). This is demonstrated by research indicating that despite the modest level of the aged pension in Australia (one quarter of average weekly earnings), only 17% of current retirees have private income that matches or exceeds that level (Kelly 2003). Many Australians are relying on the mandatory superannuation system to fund their lifestyle in retirement and as a result are not actively considering alternative approaches.

If there is no perceived need to consider an alternative, little or no effort will be expended on differentiating between the alternatives available. However the mandatory retirement-

savings system has not had enough time to accumulate a level of savings to finance an adequate retirement income (IFSA 2003) and the lack of involvement of many individuals in the system suggests that they may not be aware of the level of income they are likely to generate through the mandatory system. The involvement literature implies that, for people to be aware and potentially evaluate alternatives there must be some degree of involvement.

Object or stimulus factors – Source of communication

Increased involvement implies that communication from relevant institutions would be noticed. Communication from financial services companies can take many forms with much being in print. However, retirement-savings programs that rely solely on print media have previously been found to have little or no affect on participation or contribution levels (Bayer et al. 1996; Bernheim and Garret 2003).

Under low involvement conditions, persuasion may typically be governed by such peripheral cues as source characteristics, whereas under high involvement conditions, persuasion may be governed more by message content (Caioppo & Petty 1980 cited in Petty and Caioppo 1981). Under low involvement conditions, the source of the message would be the prime motivator whilst the content is unlikely to undergo peripheral analysis. Low involvement individuals are unlikely to have strongly held beliefs and consequently are more easily influenced (Korgaonkar and Moschis 1982). This is consistent with findings that indicate that the type of financial information plays a significant part in the participation and contribution rates of retirement-savings plans (Clark et al. 2003).

Object or stimulus factors – Content of communication

Studies indicate that under high-involvement conditions, message content is the potent determinant of the amount of persuasion that occurs and that under low involvement, non-content factors such as credibility or attractiveness of the message are more important (Petty and Cacioppo 1981). For example some advertising of retirement-savings products depicts the target audience as a mature single white male who is reasonably wealthy, has a highly paid successful career and is investment 'savvy', having established investment goals (Ekerdt and Clark 2001). Where the communication does not realistically represent the majority of people who are the target, the use of such images is unlikely to cause these people to relate to the purpose of the communication. This is supported by the research of Neukam and Hersley (2003) who argued that individuals who experienced anxiety would be less likely to plan and save for the future than those who do not experience anxiety. This was based upon a general pattern of avoidance when it comes to thinking about engaging in long term savings activities. This is consistent with the procrastination and inertia detected by various studies of retirement-savings behaviour (Bernartzi and Thaler 2001; Choi et al. 2002; Madrian and Shea 2001). Low involvement individuals are presumed to have wide latitudes of acceptance and non-commitment and narrow latitudes of rejection (Laaksonen 1994). Consequently, these individuals would be likely to be more open to accepting images that are consistent with their negative self-image, thereby reinforcing their non-commitment.

The supposition that little or no attention is paid to communication about retirement saving by many is supported by studies documenting that large numbers of workers simply do not possess the information necessary for making savings decisions (Lusardi 2001), despite the quantity and promotion of material about these issues. The Retirement Confidence Surveys have asked respondents if they have calculated how much they need

in retirement with only a minority stating that they have. When asked why this has not been done, the majority replied that they found it too difficult and did not know where to find help to do it (RCS 2001; RCS 2002; RCS 2003). Yet many service providers have designed material to help people do exactly this and provide details in regular communications to fund members.

Situational factors – Purchase/use

Outside the normal mandatory system or in a voluntary system, a retirement-savings product purchase decision normally has to be made. Such products are purchased based upon the premise that they will meet expectations at the required time in the future, by which time it will be too late to make any changes. Planning for retirement is a complex task with many people not performing the task well and/or postponing any decision until it is too late, with information needed for making reasoned decisions extensive (Lusardi 2001) and rules concerning benefits and entitlements complex and potentially intimidating. As a result, information and assurances are required for meaningful decisions to be made, which by definition requires time, effort and involvement. Where involvement is low, a more likely option is to follow the path of least resistance, as occurs with many default options (Choi et al. 2002; Choi et al. 2001). In such situations individuals can procrastinate indefinitely and put little or no effort into planning (Lusardi 2003b). Increasing the involvement of the individual may provide a means to facilitate greater understanding and better retirement preparation.

Situational factors – Occasion

Membership of retirement-savings funds is invariably linked to employment. Consequently, the occasion when a person may have some engagement in the personal retirement-savings decision is when they join a new employer and a decision is made

concerning the new retirement-savings fund. However, this is not always the case. In a number of situations, employees are automatically included in the existing retirement plan upon joining the company.

This is a feature of a mandatory approach such as exists in Australia, where the employee is usually automatically included in a superannuation plan. However, it can also occur in a voluntary system (Clark and d'Ambrosio 2002). In both instances the employee will need to complete some form of documentation in order to provide relevant details, but from that point on the member's involvement in the retirement-savings decision is likely to be low. This can have significant consequences. When leaving the company the money accumulated in the retirement-savings fund usually has to be transferred to another account, be it some form of roll-over account or a new fund. However there is evidence that this is not always occurring with estimates suggesting that as of January 2006, lost or unclaimed superannuation in Australia amounts to approximately A\$10 billion (Find My Super 2006; Super 2006) and is growing at approximately \$1 billion per annum. Age can also provide an impetus towards saving for retirement (Munnell and Sunden 2003) with the occasion of reaching a particular age potentially influencing the involvement of the individual with regard to their retirement preparation, as outlined in the following sections.

2.5.2 Possible results of involvement

If the level of involvement in the personal retirement-savings decision is a critical issue in the financial preparation undertaken by an individual for their retirement, it is necessary to be cognisant of the results of increasing involvement. The model of involvement illustrated by Zaichkowsky outlined nine different potential results of involvement.

Involvement with advertisements – Elicitation of counter argument

Increasing involvement suggests that when individuals encounter an advertisement about retirement savings, they will respond differently to those who are less involved. Consumers who are more involved with a message will give more counter arguments than those who are not involved (Zaichkowsky 1986). However, given that a number of advertisements for retirement savings do not detail what a person would be saving, investing or planning for (Ekerdt and Clark 2001), it is hardly surprising if consumers have insufficient knowledge and do not make optimal retirement plans (Clark and d'Ambrosio 2003). In such circumstances the individual may not question the portrayal of a secure retirement, believing they are fully prepared and therefore do not need to take remedial action. This supposition is supported by growing evidence of significant falls in consumption at retirement. The falls in consumption evidenced are greater than traditional models of saving lead us to expect (Bernheim et al. 2001). The literature would therefore suggest that people who are involved would be more likely to critically appraise any advertisements regarding retirement savings, particularly where an idyllic existence is portrayed.

Involvement with advertisements – Affectiveness of advertisement

Affectiveness of advertising has also been defined as the ability of an advertisement to elicit interest in the purchase or use of a product (Kover et al. 1995). Consequently, where a person has a high level of involvement, advertisements that are concerned with the aspect of involvement are likely to be considered relevant to that individual (Petty and Caioppo 1981). In contrast, in a low involvement situation, the level of interest is likely to be low and the message not considered relevant. Therefore, where involvement is low, one would expect little attitude change, low levels of awareness about relevant products and even relatively low levels of knowledge. This is supported by findings that indicate

that large numbers of workers simply do not possess the information necessary for making savings decisions (Lusardi 2001) and a significant lack of financial knowledge exists among employees at all levels of many firms (Fore 2003) despite significant amounts of advertising and promotion. Indeed there is substantial evidence of wide heterogeneity in saving-behaviour (Gustman and Steinmeier 2001) and it is difficult to rationalize the huge differences in wealth holdings among households of similar characteristics and economic status (Lusardi 2002a).

It has also been found that individual attitudinal factors influence how a person reacts to advertising, with marketing research indicating that the level of involvement can affect how consumers respond (Park and Hastak 1994; Petty et al. 1983). Specifically it has been found that the amount of attention people pay to advertising is influenced by factors such as how much they believe advertising helps keep them informed (Mehta 2000). However, for a communication about retirement savings to be judged to be of sufficient quality to merit attention, the individual must first of all consider it to be important enough to consider. The literature implies that the level of involvement will affect the attention devoted to such advertising and as a result, advertisements are likely to be less affective where levels of involvement are low.

Involvement with products – Relative importance of the product class

Holbrook and Maier illustrate research indicating that low-involvement consumers are likely to appear disinterested and would be expected to pay little attention to messages about the product class (1969 cited in Finn 1983). This is consistent with the view that product involvement relates to the perceived relevance of the products and services to a consumer's needs, values and interests (Zaichkowsky 1989) and also how important the product is to their life (Zaichkowsky 1994). If an individual considers that a product is

important to their life, they will be more likely to process relevant information about that product and expend more effort processing or understanding communications about that product type (Macias 2003). Consumers who are highly involved consider these identified product categories especially relevant to them (Flynn and Goldsmith 1993). This is demonstrated by the positive relationship that has been found to exist between involvement in, and the amount of money spent on, a product category (Earl and Kemp 1999). This can be illustrated by the behaviour of people whose parents suffered health problems before dying or who lived in nursing homes. Such people are more likely to think about issues associated with retirement as their personal experiences may induce efforts to plan for retirement (Lusardi 2001). Involvement can therefore influence the perception of product class with regard to its relative importance to an individual.

Involvement with products – Perceived differences in product attributes

High involvement implies that beliefs about product attributes are strongly held, whereas low-involvement individuals do not hold strong beliefs about product attributes (Robertson 1976). This is consistent with findings illustrating that under low-involvement conditions, there is little comparison among product attributes (Belk 1989; Mitchell 1979). It was argued that this was because an individual's needs and values as well as their perception of a product and its relevance determined how they perceived that product (Howard and Sheth 1969) and/or its attributes (Costley 1988). Consequently, individuals with low levels of involvement are unlikely to perceive major differences between the different types of products available, supported by the view that involvement and product-use appear related (Zaichkowsky 1985a).

Involvement with products – Preference of a particular brand

When involvement is low, there is a perception of similarity between brands and no special preference for a particular brand (Belk 1989; Lastovicka 1979; Mitchell 1979; Tyebjee 1979). More involved consumers on the other hand are deemed to seek and utilise more information about brands (Bloch et al. 1986; Lastovicka and Gardner 1978; Mitchell 1981) and high involvement has been found to lead to greater commitment to brand choice (Howard & Sheth 1969 cited in Zaichkowsky 1985b). Retirement-savings plans provided by employers can become the brand of choice as many find it difficult to make financial decisions. Consequently inertia has become a powerful factor, with significant numbers not making any changes to their retirement savings for long periods (Fore 2003). This is consistent with the view that if a consumer learns about a product for which they have no felt need, it is doubtful that when the need arises, brand purchase will be the most favoured source of information (Finn 1983).

The literature on involvement outlined in this chapter suggests that increasing the level of involvement may lead the individual to critically appraise any choices being offered, considering brand as one of the factors, rather than simply opting for the simplest and/or cheapest option.

Involvement with purchase decision – Influence of price on brand choice

Purchase decision involvement has been defined as the extent of interest and concern that a consumer brings to bear upon a purchase decision task (Mittal 1989a). The characteristics of the consumer will influence long-term perceptions of the importance of the product and one of the factors that is related to the perceived importance of that product is the cost associated with it (Bloch and Richins 1983). It has been found that consumers with low levels of involvement looked for low prices and convenience while

highly involved consumers were far more interested in quality and service (Tigert et al. 1980). Under low involvement learning, i.e. where new product/brand information is learned without active participation in the learning process (Finn 1983), the costs associated with saving for retirement are likely to be the focus of attention irrespective of their importance and/or relevance to such factors as performance. This is supported by the literature indicating that involvement implies attention to something because it is perceived to be relevant or important (Ratchford 1987). The service and quality associated with particular brands are not likely to be the focus, as low levels of consideration are likely to be applied to a relatively large set of options, rather than detailed consideration given to a small number of options (Steinhart 2003b).

Involvement with purchase decision – Amount of information search

When a purchase is considered important, expending effort to obtain relevant information with a view to reducing uncertainty is consistent with high levels of involvement (Howard and Sheth 1969). This is supported by research that found greater involvement leads consumers to search for more information (Clarke and Belk 1979). A subsequent study found that, depending upon their level of involvement, individual consumers differ in the extent of their search for information (Laurent and Kapferer 1985). Specifically, high consumer involvement in a product's purchase led to extensive pre-choice information search (Mittal 1989b). This suggested that individuals who are involved in their personal retirement-savings decision are likely to undertake a higher level of information search than those with low levels of involvement. This is particularly pertinent as the current retirement-savings environment dictates that individuals have greater responsibility for determining their own retirement income. Consequently individuals need more information about appropriate steps to take. This is supported by findings that a great many people who have given little thought to retirement expect to have few assets at

retirement (Lusardi 1999) and as a result end up having much lower savings than households that have thought about retirement (Lusardi 2000b). Subjects illustrating high levels of personal involvement also report that they are more likely to read magazines, newspaper articles and books and watch television shows about a relevant products than those who with a low involvement score (Flynn and Goldsmith 1993).

Involvement with purchase decision – Time spent deliberating alternatives

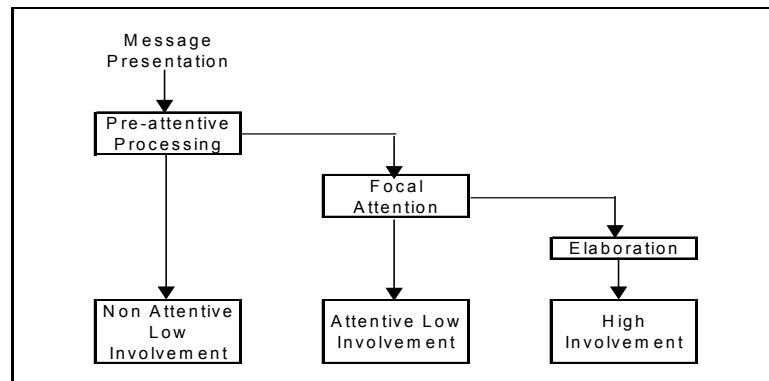
High levels of involvement lead the consumer to spend more time searching for the right selection – the concern is that the decision is relevant and hence the person will be motivated to make a careful purchase decision (Clarke and Belk 1979). The literature also suggests that typically, when consumers are involved, they are likely to engage in a number of behaviours (active search, extensive choice process, active information processing etc.). When they are not involved, they are unlikely to engage in these behaviours (Laurent and Kapferer 1985). This is supported by findings which indicate that active participation in a retirement-savings scheme is sensitive to the level of information and support available (Bernheim and Garret 1996; Clark and Schieber 1998; Madrian and Shea 2001). Involvement has also been found to be positively correlated with activities such as the extent of ongoing information search (Earl and Kemp 1999) where alternatives will be considered.

Involvement with purchase decision – Type of decision rule used

It is argued that different consumers gain information from communications in different manners, depending upon their level of involvement. Information processing follows a different route when involvement is low rather than high (Krugman 1965). The model that was proposed (Leavitt et al. 1981) suggested that as processing proceeds from pre-

attentive processing to focal attention and then to elaboration, the latter processes have more powerful consequences for behaviour.

Figure 5 **Model of Decision process for High and Low Involvement**



Source (Leavitt et al. 1981)

In low-involvement situations, right-brain processes dominate whereas higher degrees of involvement give rise to left-brain processes (Hansen 1981). This suggested that under high involvement conditions, information processing and deliberate choice making occurs whereas under low involvement conditions, information is received holistically and choices made without any high degree of awareness (Kassarjian 1981). Further, Hansen indicated that under low-involvement conditions, the number of exposures needed before a sufficient amount of learning has occurred may be greater when right brain processes dominate. The literature also suggests that involvement implies attention to something because it is somehow relevant or important (Ratchford 1987).

Suggested consequences of involvement in the field of information processing include:

- levels of processing (Celsi and Olsen 1988; Maheswaran and Meyers-Levy 1990)
- motivation to process information (Bloch et al. 1986)
- type of processing (Mittal 1988).

The level of involvement has also been shown to determine the depth, complexity and extent of cognitive and behavioural processes (Laurent and Kapferer 1985). Under low involvement conditions, the level of information processing is superficial whereas highly involving communications receive more attention and cognitive effort (Earl and Kemp 1999).

Researchers concerned with cognitive processes underlying attitude change have examined involvement. This is considered to affect persuasion because it instigates more thorough processing of persuasive messages (Chaiken 1980 cited in Johnson and Eagly 1989). Highly involving attitudes are viewed as more difficult to change than less involving attitudes (Johnson and Eagly 1989)

Further, studies have found that high involvement increases memory for message information (Gardner et al. 1985). Higher involvement has also been found to increase the accessibility of message details and self-generated evaluative thoughts (Hawkins and Hoch 1992) with personal involvement one of the variables that affects the intensity of information processing (Petty and Caioppo 1990).

2.6 Measuring involvement

The importance placed upon the involvement construct has led to the development of a number of measures. This section considers several of those measures and provides the rationale for the choice of the Zaichkowsky instrument.

2.6.1 The Zaichkowsky Personal Involvement Inventory (ZPII)

Zaichkowsky (1985b) argued that a measure of involvement, independent of the behaviour that resulted from involvement, would permit researchers to apply the same measure across research studies. Such a measure would also need to be sensitive to areas that affect a person's involvement, namely the three variables that precede involvement. Zaichkowsky classified these into three factors:

- The characteristics of the person (such as their inherent value system and unique experiences) determine whether a person is involved with a particular object.
- The physical characteristics of the stimulus – physical differences can relate to differences in the communication media, the content of the communication or the variation in the product classes being advertised.
- The varying situation, as a person may pay more attention to a communication that is more relevant to their particular circumstances at that point in time.

Involvement with products had also been measured by several methods: rank ordering products (Sheth and Venkatsan 1968), rating a series of products on an eight point concentric scale as to their importance in the subjects life (Hupfer & Gardener 1971), asking how important it is to get a particular brand (Cohen and Goldberg 1970) or finding the total time that subjects report 'don't know' for a series of brands (Ray 1973). Zaichkowsky also stated that involvement had previously been measured by administering Likert statements that were thought to tap the underlying concept, e.g. the product means a lot to me, it matters to me, or the product is important to me (Lastovicka and Gardner 1978; Taylor 1981). Zaichkowsky concluded that the problems of the use of such different and diverse measures were three fold, namely:

- a) If conflicting results were obtained, questions arose as to whether such findings were the result of the behaviour or the measure.

- b) Single item measures may also not capture the total involvement concept.
- c) Single item measures have low reliability and multiple item measures in use at that time had not been tested for internal reliability, stability or validity.

Consequently, Zaichkowsky undertook the development of a standardised, general, valid and multiple-item measure of involvement that was designed to register differences across people, objects and situations. Consistent with this view, she defined 'involvement' as 'a person's perceived relevance of the object based on inherent needs, values and interests'. After testing various types of scales, a semantic differential type (Osgood, Suci & Tannenbaum 1957 cited in Zaichkowsky 1985b) was considered the most efficient. This consisted of a series of bipolar items, measured on a seven point rating scale with the descriptors or phrases being easy to relate across product categories.

The steps taken to develop the measure were:

1. Definition of the construct to be measured.
2. The generation of items that pertained to the construct.
3. Judging the content validity of the generated items.
4. Determining the internal reliability of items judged to have content validity.
5. Determining the stability of internally reliable items over time.
6. Measuring the content validity of the selected items as a whole.
7. Measuring the criterion-related validity, namely the ability of the scale to discriminate among different products for the same people and different situations for the same product and same people.
8. The testing of the construct or theoretical value of the scale by gathering data and testing whether the scale discriminated on self-reported behaviour

(Zaichkowsky 1985b).

The research produced the Zaichkowsky Personal Involvement Inventory (ZPII) and it was found that the ZPII had content validity for both the selection of the items used and through the classification of open-ended responses from subjects. Reliability over time was demonstrated with a test–retest correlation of 0.90. Criterion-related validity was established by demonstrating similar ordering of products from previous research. Construct validity was tested and a positive relationship was found between ZPII scores and responses from subjects to theoretical propositions pertaining to involvement. Convergent and discriminate validity testing was not carried out. However as at the time of the research it was claimed that no other involvement measure had been subjected to reliability and validity testing (Zaichkowsky 1985b). Previous research had already established discriminant validity of the concept of expertise or product knowledge (Zaichkowsky 1985a) whilst ZPII scores were found to be unrelated to expertise but related to product use.

The ZPII revealed in the doctoral dissertation ‘Conceptualising and Measuring the Involvement Construct in Marketing’ in 1984 (cited in Zaichkowsky 1985a) became one of the most widely used self report measures in marketing research (Flynn and Goldsmith 1993). The ZPII was also used in a study of consumer involvement with various common products and services across many countries with the measure demonstrating reliability as a measuring instrument across 15 national cultures, including those where English was spoken as a second language (Zaichkowsky 1989). This was later updated and revised to produce the Zaichkowsky Revised Personal Involvement Inventory which was used in a number of studies to the satisfaction of the researchers. Details of the development of this revised scale and its acceptance by a number of users are contained in Chapter 3.

2.6.2 The Consumer Involvement Profile (CIP)

It was argued that different consumers experience different levels of involvement which affects their decision processing and their search for information (Laurent and Kapferer 1985). Conclusions were drawn that no single indicator of involvement could satisfactorily describe, explain or predict involvement (Rothschild 1979 cited in Laurent and Kapferer 1985) which in turn led to the concept of the involvement profile.

In early 1985 the research of Laurent and Kapferer resulted in the claim that involvement derived from:

- the perceived importance of the product
- the perceived risk associated with the product purchase, which had two facets:
 - the perceived importance of negative consequences in the case of poor choice
 - the perceived probability of making such a mistake
- the symbolic or sign value attributed by the consumer to the product, its purchase or consumption
- the hedonistic value of the product, its emotional appeal, its ability to provide pleasure and affect.

(Laurent and Kapferer 1985)

It was argued that the involvement profile could be used to segment a market rather than just indicating high or low levels of involvement, as the profile identified consumers that were high on some facets but low on others. It was suggested that such information would enable a better understanding of where involvement originates, thereby providing clues as to what types of appeals should be made in communications for various segments (Laurent and Kapferer 1985).

It was subsequently argued that it was necessary to separate the state of involvement from its alleged consequences (Kapferer and Laurent 1985). At this stage there was little agreement on how to measure the construct of involvement as the term had been applied in a variety of ways by different researchers. They suggested that involvement was not a uni-dimensional construct, arguing that as involvement was a hypothetical variable, it could not be directly measured. Consequently, it had to be inferred from the presence or absence of its alleged determinants or antecedents (Kapferer and Laurent 1985).

Five antecedent conditions were subsequently outlined:

- interest in the product category
- enjoyment or pleasure gained from it
- perception of self expression through product category
- two components of perceived risk
 - probability of an incorrect decision
 - the importance attached to that decision.

It was further claimed that the first facet (interest) was an antecedent of enduring involvement only whilst pleasure and sign value could apply to both enduring and situational involvement, whereas perceived risk was likely to be limited to situational involvement (Kapferer and Laurent 1985). In subsequent research this approach formed the basis for their development of the Consumer Involvement Profile (CIP). Kapferer and Laurent claimed that the CIP provided five clean, conceptually clear and multi product scales. It was argued that knowledge of these antecedents would allow a clear specification of the nature of the involvement and therefore enable a prediction of the consequences of involvement (Kapferer and Laurent 1985b).

In their reports on Consumer Involvement Profiles (Kapferer and Laurent 1985; Kapferer and Laurent 1985b; Laurent and Kapferer 1985) the terms ‘antecedents’ and ‘facets’ were interchanged. Mittal argued that if the factors identified by Laurent and Kapferer were antecedents of involvement, then their Consumer Involvement Profile measures only these antecedents and not involvement itself. It was further argued that only the importance factor be deemed to represent involvement (Mittal 1989c).

In subsequent research on the CIP which included both the original French version and an English translation of the scale, mixed results were obtained with regard to reliability (Kapferer and Laurent 1985; Kapferer and Laurent 1993). The interest and pleasure sub-scales also appeared to merge and the authors discussed whether the risk component should be considered an antecedent of involvement. The merging of the pleasure and interest scales was also found in 1990 when the original CIP was translated into English and the format changed from the original five point Likert scale to a semantic differential scale (Jain and Srinivasan 1990).

Subsequent research noted that the following:

- No US study had applied the full CIP scale in its original Likert scale format.
- No study of the CIP scale had presented a product by product analysis without aggregating responses across several unrelated product categories.
- No study of US consumers had utilised a sample that was not drawn from college students.

(Rodgers and Schneider 1993).

Rodgers & Schneider found that the CIP sub-scales for ‘sign’, ‘risk importance’ and ‘risk probability’ could be used to measure those antecedents of involvement but that ‘interest’ and ‘pleasure’ would probably need to be conceptualised as a single factor. In order to

establish as much external validity as possible, it was decided that this research should utilise a measure that had been tried and tested by other researchers and had gained their approval. The Consumer Involvement Profile did not meet these requirements and so was not considered suitable for this study.

2.6.3 Versions of the Zaichkowsky Personal Involvement Inventory (ZPII)

It was claimed that the ZPII measured the ‘state’ of involvement rather than relying on indicants associated with the antecedents and consequents of this state. However, concerns were raised about the scale, namely:

- It included scale items that might not easily be understood by the general public.
- It was considered to be too long when used on subjects assessing multiple objects.
- Its psychometric properties were derived from several small, diverse sample populations with only two objects scaled by each sample.

(Munson and McQuarrie 1987).

In an attempt to improve the ZPII, four of the original items in the ZPII were discarded with the remaining 16 items forming the Modified Personal Involvement Inventory (MPII). Results using the MPII were comparable to those obtained using the original ZPII with levels of internal consistency, test-retest reliability, convergent and predictive validity described as satisfactory (Munson and McQuarrie 1987). Further testing of the ZPII was conducted, leading to the development of the Revised Personal Involvement Inventory (RPII) (McQuarrie and Munson 1987) in an attempt to incorporate the multi-faceted perspective on involvement developed by Laurent and Kapferer (1985). Analysis was conducted on what was called the OPII (Original Personal Involvement Inventory), which in fact represented the MPII from the previous research (Munson and McQuarrie 1987) and the new RPII. This latter scale contained eight paired items from the OPII and

eight new paired items were added in an attempt to capture some of the antecedents of involvement outlined by Laurent and Kapferer. Analysis indicated two pairs were relatively un-correlated with any of the remaining 22 pairs. Consequently they were incorporated into a pleasure sub-scale causing the RPII and OPII to be proposed as two overlapping subsets of the remaining 22 scale items (McQuarrie and Munson 1987).

In the research findings, both scales exhibited a high degree of internal consistency but within the RPII the importance and pleasure sub scales produced more consistency than the risk subscale. Test/retest results were not as strong as found by Zaichkowsky with her original ZPII but the researchers claimed that the high correlation between the RPII and the original indicates that the extensive validation conducted by Zaichkowsky supported the revised version as well. At the same time, the sub-scale structure allowed the incorporation of the perspective of Laurent and Kapferer (1985). However, as the RPII was not actually compared with the original ZPII the researchers suggested a note of caution as to which scale may be 'better' (McQuarrie and Munson 1987).

Mittal (1989c) argued that although Zaichkowsky adopted a uni-dimensional conception of involvement, the 20 item Personal Involvement Inventory did not constitute a uni-dimensional construct arguing that it contained at least 3 distinct constructs:

- involvement, reflected in such items as unimportant/important, significant/insignificant etc.
- a hedonistic factor, reflected in four items, namely boring/interesting, mundane/fascinating, appealing/unappealing, and unexciting/exciting.
- An attitude construct, reflected in such items as valuable/worthless, beneficial/not beneficial

Mittal also considered that the McQuarrie and Munson revision of the ZPII (McQuarrie and Munson 1987) was correct to discard the attitude items but in utilising the Laurent and Kapferer (1985) items, only those relating to importance were viewed as representative of involvement, the others measuring antecedents of involvement instead. In an analysis of convergent and discriminant validity of both the ZPII and the CIP, the results illustrated convergent validity between the two measures. It was also found that both measures exhibited discriminant validity relative to innovativeness and confidence in information processing, but not in terms of attitude towards the object and attitude towards the act (Celuch and Evans 1989). It was further found that discriminant validity existed for the ZPII in terms of confidence in information processing for both low and high products.

The ZPII was tested against another Revised PII in 1992 (McQuarrie and Munson 1992). Two new item pairs were added to the ZPII, chosen to represent the interest facet of involvement and to help 'alleviate the polysyllabic character of the ZPII'. The version of the RPII tested in this analysis consisted of eight item pairs drawn from the ZPII plus the two new items pairs. Consequently, 12 item pairs were discarded. The researchers concluded that:

'the [Z] PII is exceedingly reliable; it is highly predictive of a broad range of behavioural outcomes associated with involvement; and it is able to successfully discriminate felt involvement across several products and a variety of situations. The last two tests go beyond the evidence provided by Zaichkowsky in 1985'

The authors also concluded that the ZPII was unnecessarily long and elaborate, needlessly difficult to comprehend, insufficiently predictive of information search and processing outcomes and unduly narrow in its conceptualisation. Consequently, the 1992 version of the RPII was half as long as the ZPII. However, the new measure, whilst gaining relatively high reliability scores, did not perform as well as the original.

Higie and Feick utilised the ZPII and the RPII (McQuarrie & Munson 1987) in their research on enduring involvement. This was defined as an ‘individual difference variable’ representing an arousal potential of a product or activity that causes personal relevance. Enduring involvement was considered to be intrinsically motivated by the degree to which the product or activity is related to the individual’s self-image or the pleasure received from thoughts about or the use of the product or engaging in an activity (Richins & Block 1986 cited in Higie and Feick 1989). The work built upon the measurement and empirical studies on involvement conducted by Zaichkowsky (1985) and McQuarrie and Munson (1987) to develop the Enduring Involvement Scale (EIS). This was achieved by utilising four hedonic and two self expression items from the RPII (McQuarrie and Munson 1987) and generating three semantic differential items to measure the self expression component of enduring involvement. Also included was one hedonic item from the ZPII (Zaichkowsky 1985b) and four used from the RPII (McQuarrie and Munson 1987). Consequently, the EIS consisted of 10 items, five hedonic and five self-expression. Higie and Feick argued that this version of Zaichkowsky’s original PII was capable of discerning levels of enduring involvement across product categories and appeared to have predictive validity.

Mittal conducted further analysis of various measures of involvement including the ZPII (Mittal 1995) in which he changed the definition used by Zaichkowsky by replacing the word ‘relevant’ with ‘importance’. He further concluded that 15 of the 20 items in the ZPII were not needed for the scale to measure involvement. Consequently this five- item scale was used in his analysis, comparing it with his modified version of the Laurent and Kapferer (1985) Consumer Involvement Scale (CIS) which only utilised the importance sub scale, the FCB scale (Ratchford 1987) and the Purchase Decision Involvement Scale

(PDIS) developed by Mittal (1989a). The author concluded that each of the four scales (in their reduced form) elicited acceptable reliability and validity.

Lack of consensus over exactly which scale was the most suitable to determine involvement meant that none of the versions of the ZPII listed above has been widely used or tested by other researchers. Consequently, none of them were deemed appropriate to use in this study. Chapter 3 outlines the development of the Zaichkowsky Revised Personal Involvement Inventory (Zaichkowsky RPII) and why it was used in this research.

2.6.4 The Purchase Decision Involvement Scale (PDIS)

Mittal (1989a) considered that neither the Laurent and Kapferer CIP nor the Zaichkowsky PII adequately captured Purchase Decision Involvement. Mittal offered three aspects of this variation of the involvement construct:

- Unlike situational involvement, purchase decision involvement accommodates situational variations in purchase decision involvement itself (i.e. emergency versus regular purchases of the same product).
- The concept has the purchase decision task as its goal object, but that it is not restricted to being assessed only at the time of purchase.
- The concept concerns a response behaviour manifested in the decision making process.

Central to this concept is that it relates to the extent to which a consumer cares about what they buy and correspondingly, the extent to which they are motivated to make the right choice (Mittal 1989a). A Purchase Decision Involvement Scale was subsequently developed to capture these elements. This was composed of four items, degree of caring, perceived brand differences, importance of right brand selections and concern with the

outcome. Mittal claimed that his analysis showed that these items reflected a single underlying construct and demonstrated acceptable reliability. However the PDIS does not appear to have been extensively used and tested by other researchers. Consequently it was not considered suitable for this study.

2.6.5 Involvement, personality and financial preparation

One study has been found which linked involvement and financial preparation for retirement (Hersley and Mowen 2000). However the study did not use the original ZPII to measure involvement. Instead the researchers modified the original to produce their own, albeit only slightly different, version of the ZPII. Various personality traits, involvement and financial preparation were considered as part of what is described of an exploratory study. Whilst this may appear similar to this research, there are significant differences and as a result the current research will extend their research.

Hersley and Mowen argued that, of the numerous studies which have been conducted on retirement decision-making, the majority have focused on the non-financial aspects of retirement planning. They suggest that only a small number of psychological studies have examined pre-retirement financial planning decisions. Of those, most have been information processing investigations aimed at determining how individuals' mental models influence the nature and quality of their decision-making efforts. The Hersley and Mowen study examined the relationship between perceived knowledge and financial preparedness as well as looking at individual differences in personality traits and whether they are predictive of financial knowledge and retirement planning. The approach used in the investigation was based upon the notion of an individual having central traits of their personality. It was argued that Future Time Perspective (FTP) results from a combination of cardinal traits, the influence of one's culture and the individual's prior learning history.

Such an approach implied that disposition to perform behaviours such as retirement planning, resulted from combinations of the central and cardinal traits. The hierarchical model of personality used in the study was comprised of four levels. The criterion measure of perceived financial preparedness was expected to be influenced by two surface traits (perceived financial knowledge and retirement involvement), which in turn were influenced by the central trait of FTP, which in turn is influenced by a subset of cardinal traits.

Consequently Hersley and Mowen's study is relevant to this research as it is the only study identified that utilized the involvement construct when examining financial preparation for retirement. Hersley and Mowen predicted that self-rated financial knowledge would be positively associated with perceived financial preparedness. They also predicted that as the perceived importance of retirement planning increased there would be an increased level of retirement planning. They argued that as retirement planning behaviour requires the ability to think well into the future, FTP would be positively associated with the surface traits of perceived financial knowledge and retirement involvement.

Participants in the Hersley and Mowen study were members of the Arkansas Household Research Panel. Surveys were sent to 460 participants who were regularly offered the option of completing a number of surveys, which on this occasion included this 3-page survey, entitled 'Retirement Planning Survey'. The members of the panel had the ability to choose which surveys they would complete and which ones they would ignore. From the original 460 surveys sent out, 248 were returned, of which 230 were usable. The average age of respondents was 62.6 years (SD 12.5). A large majority of the sample was

in either full time or part time employment with a modal annual income range of US\$40,000 – 50,000.¹²

Hersley and Mowen used six cardinal trait scales:

- emotional stability
- conscientiousness
- introversion
- openness to experience
- the need for arousal
- the need for material resources.

The last two were included as Hersley and Mowen suggested that both might be related to retirement planning practices. All items used for these scales required participants to evaluate the extent to which a word or phrase applied to them. A measure of FTP was included in the study as a central trait as Hersley and Mowen argued that preparation for retirement necessarily requires individuals to take a long-term perspective on life planning. As they were unable to identify suitable measures, they developed a nine-item measure of future orientation using a seven-point Likert type response scale. Subsequent analysis reduced this to a four-item solution.

Two surface traits were identified. The first was the ‘enduring tendency of respondents to have a high level of involvement in retirement issues’. A nine-item version of the Zaichkowsky PII was used to measure individual differences in retirement involvement. The questions retained the seven-point semantic differential scale. Factor analysis split

¹² **Note:** The nature of the sample used in the Hersley and Mowen study is substantially different from that used in the empirical study for this thesis in terms of composition, number and selection procedure.

the set of retirement-involvement items into two factors. The first factor was labeled ‘retirement relevance’ and was composed of items that dealt with the degree that retirement planning mattered to the person. The second factor was labeled ‘retirement affect’ and was composed of items that dealt with the respondent’s affective reaction to retirement planning. The ninth question relating to whether the respondent thought the issue was important or unimportant did not load on either factor and was subsequently excluded.

However, the scale used to measure involvement was fundamentally different to that outlined by Zaichkowsky in her 1985 paper which is referenced as the source of the involvement measure used in the study (Zaichkowsky 1985b). The ZPII comprised 20 items and became a widely-used measure of involvement (Foxall and Pallister 1988). The scale eventually used in the analysis by Hersley and Mowen contained only eight items with a number of differences with the original ZPII. The differences are illustrated in the following table:

Table 6 Differences Between Hersley and Mowen Involvement Measure and the Original ZPII

Differences between the Hersley & Mowen Involvement Measure and the original ZPII				
Order	ZPII		Hersley & Mowen Involvement Scales	
1	unimportant	important	Not included	
2	of no concern	of concern to me	of no concern	of great concern to me 4r
3	irrelevant	relevant	irrelevant	relevant 2r
4	means nothing to me	means a lot to me	means nothing to me	means a lot 3r
5	useless	useful	Not included	
6	valuable	worthless	Not included	
7	trivial	fundamental	Not included	
8	beneficial	not beneficial	Not included	
9	doesn't matter to me	matters to me	does not matter to me	matters to me 1r
10	uninterested	interested	Not included	
11	insignificant	significant	Not included	
12	superfluous	vital	Not included	
13	boring	interesting	boring	interesting 2a
14	unexciting	exciting	unexciting	exciting 3a
15	unappealing	appealing	unappealing	appealing 1a
16	mundane	fascinating	Not included	
17	nonessential	essential	Not included	
18	undesirable	desirable	Not included	
19	unwanted	wanted	Not included	
20	not needed	needed	Not included	
	Not included		dull	fun 4a
	Source: Zaichkowsky 1985		Source: Hersley & Mowen 2000	

*a = affected dimension r=relevance dimension

Some of the changes were relatively minor and related to semantic differences, i.e. Hersley and Mowen used the phrase ‘of great concern to me’ whilst the ZPII uses the phrase, ‘of concern to me’; Hersley and Mowen used the phrase, ‘does not matter to me’ the ZPII uses the phrase doesn’t matter to me’. The order of the questions was also different and in the case of the Hersley and Mowen case was split into two sub sets. On a more significant note, one question used by Hersley and Mowen does not appear in the ZPII at all, i.e. the use of the dull... fun dimension. The words ‘dull’ or ‘fun’ do not appear anywhere in the original scale.

A second surface trait was developed to assess respondents’ perceived financial knowledge and a nine-item scale was developed to measure perceived financial preparedness. Items on the scale emphasised an understanding of how much would be needed to fund retirement expenses and whether the respondents had calculated how much they would need in retirement. These were all measured on a 7-point Likert type response scale. Based on detailed factor analysis this was subsequently reduced to four items¹³.

The Hersley and Mowen study found that the scale measuring the affective component of retirement planning (i.e. exciting, fun appealing, interesting) was unrelated to the degree of financial preparedness. This led them to argue that individuals who are future orientated and have high levels of perceived financial knowledge are able to make retirement plans regardless of whether they are excited or bored by the task. Hersley and Mowen were surprised by the finding that that the retirement relevance dimension was

¹³ The measure of financial preparedness used by Hersley and Mowen is significantly different to the Financial Preparation for Retirement Scale (FPRS) used in this research. The FPRS uses questions on issues other than just money; it has 10 questions as opposed to the 4 used in by Hersley & Mowen and utilizes a 4-point Ordinal scale as opposed to 7-point Likert scale.

inversely related to preparedness. This suggested that individuals who were the least prepared found retirement planning issues to be the most personally significant. Hersley and Mowen interpreted this to indicate that those who have not engaged in retirement planning behaviours are worried about the future and may be open to communications either in the form of persuasive appeals or direct intervention.

The research also found that an individual's FTP was predictive of financial knowledge and the retirement involvement construct. Hersley and Mowen argued that a strong future orientation impacts not only individuals' knowledge of financial planning and their involvement in the financial planning process, but that it also has a direct impact on individuals' retirement preparedness as well.

Hersley and Mowen discussed a number of limitations to the study, including using a previously untested measure of future orientation even though it possessed both face validity and a reasonable level of internal consistency. A second limitation was identified as being the subjective self-report measure of perceived financial preparedness for retirement. A further limitation was the self-selecting nature of the sample. Hersley and Mowen noted that four times a year as members of the panel, the respondents received several surveys and had the option to select which surveys they wished to complete and which ones they would ignore. Consequently those completing this survey may have differed in important ways from those who chose not to complete this particular survey.

This research will extend the work of Hersley and Mowen by examining the role of involvement in financial preparation for retirement. However it will ascertain involvement levels with the Zaichkowsky RPII, a measure that has been tried and tested and has significant differences to the one used by Hersley and Mowen.

Table 7 Differences Between the Zaichkowsky RPII and the Hersley and Mowen Involvement Measure

Differences between the Zaichkowsky RPII and the Hersley & Mowen Involvement Measure				
Order	Zaichkowsky RPII		Hersley & Mowen Involvement Scales	
1	unimportant	important	Not included	
2	boring	interesting	boring	interesting 2a
3	irrelevant	relevant	irrelevant	relevant 2r
4	unexciting	exciting	unexciting	exciting 3a
5	means nothing	means a lot to me	means nothing to me	means a lot 3r
6	unappealing	appealing	unappealing	appealing 1a
7	mundane	fascinating	Not included	
8	worthless	valuable	Not included	
9	uninvolving	involving	Not included	
10	not needed	needed	Not included	
	Not included		does not matter to me	matters to me 1r
	Not included		of no concern	of great concern 4r
	Not included		dull	fun 4a
	Source: Zaichkowsky 1985		Source: Hersley & Mowen 2000	

*a = affected dimension r = relevance dimension

Hersley and Mowen argued that, given the limitations of their study, the findings should be considered exploratory in nature. Whilst this research considers similar issues to those in the Hersley and Mowen study, it is also very different as it incorporated a mixed-method design and explored involvement and financial preparation through the case study approach as well as through the self-administered questionnaire. Consequently, this study will build upon the exploratory nature of the Hersley and Mowen study by considering the correlation between involvement in the personal retirement-savings decision, using the Zaichkowsky RPII, and financial preparation for retirement as measured by the FPRS.

2.7 Moderating variables

The influence of involvement on a person's financial preparation for retirement can be moderated by a number of factors. Consequently these were incorporated into the proposed model, namely; the level of education completed, the age of the individual, their

income, the number of dependants they support and their gender. Each of these is discussed below:

2.7.1 Education

Financial preparation for retirement is not restricted to those with higher education as members of retirement saving funds represent a broad range of individuals. However, the less well-educated have been found to be most likely not to think about retirement (Lusardi 2003b), be less well prepared for retirement (Warshawsky and Ameriks 2000) and less likely to have basic financial knowledge (Lusardi 2002a). Even when investments have been made, evidence indicates that the level of education is a significant factor in the type of investments made. Those without college degrees are more likely to invest a major proportion of their retirement savings in cash whilst their better educated counterparts are more likely to use growth assets (Waggle and Englis 2000). The level of education therefore does not prevent financial preparation, but appears to have some affect (RCS 2005a; RCS 2006). An individual making voluntary contributions to a retirement-savings fund having made a conscious decision to do so, is by definition, involved. Therefore, less well-educated individuals may be involved but still do not prepare adequately for their retirement.

The affects of employer-based financial education on personal saving has also been researched in various studies (Bernheim and Garret 1996; Bernheim et al. 2001) with some evidence supporting the view that financial education can produce significant changes in how individuals think about and plan for retirement (Clark and d'Ambrosio 2002) and can increase retirement savings (Madrian and Shea 2001). Further, it is argued that increased financial education appears to be one of the primary avenues for improving retirement preparedness (Lord 2002) as education and financial literacy can be more

conducive to planning (Lusardi 2003c). This is supported by findings indicating that a greater understanding of retirement income needs and the savings process encourages many workers to increase their savings rate in order to achieve their modified retirement goals (Clark et al. 2003). However, the findings from research on financial education have been mixed (Braunstein and Welch 2002) but with little consensus as to why this is so, although the nature of the financial education and the methods used have been suggested as factors in its effectiveness (Bernheim and Garret 1996).

2.7.2 Age

Members of the workforce are able to contribute to a retirement-savings fund, irrespective of their age. A sense of getting older and an awareness that old age may cause people to take action as saving tends to increase as people get older (Glass and Kilpatrick 1998) particularly when a 'benchmark' age is reached, such as 30, 40 or 50 (FSA 2002). Age can also be a factor in the determination of retirement goals and in particularly desired retirement age with younger people less likely to be more specific about a set retirement age and/or date (Clark and d'Ambrosio 2003). Determination of a set age for retirement can bring into focus the amount of time left before reaching that desired age and therefore could lead to a modification of financial preparation. This is supported by findings that a primary decision making issue with regard to saving for retirement is the expected time horizon (Waggle and Englis 2000). The younger the individual, the longer the expected time until retirement is likely to be. This is consistent with findings that show young families demonstrate particularly low levels of wealth accumulation (Lusardi et al. 2001b).

One major economic framework used to describe how people make spending and saving decisions over the course of their lifetimes is the life-cycle approach. Estimation of

retirement needs is often based on the life-cycle hypothesis and the assumption that individuals desire to smooth the level of consumption over their lifetime. (Modigliani & Brumberg, 1954 cited in Yuh et al. 1998). Such models predict that the profile of wealth accumulation over the life-cycle is hump shaped, i.e. to finance consumption during nonworking years, individuals save a portion of their earnings earlier in life. They decide on their optimal path of earnings and savings that will achieve the desired level of consumption in each period. These consumption and savings decisions determine their retirement income at their chosen retirement ages (Clark et al. 2003). Age can reflect a person's stage in the life-cycle and as a result their interest in retirement preparation with evidence suggesting that rates of saving rise moderately with age (Bernheim et al. 1997).

2.7.3 Income

The ability of a retiree to maintain their pre-retirement standard of living depends on their ability to replace pre-retirement income from Social Security, private retirement benefits and investments. Whilst income from some form of social benefit is usually the main source of retirement income, for most, especially higher income individuals, such benefits do not provide sufficient income to maintain the pre-retirement standard of living. However, a divergence of expectations and reality has been documented with many failing to perceive the need to accumulate more as they expect their various benefits to 'fill the gap' (Elder and Rudolph 2000).

Research that considers current income with respect to the adequacy of retirement saving has produced mixed results. Engen et al. (2001) argued that some findings indicated that households with higher current earnings are less likely to be saving adequately for retirement whilst others present evidence that high earning households save a greater share of their incomes. However, a positive relationship has been found to exist between

the value of savings, status of employment and income in relation to the level of savings for retirement (Glass and Kilpatrick 1998).

Income and tax may also affect the decision to save for retirement. The relative appeal of the available tax concession in superannuation can depend upon income, with it being more favourable for low income workers than those on higher salaries. Low income workers are also more likely to be liquidity constrained and would also encounter relatively higher replacement rates from any safety net system and therefore have less apparent need for additional retirement income (Munnell et al. 2001). Households whose head suffered periods of unemployment in the past have also been found to have significantly lower wealth accumulation for retirement (Lusardi 1998).

In the US, income, age and education were all found to be important determinants of both participation and contributions to a pension scheme (Munnell and Sunden 2003). One study found that irrespective of income or wealth, the majority of respondents displayed low levels of knowledge about financial preparation for retirement including approximately one third of those with significant assets and high levels of income (Institute 2003a). Income levels were found to be a factor in the determination of:

- expected retirement age
- the degree to which social security and/or any retirement plan will provide expected income in retirement
- the amount of full time/part time employment that the individual anticipates they will need to undertake to provide an adequate income once retired
- the likelihood that the individual has attempted to establish how much money they will actually need to live on in retirement.

(Tucker et al. 2001)

2.7.4 Number of dependants

Logically, having financial dependants is going to focus attention, particularly financial attention, on short-term activities and needs rather than longer term goals. This view was supported by research showing that having dependant children is significant with regard to the setting of retirement goals (Clark et al. 2003). Single women reduced the proportion of risky assets they held as the number of children in their household increased (Jianakoplos and Bernasek 1998). Households with children were also found to have the lowest success rate with regard to financial preparation for retirement (Warshawsky and Ameriks 2001). Families with dependant children were found to be more likely to have accumulated little financial and total net worth (Lusardi et al. 2001b). Commonly, their major asset was the family home, with many having no other financial assets. Consequently, literature such as that outlined above, suggests that having dependants can lead to the focus of financial attention being directed at their immediate needs, thereby moderating the influence of involvement.

2.7.5 Gender

Previously it was argued that despite the increased emphasis on ageing in society, the issue of women and retirement had been neglected (Johnson and Price-Bonham 1980). There is now a growing body of evidence emerging that gender is an important macroeconomic variable in terms of saving (RCS 2005a; RCS 2006; Seguino and Floro 2003). Glass and Kilpatrick (1998) found that the lowest level of retirement savings for males, regardless of marital status, was higher than the highest level of savings for females. Gender can also have an influence on the setting of retirement goals with women more likely to aim to retire prior to reaching the age 65 than men (Clark and d'Ambrosio 2003). Men have been found to be more likely to save than women (Glass and Kilpatrick

1998), are also more likely to overestimate their pension (Elder and Rudolph 2002), but do a better job at estimating their pension benefits (Gustman and Steinmeier 2001).

When women actually save for retirement they display characteristics that may be conducive to low savings (Lusardi 2003c) as they are more likely to make lower risk/lower return investment choices than men (Bajtelsmit et al. 1999; Bernasek and Shwiff 2001; Graham et al. 2002; Institute 2003b; Sunden and Surette 1998). Single women have also been found to exhibit relatively more risk aversion in financial decision making than single men (Jianakoplos and Bernasek 1998). A survey of US pre-retirees found that women were typically less well informed and/or knowledgeable about retirement issues. Women were also found to be:

- less likely to be able to identify whether they belong to a DC or DB retirement-savings plan (Gustman and Steinmeier 2001)
- less likely to consider longevity a significant financial risk (Institute 2003a)
- less confident about having enough money
- less knowledgeable, in their own opinion, than men about saving for retirement (RCS 2003).

Such evidence was supported by research that found women were less likely to plan for retirement (Lusardi 2003c) and were less likely to have attended a retirement seminar (Lusardi 2003b). Indeed women were identified as being at risk of facing a vulnerable financial situation in retirement (Tucker et al. 2001).

Comparatively little research has been conducted on individual retirement-savings decisions in the mandatory system in Australia, particularly in relation to gender. An opportunity arose in 2001 as a number of funds have converted from a traditional DB

structure to a DC approach and as a result the decisions of members who were asked to choose between these two types of schemes was examined (Clarke-Murphy and Gerrans 2001; Gerrans and Clark-Murphy 2004). The researchers explored gender differences in knowledge of superannuation as well as who was consulted in the decision making process. Clark-Murphy and Gerrans found that females were significantly more likely to consider themselves to have a lower level of knowledge of superannuation. Further, it was found that those most likely not to consult with others were the ones who viewed themselves as having the least amount of knowledge about superannuation, e.g. women. This was supported by Ginn (2003) who argued that the need for financial advice to avoid the pensions poverty trap was greater for women than men, and industry research that reported that less than 30% of women were ‘very confident’ about their level of financial preparation compared to 43% for men (Citibank. 2005).

2.8 The dependant variable – Financial preparation for retirement

When it comes to financial preparation for retirement, economic research has tended to primarily focused on public policy issues rather than examining decisions from a personal perspective (Elder and Rudolph 1999). Whilst there has been a significant amount of research on retirement planning there has been comparatively little on where financial preparation for retirement is lacking (Beal and Delpachitra 2003). Whilst there is some agreement that there are many reasons why households and/or individuals do not prepare financially for their retirement (Lusardi 2001), there is no consensus.

For members of a household to try and determine how much they will need to be able to retire comfortably and then how to invest to achieve that goal is a considerable challenge

(Fore 2003). To plan adequately for retirement requires extensive information, including an understanding of the elaborate rules governing social security and private pensions (Lusardi 1999). In addition, retirement is not a repeated event that provides people with the opportunity to learn from their mistakes. Only at retirement will people realise that they have made mistakes. Findings indicate a significant lack of financial knowledge among employees at all levels of many firms (Fore 2003). Lusardi (2002b) suggests that some individuals may be poorly informed because for them gaining information is too costly. Aaron (1999) suggests some may be poorly informed because they are not capable of solving the complex problems associated with rational retirement and saving behaviour. Some may simply be taking a 'head in the sand' attitude and ignoring the problem or overestimating the value of their future pension benefits and as a result have an over-optimistic view of their lifestyle in retirement (Elder and Rudolph 2000). Such an explanation could result from people not having the sophistication and/or knowledge required to make good estimates, or that the type of plan they belong to, i.e. DB, makes such analysis difficult. Such a view is supported by findings that people do not seem to know much about their pension plans (Elder and Rudolph 2002).

When asked why people had not attempted to work out how much money they would need in retirement a significant proportion said they could not find the time and that they were afraid of the answer (Yakoboski and Dickemper 1997). Individuals may also procrastinate over something that takes time and effort, such as developing a financial plan (Lusardi 2003b). Some households may simply face high planning costs or lack financial literacy (Lusardi et al. 2001a), they may find planning for retirement too complicated and they do not know how to find help to do it (Yakoboski and Dickemper 1997). Not only do individuals have to spend time collecting information about the variables that are needed to make savings decisions, they also have to overcome any stress

associated with what may be to them an unpleasant event, i.e. their retirement and impending morbidity (Lusardi 2003b).

Such a view is supported by Retirement and Confidence Surveys which invariably show that workers in the US have done little retirement planning or saving (RCS 2001; RCS 2002; RCS 2003; RCS 2005b; RCS 2004). When people have been asked why they have not attempted to calculate how money they need for their retirement, many reply that it is too difficult (Lusardi 2003b). Yet Lusardi reports a significant correlation between thinking about retirement and retirement satisfaction with those thinking ‘a lot’ about retirement reporting greater levels of satisfaction compared to those who had ‘hardly thought at all’ about retirement (Lusardi 2000b).

A strong correlation has also been found between the amount of time a person spends developing a financial plan and the accuracy of their estimates of spending needs at retirement (Ameriks et al. 2003). However, there is substantial evidence that many individuals find it difficult to make financial decisions (Fore 2003), suggesting that members of a typical household may not be sufficiently financially literate to make appropriate savings decisions regarding their financial preparation for retirement (Bernheim 1998).

Financial planning is also shaped by the experience of other individuals, as people learn to plan for retirement from older siblings (Lusardi 2001). They also learn from the experiences of old parents especially if their parents are experiencing financial difficulties (Lusardi 2002a). Economic knowledge may also be positively correlated with the inclination to save because knowledge creates the impetus to save, because high savers have greater incentives to acquire knowledge, or because taste for saving and tastes for

financial knowledge are correlated (Bernheim and Garret 2003). However, it is not easy to interpret evidence on retirement preparation behaviour as there are many reasons why households have low wealth holdings close to retirement.

A number of explanations for low accumulation have been suggested, including that households may rely on pensions or Social Security, they may have little savings because they have low lifetime resources or have been hit by many shocks. In addition, they may accumulate little because they do not face high risks such as unemployment or poor health, or they have some form of insurance against adverse events. The bequest motive is important in explaining accumulation, particularly for those with high education and for richer households (Lusardi 2002a) and they may also expect to receive inheritances or to enjoy big capital gains on their assets as expectations that house prices will increase in the future can be important (Lusardi 2003b). In addition, they may fail to anticipate a prolonged period in retirement or may simply be impatient and discount the future heavily with many baby boomers stating that they plan to work at least part time during their retirement (Uccello 2001). Plan features have also been found to be important in encouraging participation. Contribution rates including choice over asset allocation (Papke 2002) and having a retirement plan can be influenced by the availability of a pension and when the benefits will be available (Shaw 1984). Lusardi also reported that a lack of 'planning' can explain why savings and wealth holdings relating to retirement are so small (Lusardi 1999). People with a high propensity to plan are more likely to save than those with a low propensity, and budgeting appears to have an important relationship to one's propensity to plan (Ameriks et al. 2003). People also procrastinate when faced with making decisions that require immediate effort (Akerlof 1991) and many suffer from self-control problems and consequently fail to follow through on plans to save (Thaler and Shefrin 1981).

From a policy perspective, there appears to be a great deal of misinformation about retirement benefits with the public so poorly informed that increasing the amount of information available can fill an important gap (Lusardi 2000b). In Australia for example many believe they have earned an entitlement to the aged pension and as a result an entire industry has developed to find ways to circumnavigate the rules (Kelly 2003). Consequently, a number of explanations have been proposed by researchers in this field (Lusardi 2002a) but none has been able to provide an explanation that potentially encompasses all circumstances. The application of the involvement construct may go some way towards that goal.

In research into financial preparation for retirement, a number of researchers have used several indicators of retirement planning activities based on information from the HRS database. In this database, many of the subjects responses have been limited to one of four responses; 'a lot, some, a little or hardly at all'. Consequently, questions have previously been developed and tested and a number of those have been incorporated in the FPRS. However this will be the first time such questions have been put together as a scale to measure levels of financial preparation.

Hersley et al. (2003) also considered several retirement preparation measures. One included actions such as, seeking relevant information and/or advice as well as making various financial calculations with respect to retirement. A second measure considered was based on five 7-point Likert type items that included activities such as collecting information about retirement, establishing how much money will be need in retirement and discussing retirement plans with others. Clarke-Murphy & Gerrans (2001) considered the use of seminars, collecting and using information as well as consulting others when making

decisions regarding financial preparation. Lord (2002) reported on a number of studies that related to an individual's propensity to plan/prepare for their retirement. Under the heading 'Giving thought to retirement' Lord referred to research reporting that those who have given 'some' thought to retirement have a 45% greater net worth than those who have 'hardly at all' thought about retirement. Lord also referred to research that reported a correlation between thinking about retirement and retirement satisfaction.

Ameriks et al. (2002a) found a strong correlation between the amount of time people spent thinking about their retirement (and developing a financial plan) and the accuracy of their estimates of spending needs in retirement. Further research provided more evidence on the strength of the correlation between giving thought to retirement (with planning) and net worth once retired (Ameriks et al. 2002b). By asking whether people had given thought to their retirement, along with other questions, Lusardi (2000a; 2000b) found a lack of planning prevalent among older workers 5 to 10 years away from retirement. Elder & Rudolph (1999) found that thinking about retirement can have a significant impact upon retirement outcomes.

It has been found that many families have not thought about retirement even though they are only a few years away from retirement and the event is imminent (Lusardi 2003c). Elder & Rudolph (1999) suggested that the 'thought about' and 'attended meetings' responses can have a positive impact upon retirement preparation. Lusardi (2002a) found that approximately 30% of households whose head was close to retirement have done little or no planning for retirement (i.e. have given it little or no thought and have not attended any retirement seminars/meetings). Devaney & Su (1997) found that future expectations about the quality of lifestyle in retirement were closely related to the type of financial preparation undertaken. Lusardi (2002a; 2000b) found that a majority of respondents who had not

thought about retirement rated their retirement years as being inferior to the years before retirement. Neukam & Hershley (2003) looked at people thinking about their retirement in terms of the types of images they conjured up about life in retirement and the setting of goals as part of the retirement preparation process. Lusardi (1999) has reported that a great many who have thought little about retirement expect to have no assets at retirement and are generally uninformed about the retirement process. Thinking about retirement was also considered by Chan & Stevens (2004). Industry research found that many had a vague plan for their retirement or simply had not thought about it (Wills 2001) and a large proportion of Australian pre-retirees have been found to have given little or no thought to preparing financially for their retirement (Newspoll 2003). Consequently, thinking about retirement was incorporated as one of the questions in the FPRS.

Lusardi (2002a; 2000b) asked respondents where they obtained their information about preparing for retirement. She concluded that very little work has been done in investigating how households prepare for their retirement and how they collect relevant information to make such decisions. However, she reported that households may make use of a variety of sources of information, including magazines and newspapers when preparing for their retirement. Such findings were supported by the 2005 Retirement Confidence Survey (RCS) which found that when making decisions regarding their financial preparation many utilise the input of family and friends as well as various written materials (RCS 2005b). Bernheim & Garret (2003) also considered the impact of collecting relevant information about financial preparation for retirement whilst Bernartzi and Thaler (1999) had previously reported that many do not read related material about retirement preparation other than that provided by their pension fund company. Yet an earlier RCS survey found that almost 20% of workers reported that had made changes as a result of material collected from their employers about financial preparation (RCS 2003). Consequently, collecting information

about retirement and taking action based on that information were measures that were incorporated into the FPRS.

Elder & Rudolph (1999) found that attending seminars/meetings about retirement can have a significant impact upon a persons life in retirement. The Metlife Institute found that approximately 25% of respondents to the 1992 and 2000 AHEAD¹⁴ surveys reported having attended a seminar/meeting on financial preparation with a high proportion of those reporting having a satisfying retirement (Institute 2002). Madian & Shea (2001) found that attendance at financial education seminars had a significant impact on financial preparation for retirement. Lusardi (2001; 2003b; 2000b) also found that attending seminars can have a positive and significant impact with respect to financial preparation for retirement. Bernheim & Garrett (2003) reported that seminars can be affective means of encouraging some types of financial preparation behaviour. Lord (2002) reported upon a number of studies relating to the affects of seminars concerned with retirement preparation and found that participants were more active in their retirement preparation after attending such seminars. Elder & Rudolph (1999) found that preparing for retirement as measured by how much a person thought about retirement and whether they attended retirement planning meetings, was positively related to the level of satisfaction in retirement. They believed this was an indication that action must have been taken as a result of this activity. Clark et al. (2003) reported that after completing seminars, a very large proportion of respondents indicated a likelihood of changing their retirement preparation behaviour. Bernheim & Garret (2003) considered action people take after attending seminars concerned with financial preparation for retirement. However, Lusardi (2003c) reported that whilst several studies have found a positive correlation attending a retirement seminar and increased

¹⁴ Assets and Health Among the Oldest-Old (AHEAD) survey administered by the University of Michigan with funding from the National Institute on Ageing (part of the US Department of Health & Human Services).

financial preparation, it is not clear what that correlation means. Hersley et al. (2003) investigated the impact of various interventions (meetings/seminars) causing participants to think about their retirement and found the strongest impact where the intervention was focused on relevant financial information and goal setting. Clarke et al. (2003) and Clark & d'Ambrosio (2003) found that after attending seminars/meetings on financial preparation, people were likely to alter their plans in relation to work and retirement. Consequently, whether people attended seminars/meetings relating to retirement, and whether they took action as a result of those meetings, were measures that were incorporated into the FPRS.

The Metlife Institute found that approximately one in seven respondents to the 1993 & 1995 AHEAD surveys discussed their financial preparation with a financial adviser. Yet Bernartzi and Thaler (1999) found that many did not consult with anyone about their financial preparation for retirement, other than family members. Lusardi (2002a; 2000b) asked respondents whether they used others such as family, friends or financial planners, as sources of information when preparing for their retirement. Industry research in Australia found that family and friends can be regarded as important sources of financial information (Wills 2001). The 2005 Retirement Confidence Survey reported that more than a third of workers reported they had asked a financial adviser to calculate how much they would need in retirement (RCS 2005b). Bernheim & Garret (2003) looked at actions people undertook following discussions with others about preparing financially for retirement. The 2004 Retirement Index in the UK (Prudential 2004) found that two thirds of those surveyed had not taken any financial advice before they retired. Almost two thirds of those surveyed as part of a global research project by HSBC said they had begun to prepare for retirement but most of this was restricted to reading up on the subject and discussions with family and friends (HSBC 2005b). The 2005 RCS found that discussions with a financial adviser was considered to be amongst the most valuable activities in preparing financially for retirement

(RCS 2005b). As a result, discussing financial preparation with others and taking action as a result of those discussions were measures that were incorporated into the FPRS.

The remaining questions were based upon a number of studies, several of which incorporated more than one of the questions in relation to financial preparation for retirement:

Kim & Hong (2001) investigated factors affecting the expected retirement age of workers and found that they could be influenced by knowledge of retirement benefits. Clarke et al. (2003) and Clark & d'Ambrosio (2003) found that attendance at seminars had an impact upon the setting of an age for retirement. When inquiring about what age people expect to retire, HSBC found that globally, when people expected to retire, remained relatively constant with the average age at 58. However, they found that those still in work were on average expecting to retire at age 59 (HSBC 2005b).

The first Australian Citibank Retirement Index report stated that 33% of respondents had not considered when they would retire (Citibank. 2005). Research by the Financial Services Institute of Australia (FINSIA 2006) found that many had unrealistic expectations in terms of the savings required to generate an adequate income in retirement as well as the age at which they expected to retire. A national retirement survey conducted in the US asked about planned retirement age and found that more than 40% of workers stated a desire to retire before they reached the age of 65 (Highland 2005). The Metlife Institute found that many underestimated how many years they are likely to spend in retirement and did not consider longevity a significant financial risk in terms of appropriately preparing for their retirement (Institute 2003a).

In the UK the Institute for Public Policy Research (IPPR) asked people about their expectations of how long they would live in retirement and found that many did not believe they were likely to live longer than their parents as they did not accept that life expectancy is increasing (Robinson 2005). The Institute of Fiscal Studies (IFS) in the UK also enquired about expectations regarding both retirement age and life expectancy and as a result, how long people expected to live in retirement (Banks et al. 2005). Clark et al. (2003) found that when thinking about their financial preparation for retirement individuals often anticipated making some changes in their planned lifetime pattern of work and retirement. Yakobski & Dickemper (1997) report that only 36% of workers in the 1997 Retirement Confidence Survey had tried to determine how much they need to save in order to fund a comfortable retirement.

Lusardi et al. (2001a) noted that some households have difficulty recognising the need to prepare for retirement and calculating the saving they need. When asked about expectations of living standards in retirement 50% of workers in their fifties felt it would stay the same (as when they were working) whilst 42% felt it would decline ‘somewhat’ or ‘a lot’ (Institute 2002). The Metlife Institute found that many underestimate how much money they should be saving as part of their financial preparation for retirement and displayed a lack of understanding of the extended time horizon they would be living in retirement and the likely impact of inflation on the future value of their money (Institute 2003a). Hersley et al. (2003) found that clear and strong retirement goals (particularly in relation to finances) were closely associated with retirement preparation.

The 2004 Retirement Index in the UK (Prudential 2004) found that when asked if people had considered how much money they needed to save in to provide them with the income they want in retirement, 50% had no idea. The Citibank Retirement Index investigated

confidence in having enough money in retirement and found that approximately 30% of the total sample considered they do not have enough savings to get by on (Citibank. 2005), a figure that rose to 42% for those aged between 55 & 64. Bernheim & Garret (2003) found that those who attended relevant seminars in the workplace were more likely to consider their financial needs in retirement. Neukam & Hershley (2003) measured a number of issues relating to financial preparation including concern about how much money a person would have in retirement. Global industry research (HSBC 2005b) reported that Canada was the country found to be the best prepared. However, even in that country, when asked about whether people thought they would have enough money to fund their retirement, less than 25% stated they equated later life with financial independence. Clark et al. (2003) found individuals altered their desired level of income in retirement after attending a seminar/meeting. Industry research in Australia found that a majority could nominate how much income they wanted in retirement but had not calculated how much money would be required to produce that income (Wills 2001). Industry research in the US found that approximately 45% of the US workforce does not believe it will have enough money set aside for a comfortable retirement (Highland 2005). The 2005 RCS reported that approximately 40% of workers had tried to calculate how much they need to accumulate for their retirement whilst 10% indicated they simply made a guess at the figure (RCS 2005b).

Financial Literacy research in Australia found that less than 40% of people had worked out how much money they needed for their retirement (Research 2003). The IFS in the UK used information from the first wave of the English Longitudinal Study of Ageing (ELSA) and discovered that approximately 30% of house owners expect to have insufficient [financial] resources when retired whilst the figure amongst non house owners was closer to 50% (Banks et al. 2005). Asking people about when they are going to retire, how long they expect to be retired for and how much money they consider they need has also been a

regular feature of RCS research (RCS 2001; RCS 2002; RCS 2003; RCS 2005b; RCS 2006; RCS 2004).

Consequently, asking if people had considered an age and/or date for retirement, whether they and thought about how long they would be in retirement and whether they had considered how much money they would need to fund a comfortable retirement were all measures incorporated into the FPRS.

Chapter 3

Research methodology

3.1 Introduction and chapter overview

The function of research design is to ensure that the evidence obtained enables the research question to be answered as unambiguously as possible (Devaus 2001). The strategies and tactics used in carrying out a piece of research depend upon the research questions that are under consideration (Manstead & Semin 1988 cited in Robson 2002). The research method used must therefore be appropriate to answer the questions posed.

Survey research methodologies offer unique differential power to known populations, within measurable levels of sampling error (Groves et al. 1992). Surveys also have a real world context that enables the collection of significant amounts of information and enable the incidence and distribution of behaviours and/or attitudes in a population to be assessed (Davis 2000). However, it must be acknowledged that this is achieved at the cost of lack of control over non-systematic variations in the variables of interest (Crano and Brewer 2002).

Case study research, on the other hand, produces rich understanding of social sites and the meaning structures created by the actors who operate there. Information gathered from structured interviews enable themes to be identified and described (Davis 2000). This understanding can be used to inform actions that can affect changes to social practices and public policy. Consequently, a mixed-method approach was adopted utilising both survey and case study methodology as this was posited to be an appropriate approach for this research project to answer the research objectives set out in Section 1.6.

Consequently the chapter is organized as follows:

Section 3.2 outlines the detailed Hypotheses and Research Questions used in this study.

Section 3.3. considers the study design.

Section 3.4 reviews the methods used to measure the variables.

Section 3.5 details the research implementation strategy.

3.2 Detailed research hypotheses and questions

To accomplish the research objectives of this study, hypotheses and research questions were developed and are set out in this section along with the rationale for their selection. Consistent with the positivist approach, each hypothesis also has an appropriate null hypothesis:

3.2.1 Level of involvement

The discussion in Section 2.2 focused on the different decision-making processes used by those with different levels of involvement. The evidence (Engel et al. 1995; Kapferer and Laurent 1993; Zaichkowsky 1985a) drawn from this discussion suggested that the level of involvement is increasingly affecting subsequent behaviour by individuals with respect to actions to prepare financially for retirement. The literature reviewed in Chapter 2 indicated that when interventions have occurred that are likely to have increased the level of involvement of the individual. Behaviour to prepare financially for retirement has also increased although there is no consensus as to why this has occurred. If, as the involvement literature implies, increased involvement in the personal retirement decision can have a significant positive impact upon financial preparation for retirement, it could be a major contribution. In such circumstances the involvement construct could be used

to help the design and development of new and potentially more affective communication programs and as a result, increased financial preparation. Therefore the following hypotheses are proposed:

Hypothesis 1: The level of involvement in the retirement-savings decision, as measured by the Zaichkowsky RPII, is positively related to the level of financial preparation for retirement, as measured by the FPRS.

Null Hypothesis 1: The level of involvement in the retirement-savings decision, as measured by the Zaichkowsky RPII, has no relationship with the level of financial preparation for retirement, as measured by the FPRS.

3.2.2 The moderating variables

This section presents the hypotheses relating to the influence of the moderating variables on individual's financial preparation for retirement.

Education

The level of education attained by an individual has been examined in the context of financial preparation behaviour as outlined in Section 2.7. It can influence not only the attitude to saving, but also the nature of any savings made and, as a consequence, the amount accumulated. Bodie and Crane (1997), for example, identified education as one of the factors that can influence decisions with regard to investing for retirement. As a result the following hypothesis is proposed:

Hypothesis 2: *The effect of involvement on financial preparation for retirement is moderated by the level of education completed by that individual such that the lower the level of education completed, the less the affect of involvement.*

Null Hypothesis 2: *The effect of involvement on financial preparation for retirement is not moderated by the level of education completed by that individual.*

Age

Age is also an important prompt with regard to saving for retirement (Munnell and Sunden 2003) with the awareness of ageing potentially leading to, increased financial preparation for retirement (Glass and Kilpatrick 1998) and changes in attitudes towards retirement goals (Clark and d'Ambrosio 2003), whilst younger people tend to demonstrate a lower propensity for retirement savings (Lusardi et al. 2001a). Consequently the following hypothesis is proposed:

Hypothesis 3: *The effect of involvement on financial preparation for retirement is moderated by the age of the individual, i.e. the younger the individual, the less the affect of involvement.*

Null Hypothesis 3: *The effect of involvement on financial preparation for retirement is not moderated by the age of the individual.*

Income

The economic circumstances of an individual can moderate their retirement-savings behaviour as the level of income can determine attitudes towards the use of available monies. Low income workers are more likely to need money for purposes other than retirement saving and may also be eligible for relatively high levels of benefits and therefore consider they have less need for to save for their retirement (Munnell et al. 2001). A positive relationship has been found to exist between the value of savings, status

of employment and income in relation to the level of financial preparation (Glass and Kilpatrick 1998). Yet studies on income levels and the adequacy of financial preparation have produced mixed results (Engen et al. 2001). Other research indicates that a significant proportion of high income households do not save for their retirement (Venti and Wise 1998). Evidence also indicates that the variance of income has a role in explaining saving and wealth accumulation of people close to retirement (Lusardi 1998). As a result the following hypothesis is proposed:

Hypothesis 4: The effect of involvement on financial preparation for retirement is moderated by the level of income of the individual such that the lower the level of income, the less the affect of involvement.

Null Hypothesis 4: The effect of involvement on financial preparation for retirement is not moderated by the level of income of the individual.

Number of dependants

In terms of investing for retirement, marital situation is one of the factors that can impact the decision-making process (Bodie and Crane 1997). It has also been found that a large proportion of families with dependant children have accumulated little financial and total net worth with their major asset being their homes (Lusardi et al. 2001b) and many having no other financial assets. Households with children have been found to be the least successful in terms of financial preparation (Warshawsky and Ameriks 2001). The literature has therefore indicated the number of financial dependants a person has is potentially an important factor in the personal retirement-savings decision. As a result the following hypothesis is proposed:

Hypothesis 5: *The effect of involvement on financial preparation for retirement is moderated by the number of financial dependants being supported, in particular, the more dependants supported, the less the affect of involvement.*

Null Hypothesis 5: *The effect of involvement on financial preparation for retirement is not moderated by the number of financial dependants being supported.*

Gender

Evidence is also increasing that gender is an important issue with respect to financial preparation for retirement (Seguino and Floro 2003) with gender appearing to influence the setting of retirement goals (Clark and d'Ambrosio 2003). Whilst males are more likely to save than women (Glass and Kilpatrick 1998) they are also more likely to overestimate their pension wealth (Elder and Rudolph 2002), and the approach adopted by some women can induce low levels of savings (Lusardi 2003c). Consequently the following hypothesis is proposed:

Hypothesis 6: *The effect of involvement on financial preparation for retirement is moderated by the gender of the individual, in particular, the affect of involvement will be less in women than men.*

Null Hypothesis 6: *The effect of involvement on financial preparation for retirement is not moderated by the gender of the individual.*

3.2.3 How and why involvement impacts upon financial preparation for retirement

Increased involvement in the personal retirement-savings decision, by definition, suggests that the issues are considered relevant and important to the individual (Zaichkowsky 1986). This suggests that personal experience, either through a relative or close friend,

would be likely to increase involvement. This definition would also imply that those with low levels of involvement would have different attitudes. However, what has not been investigated is what involvement means to the individual. This investigation is the first time that involvement has been explored in the context of preparing for retirement in this way. As a result the case study subjects were required to answer each of the questions used in the Zaichkowsky RPII and were then probed as to how and why they held those views with a view to determine if there were any common themes.

Consequently the following research question is posited:

RQ: How and why does involvement impact upon an individual's financial preparation for retirement?

3.3 Study design: research method

The research objectives set out in Section 1.6 were addressed by a mixed-method approach incorporating two stages. One stage related to a self-administered questionnaire whilst the other related to a series of case studies. This approach was adopted for the following reasons:

- The survey information accumulated via the self-administered questionnaire provided an efficient means to test the significance of the relationship between involvement as measured by the Zaichkowsky RPII and financial preparation for retirement as measured by the FPRS.
- The rich descriptions developed through the case study interviews enabled deeper investigation of how and why involvement impacts upon financial preparation for retirement.

- The information obtained from both the case studies and the self administered questionnaire was considered and conclusions drawn providing triangulation of evidence in support of the theoretical basis of the study.

The following sections provide further detail as to why these methods were chosen for this study.

3.3.1 Rationale for survey methodology

A survey is a self-report measure instrument that can collect information from the subject, which lent itself to this research. Survey research focuses on naturally-occurring phenomena and rather than manipulating information, it attempts to influence the attitudes and behaviours it measures as little as possible (Davis 2000). Questionnaires can be highly structured, enabling information to be collected in a form that is quantifiably analysable and therefore is usually therefore regarded as easily replicable and as a result reliable (Gill and Johnson 2002). Surveys lend themselves to the use of closed questions that have certain advantages, namely:

- The respondent is usually able to answer the question more easily when the response alternatives are given.
- The researcher is more likely to be able interpret the meaning of answers when the alternatives are given to the respondent.
- When a completely open question is asked, many people give relatively rare answers that are not analytically useful. Providing respondents with a constrained number of answer options increases the likelihood that there will be enough people giving any particular answer to be analytically interesting (Fowler 2002).

Johnson & Chistensen (2003) suggest other strengths of using questionnaire approaches include:

- They enable attitudes to be measured.
- They are relatively inexpensive.
- They provide a relatively quick turnaround.
- The perceived anonymity by respondents is usually high.
- They can have high measurement validity.
- Close ended items can provide the exact information needed by the researcher.
- Data analysis is relatively easy for close ended items.

There are also disadvantages of surveys including the potential biases identified by Davis (1997), namely:

- Respondents may say what they think the researcher wants to hear.
- Respondents may say 'yes' more easily than 'no'.
- Some people may answer more positively or in more extreme terms.
- Thinking about questions can change a respondent's opinions.

In relation to this last point, a respondent may use a questionnaire as a learning device as simply being exposed to the survey and answering questions about a topic they may not have previously given much thought to has the potential to influence attitudes and/or subsequent behaviour (Peterson 2000). Johnson and Christensen (2003) also pointed out several other disadvantages to using questionnaires:

- They must be kept short.
- Respondents may be non-responsive to certain items.
- The response rate can be low for mailed surveys.

It should be noted that the information collected may be affected by the characteristics of the respondents, namely their memory, knowledge, experience, motivation and personality. The researcher is reliant upon the respondent accurately reporting their beliefs and attitudes. There is also the danger of a socially desirability bias, i.e. respondents reporting in a manner that either shows them in a good light or illustrates action that they consider should, but may not, have taken. It is noted that the pattern of responses for closed questions is dependant on the answer set presented and that the inclusion of an 'other' category is unlikely to compensate for the omission of an important answer (Gendall 1998).

It was decided that for the purposes of this research the advantages outweighed the disadvantages and further decided that the survey would be mailed as this approach has certain advantages as illustrated by Fowler (2002) and Roberts (1999):

- It was possible to obtain a large enough sample to reduce sampling error to acceptable levels.
- Widely dispersed samples as well as samples that may be difficult to reach were able to be included.
- It is a reasonably easy method for collecting significant amounts of information relating to historical activities of a relatively large number of people.
- The respondents have time to give thoughtful answers, to look up records and/or to consult with others.
- The sample size, the costs (in both time and money) are normally considered less for a mail questionnaire than face-to-face interviews.
- Mail surveys do not introduce interviewer bias that is a potential problem for both face-to-face and telephone interviews.

- They allow anonymity for the respondent and can therefore encourage frank responses to potentially sensitive questions.

However, as Fowler (2002) also points out, mail questionnaires in themselves can also have certain disadvantages:

- Postal questionnaires typically have a low response rate. In such circumstances it may be difficult to determine if the sample is representative if little is known about the non-respondents.
- It is possible that despite effort to the contrary, ambiguities and misunderstandings of the survey questions may be missed by the researcher.
- The researcher is reliant on the respondent treating the exercise seriously and answering the questions in a truthful and realistic manner.
- Subjects may be limited in their responses by the rubric of a self-completion questionnaire, causing the respondent to answer a question that may fit within the parameters of their overall point of view, but may not enable them to more accurately express their feelings.

It was also noted that unless care is taken, questionnaires can reflect their designer's view of the world (Gendall 1998). Consequently, the research design incorporated the use of the pilot study to try and ensure a realistic degree of objectivity as well as producing questions that could be understood and interpreted by the respondent in the manner that the researcher intended.

In summary, the survey method meant that typically more questions could be asked and respondents were more likely to answer (Peterson 2000). Consequently, the purpose of the survey is to produce quantitative or numerical descriptions of the desired aspect of the

sample (Fowler 2002) which meant that such an approach was considered suitable for this research.

3.3.2 Type of data collected

The information collected in this research with the Zaichkowsky RPII and the FPRS can be described as ordinal data for the following reasons:

- According to the ordinal rule, the ordering of number labels correspond to the rank ordering of observations on the attribute of interest (Crano and Brewer 2002).
- Ordinal values are not real numbers, only labels representing the relative position within a distribution (McGibbon 2005).
- Ordinal variables allow items to be ranked ordered in terms of what has less and which has more of the quality represented by the variable, but does not allow 'how much more' to be stated (Statistica 1999).

Consequently data can be defined as ordinal when people or events are ordered or placed in ordered categories along a single dimension, i.e. good at one end and bad at the other (Fowler 2002). In both the Zaichkowsky RPII and the FPRS, the scales are arranged so that a person rates themselves between two extremes, e.g. appealing at one end and unappealing at the other, or important at one end, unimportant at the other. However, it is not possible to determine how much better, for example, a score of 3 is than a score of 2 (Brace et al. 2000). Consequently it is argued that both the Zaichkowsky RPII and the FPRS scales measure ordinal data.

3.3.3 Method of analysis of the survey data

The occurrence of any observed pattern of data is always potentially attributable to chance. The purpose of inferential statistical tests is to assess the validity of this rival

explanation of results in terms of the probability or likelihood that the obtained data pattern could have occurred by chance (Fowler 2002; Singer and Presser 1987). Consequently, statistical analysis provides the ability to assign a probability to one type of threat to internal validity – the operation of chance as a possible cause of any relationship between the independent and dependent variables. However, research design and analyses are interdependent as the way a research project is designed in part determines the method of analysis that will be used on the resulting data (Dane 1990).

Research designs can be categorised in terms of their purposes; the different purposes involve different methods of statistical analysis. The statistical test utilised is dependent upon its relevance to the theoretical issues being addressed and the nature of the design of the study (Cohen and Cohen 1983). When subjects have predetermined levels of the characteristics under scrutiny and these values are beyond the immediate influence of the experimenter, a correlational design is appropriate (Crano and Brewer 2002). This most frequently refers to efforts to provide evidence for causal inference based on measures taken all at one time, and measuring the differential levels of both affects and exposures to presumed causes, as they occur naturally, without any experimental intervention (Cook and Campbell 1979).

In terms of the analysis of the data collected in this research, Grether (1974) examined correlation between two ordinal variables and concluded that it is appropriate. In previous research, scores from the Zaichkowsky RPII were correlated with reported shopping frequency and reported spending on fashion items (Flynn and Goldsmith 1993) with the analysis based on ordinal scales. The rationale for using correlational analysis in this research is discussed below.

Correlational analysis

In terms of this study, the two variables under examination were:

- the level of financial preparation for retirement undertaken by the respondents, as measured by their scores on the FPRS as the dependant variable
- their involvement as measured by their scores achieved on the Zaichkowsky RPII as the independant variable (adapted for this study by reference to retirement savings).

It was posited that there would be a positive relationship between the independant variable, involvement in the personal retirement-savings decision, and the dependant variable, their financial preparation for retirement. In correlational research, no attempt is made to influence any variables (Cook and Campbell 1979) but only to measure them and look for relations (correlations) between the variables (Statistica 1999). Correlational analysis is appropriate if the perceived intensity of the relevant variable in the subject is determined by their responses to a measuring instrument, such as the Zaichkowsky RPII. A relationship can be shown to exist when it is shown that two variables change together systematically, i.e. when the scores on one variable tend to be accompanied by specific scores on the other variable (Herzog 1996). Further, correlational analysis is appropriate where experimental control over the important variables is either impossible, unethical or completely impractical (Crano and Brewer 2002).

The significance of a correlation is not a determination of the strength of the relationship, merely an indication that the observed value most likely did not occur by chance (McGibbon 2005). Significance values for correlations are also very sensitive to sample size and as a result every effort was made to ensure a large sample for this research. With this in mind, the sample was compared to the general population on a number of measures (age and income distribution) to determine its representativeness. As detailed in Section

3.5, it was found that there was no significant difference between the age and income distribution in the sample and the general Australian population. Consequently, the stronger the relationship found in the sample, the less likely it was that there is no corresponding relationship in the general Australian population (Statistica 1999).

Regression analysis

Whilst the correlation between two variables provides evidence of the size and direction of a relationship, regression analysis takes this process a step further by providing the means to predict a score on one variable from a score on another (Tabachnick and Fidell 1989). It also provides the ability to create a predictive model between the variables (McGibbon 2005). Regression is a statistical technique that utilises the presence of an association between two variables to predict the values of one, the dependant variable, from those of another, the independant variable (Kinnear and Gray 2000). Predictive research analysis is based upon correlational techniques in which the analysis is used to determine the extent to which one variable is related to another variable (Dane 1990). Regression analysis is one of the most widely used statistical techniques (von Eye and Schuster 1998) and enables a dependant variable to be studied as a function of, or in relation to, specified factors. This relationship may be straight line or curvilinear, general or conditional and the nature of the factors can relate to virtually any information whose bearing upon the dependant variable is of interest (Cohen and Cohen 1983). The stronger the correlation, the closer the scores will fall to the regression line and therefore the more accurate the prediction (Brace et al. 2000). For forecasting purposes, it is not critical what the true causal path is from one variable to another and there is no need to distinguish between symptoms and causes. For predictive regression, leaving out a relevant covariate may produce a forecast less precise than it might otherwise have been but it does not lead

to any misstatement of the forecasting relevance of the variable employed (Cook and Campbell 1979).

Regression is often used with survey data as it enables the combination of many variables into one predictive equation. It is the most popular method for studying the relationship between an outcome variable and a predictor variable and thereby provides a measure of the total explanatory power of the model (Technical 2003). Regression analysis using various involvement scales has been conducted by a number of researchers:

- On what was described as the *Original Personal Involvement Inventory* (OPII) and a revised version entitled RPII in connection with consequences of involvement (McQuarrie and Munson 1987).
- On a range of involvement scales against the consequences of involvement (Jain and Srinivasan 1990).
- On the predictive ability of involvement using the RPII in relation to attitudes towards products (McQuarrie and Munson 1992).
- On the relationship between perceived risk with certain products and involvement (Dholakia 1997).
- On thought preferences and involvement (Zhang and Markman 2001).

Consequently, regression analysis was deemed the most appropriate method of analysis of the data obtained via the survey using the self-administered questionnaire.

Examining the moderation of any affects of involvement

Analysis of co-variance (ANCOVA) is used to assess the impact of the moderating variables. ANCOVA has been described as providing a powerful look at the independent variable, dependent variable relationship by minimizing error variance (Tabachnick and

Fidell 1989). ANCOVA can also be used to adjust for differences among groups when groups are naturally occurring and random assignment to them is not possible as is the case in this current research. ANCOVA can be used to determine whether the independent variable is indeed having an effect, by statistically controlling the influence of an extraneous variable (covariate) during analysis (Coates and Steed 2001), i.e. it enables the examination of the relationship among two variables and at least one additional variable (Wildt and Ahtola 1978). In other words, ANCOVA is used as it enables differences on a single dependent variable to be assessed after the effects of one or more covariates are removed (Tabachnick and Fidell 1989) or are 'controlled for' (Wildt and Ahtola 1978). A 'covariate' is defined as a variable which, although not of direct interest in the investigation, could be expected to correlate (co-vary) with the relevant variable (Kinnear and Gray 2000). Consequently, if the relationship between involvement and financial preparation for retirement was to be investigated, it is useful to remove the differences of age, income or gender etc. Differences between the subjects based on these factors were used as covariates. The analysis of covariance question sought to determine if there were mean differences in outcomes associated with financial preparation after adjusting for age, or gender, or income etc.

Using ordinal data in parametric tests such as analysis of covariance, has been investigated by a number of researchers with Cochran (1957) and Winer (1962) (cited in Glass et al. 1972) indicating that the robustness of the analysis of variance to violations of the assumptions of normality and homogeneous variances carry over into the analysis of covariance. Lane (2004) tested ordinal variables with 3, 4 and 5 values corresponding to Likert scales with 3, 4 & 5 levels and found that the confidence limits were accurate for samples of 10 or more in each group. The robustness and power of parametric tests of covariance applied to ordinal scale data was tested by Sullivan and Agostino (2003) and

found that in the presence of 3, 4 and 5 point ordinal scale data and small sample size, the tests produced actual significance levels which were close to the nominal significance levels and that the power produced by these tests was relatively high. The same researchers had previously tested the robustness of analysis of covariance tests with data distorted from normality and found that the tests 'were robust' (Sullivan and D'Agostino 1998). Seaman et al. (1985) found that the parametric analysis of covariance enjoyed power advantages for a greater number of experimental conditions where the conditional distributions were mildly to moderately non normal and the conditional variance was small. It has also been argued that non normality of sample distribution is not an issue when the sample is larger than 10 (Lane 2004) with research also finding that as sample size increases beyond 40 in each group, the rank analysis may have practical power advantages for moderately non normal distributions and both small and large variances (Seaman et al. 1985). Finally, Hersley et al. (2003) followed the recommendations of Maxwell & Delaney (1990) and adopted ANCOVA when examining their data which was based on Likert scales.

Consequently ANCOVA was considered an appropriate statistical tool to determine the affects of the moderating variables in this research.

Statistical tests used for each hypothesis

A number of statistical tests were used in the research from the SPSS 14.0 package. This program was chosen as it regarded as sophisticated software used by social scientists and related professionals for statistical analysis and is a widely accepted statistical analysis package (Coates and Steed 2001). In all instances the minimum statistical significance required was set at 0.05.

Hypothesis 1

To test H1, a bivariate one-tailed correlation analysis was conducted to determine if an association existed between the independent variable (involvement) and the dependent variable (financial preparation). A scatter plot illustrated a linear relationship and a P-P plot of regression verified that the sample closely followed a normal distribution so Pearson's correlation coefficient was considered appropriate. However, as the datum was ordinal and based upon the advice given by Kinnear and Gray (2000 page 18), both Kendall's tau and Spearman's rho correlation coefficients were also calculated. This was then followed by the use of a simultaneous linear regression model to establish the percentage of the variance in the financial preparation scores that is explained by the variance in the involvement scores.

Hypothesis 2

The relevant survey question asked at what level the subjects had completed, their education. This was coded into one of five categories; school, TAFE, via Professional exams, to an undergraduate or finally to a postgraduate level. Analysis was then conducted to determine whether there were any significant difference between the involvement scores obtained by individuals with different educational backgrounds. The same test was also conducted on the FPRS scores. As there were more than two independent sub groups and based upon the advice illustrated by Kinnear & Gray (2000 page 15), the test used for Hypothesis 2 was the Kruskal Wallis non parametric ANOVA.

Hypothesis 3

The respondents were able to record their own age on the questionnaire providing a continuum ranging from age 16 to 67. Applying the same logic as outlined for Hypothesis 2, a Kruskal Wallis non-parametric ANOVA was considered appropriate to establish if

there was any significant difference in the involvement scores obtained by people of different ages. The same test was also applied to the FPRS scores. This was then followed by an Analysis of CoVariance test to determine whether age moderated the impact of involvement on financial preparation for retirement.

Hypothesis 4

The respondents were asked to record their income and as a result the incomes recorded ranged from \$0 to \$300, 000. Applying the same logic as outlined for Hypothesis 2, a Kruskal Wallis non-parametric ANOVA was conducted to establish if there was any significant difference in the involvement scores obtained by people with different levels of income. The same test was also applied to the subject's FPRS scores. This was then followed by an Analysis of CoVariance test to determine whether income moderated the impact of involvement on financial preparation for retirement.

Hypothesis 5

The subjects were asked to state the number of dependants they supported on the questionnaire. Just over half reported no dependants with the maximum number being 7. Applying the same logic as outlined for Hypothesis 2, a Kruskal Wallis non-parametric ANOVA was conducted to establish if there were any significant differences in the involvement scores obtained by people with different numbers of dependants. The same test was also applied to the FPRS scores obtained.

Hypothesis 6

The subjects were asked to indicate their gender on the questionnaire which meant that there were only two independent groups for the analysis. Whilst the data from the Zaichkowsky RPII and the FPRS was ordinal, the data illustrating the differentiation between genders was

nominal. Based upon the advice provided by Kinnear & Gray (2000 page 9), either a Chi Square or Mann Whitney test was appropriate for this data. One of the key assumptions for a Chi Square test is that each subject contributes datum to only one cell, which is the case in this instance. However, another assumption relates to the size of the expected frequencies as a Chi Square is distorted when the expected frequencies are very small. Consequently it was not appropriate to use a Chi Square test where the expected frequency count was less than 5 (Salkind 2000). When a Chi Square test was conducted on the involvement scores to determine if there was a significant difference between the scores obtained by males compared to females, the analysis illustrated that a large number of cells had expected frequencies less than 5. Such a result indicated that a Chi Square test was not appropriate so a Mann Whitney U test was performed instead. Scatter plots illustrated a linear relationship for both males and females. A bivariate one-tailed correlation analysis was conducted to determine if an association existed between the independent variable (involvement) and the dependent variable (financial preparation) separately for males and females. As the datum relating to both the independent and dependent variable was ordinal, both Kendall's tau and Spearman's rho correlation coefficients were calculated. This was followed by a simultaneous linear regression to determine the percentage of the variance in the financial preparation scores that could be explained by the variance in the involvement scores for males, and then females. Analysis of Covariance was then conducted to determine if gender moderated the effect of involvement on financial preparation for retirement. Levene's test of Homogeneity of variance was conducted and was found to be not significant for both involvement and financial preparation meaning that the variances could be assumed to be homogeneous.

3.3.4 Rationale for case study methodology

Qualitative research seeks to identify the deeper structure and common elements in experiences while valuing the uniqueness of each person's experience (Davis 2000). However, case study research has been criticised for lack of generalisability (Verschuren 2003) but this has been countered with the argument that a case study is concerned with analytical generalisation and not statistical generalisation (Jones and Lyons 2003). Inference about the logical relationship between factors is not based upon the representativeness of the sample and therefore upon its typicality, but rather upon the plausibility or upon the logicity of the nexus between characteristics (Mitchell 1983). Davis (2000) claims that the purpose of qualitative research is to understand and describe the participants' experiences, to allow them to 'tell their story'. Yin (2003) argues that with analytical generalisation, theoretical propositions are developed to offer theoretical explanations of the phenomenon under study. Therefore, ideas, insights and or propositions developed from a single case study site can be replicated at a number of different sites utilising the same theoretical purpose. The testing of ideas in other sites can support arguments for the legitimacy of case studies in terms of highlighting common problems and issues (Macpherson et al. 2000). In statistical analysis, generalisations are made to a population based upon a sample, whilst in case study research, one is generalising to a theory (Garson 2005). Consequently, the goal of qualitative research is to produce an account of the participants' experience that is faithful to what they have reported, that extends to other related contexts and that can be audited in terms of the researcher's decisions (Davis 2000).

Quantitative methods are considered to be more reliable and objective and are orientated towards producing empirical outcomes that can be generalised across a variety of different situations. Qualitative methods are considered by some to be characterised by ambiguity

and subjectivity, placing more emphasis on the localized context (Macpherson et al. 2000). Consequently, critics have charged that the case study does not accurately measure independent and dependent variables and that such methods rely on retrospective reports and employ arbitrary interpretations. Unlike random sample survey research, case studies are not representative of the entire population, nor should they claim to be (Garson 2005).

In general the charge is that the case study method suffers from a lack of rigor and an excess of bias (Stoecker 1991). Case study researchers are also open to the charge that their findings are specific to the few cases they examine, and when they do make broad comparisons and attempt to generalise, they are accused of letting their favourite case shape or at least colour their generalisations (Ragin 1998 cited in Verschuren 2003). Case study researchers have tried to cope with the threat of bias and its assumed impact upon internal validity with the arguments that probability samples and significance tests do not ensure accurate explanation and that scientific method does not control for researcher bias (Verschuren 2003).

The qualitative approach means that it is possible to identify common themes that emerge when participants describe their experiences in their own words. In order to facilitate this, it was decided to use structured interviews incorporating open questions. This approach had a number of advantages as suggested by Fowler (2002), namely:

- The research is often able to obtain answers that were unanticipated.
- The answers may be a more accurate reflection of the real view of the respondent.
- Many respondents like opportunity to answer some questions in their own words.

Johnson and Christensen (2003) also noted a number of advantages of using the interview method:

- It is suitable for measuring attitudes and most other content of interest.
- It allows probing and posing of follow up questions.
- It can provide in depth information.
- It can provide information about the respondent's internal meanings and ways of thinking.
- It is useful for exploration as well as confirmation.

In terms of the types of questions used, 'how' and 'why' questions are more explanatory as these deal with the operational links needing to be traced over time rather than frequencies or incidence. As the case study examines process, open questions are suitable for such investigations (Yin 2003) especially as survey research is not considered to be applicable to applied questions (Verschuren 2003). Consequently a case study is preferred when:

- the inquirer seeks to answer 'how' and 'why' questions
- the inquirer has little control over events being studied
- the object of study is a contemporary phenomenon and the context is not clear.

(Schwandt 1997).

The research outcomes of a case study are typically expressed in linguistic forms with the themes based upon the participants' experiences. Case study, as conceptualized by Schwandt, can be designed to investigate the rich complexities of social phenomenon and the social environments in which they are situated. It is exactly because case study research produces a rich understanding of social sites as well as the meaning structures created by those who operate within them, such understanding can be used to influence changes to social practices and public policy (Macpherson et al. 2000).

Consequently, a case study is a research strategy than can be qualified as holistic in nature; looking at only a few strategically selected cases, observed in their natural context in an open- ended way; explicitly avoiding tunnel vision; making use of analytical comparison of cases or sub-cases, attributes, patterns, structures or processes (Verschuren 2003). Consequently case study methodology was selected for this research with the aims of understanding the reasoning behind the decisions of the respondents, why they adopted particular approach towards to financial preparation for retirement and how they came to that avenue.

However, it is accepted that case study methodology also has disadvantages, as outlined by Johnson and Chistensen (2003):

- In-person interviews are usually relatively expensive and time consuming.
- Reactive affects can occur, e.g. respondents may try to show what is socially desirable.
- Investigator affects can occur, e.g. unskilled interviewers may distort the datum because of personal biases and poor interviewing skills.
- Respondents may not recall important information.
- Perceived anonymity by respondents may be low.
- The analysis of information can be time consuming for open-ended items.
- Measures need validation.

As the researcher is the primary collector of data in a case study approach, care has to be taken to minimise bias in terms of guiding the interview along desired avenues and later when the information is reviewed and analysed. In this regard, the structured interview can help minimise such distortion as all subjects are presented with the same questions, in the same order, as outlined in the case study Protocol. Multiple-case designs have distinct

advantages and disadvantages in comparison to single-case designs. The evidence from multiple cases is considered more compelling and the overall study is therefore regarded as being more robust (Yin 2003). Consequently, the transcripts of the case study subjects were examined, individually and collectively to highlight and describe any underlying themes that emerged.

In summary, the essence of a case study is that it tries to illuminate a decision or set of decisions (Schramm 1971 cited in Yin 2003). Consequently the case study was used to attempt to discover if there were underlying themes in terms of what involvement meant to the individuals and establish if there were related patterns of behaviour.

3.3.5 Mixed method design

Johnson and Christensen (2003) suggest that proponents of mixed research typically adhere to the compatibility thesis as well as to the philosophy of pragmatism. They argue that the compatibility thesis believes that quantitative and qualitative methods are compatible and can both be used in a single research study. Further they go on to argue that the philosophy of pragmatism indicates that researchers should use the approach or mixture of approaches that works the best in a real world situation. In short, what works is what is useful and should be used, regardless of any philosophical assumptions, paradigmatic assumptions, or any other type of assumptions.

Greene et al. (1989) suggested that the purposes of a mixed method includes:

- Triangulation – it tests the consistency of findings obtained through different instruments.
- Complementarity – it clarifies and illustrates results from one method with the use of another method.

- Development – results from one method shape subsequent methods or steps in the research process.
- Initiation – it stimulates new research questions or challenges results obtained through one method.
- Expansion – it provides richness and detail to the study exploring specific features of each method.

Shoveller (2004) adds that a mixed method can simultaneously accomplish two goals:

- It can demonstrate that a variable will predict an outcome.
- It can answer exploratory questions about how that predicted relationship actually happens.

Whilst quantitative methods may work best in isolating and identifying correlates associated with variation in specific moments in time, qualitative techniques are particularly good at gaining insights into the processes and events that lead up to the observed variation. They also have the advantage of providing unexpected insights (Borkan 2004).

Johnsen & Chistensen (2003) argued that a mixed-method approach also has a number of advantages:

- Words and narrative can be used to add meaning to numbers.
- Numbers can be used to add precision to words and narrative.
- It can answer a broader and more complex range of research questions.
- A researcher can use the strengths of an additional method to overcome the weaknesses in another method (i.e. the principle of complementarity).

- It can provide stronger evidence for a conclusion through convergence and corroboration of finding (i.e. the principle of triangulation).
- It can add insights and understanding that might be missed when only a single method is used.
- It can increase the generalisability of the results.
- Qualitative and quantitative research used together produces more complete knowledge necessary to inform theory and practice.

Providing external validity, i.e. the extent to which the research findings can be generalised beyond the immediate research sample, was a crucial element of the current study. The issues relating to provisioning of retirement savings are key areas of policy formulation for governments around the world. Consequently, any relationships established in this study required as much external validity as possible if the research was to be of value to policy formulation in the area of retirement savings. Shoveller (2004) argues that the quantitative method can provide statistical conclusion validity, construct validity and causal validity (control of an extraneous variable). The qualitative method can provide descriptive validity, interpretive validity, construct validity and causal validity (identification and assessment of alternative explanations).

Case studies and surveys include observations that occur in ‘natural’ settings and which involve the minimum of interference over the individual’s normal behaviour or choices (Crano and Brewer 2002). Enabling the subjects to undertake the interview or complete the self-administered questionnaire in their natural settings, with minimum interference, provides the opportunity of generalising any identified relationship as having the potential to recur at other times, in other places with other people. Reliability was addressed by

presenting all respondents to the self-administered questionnaire with the same standardised questions which had been refined after a pilot study (Robson 2002).

In summary, the description used by Strange and Zyzanski (cited in Borkan 2004) seems particularly pertinent:

‘If the only tool researchers have is a hammer, they tend to see every problem as a nail. An appreciation of both quantitative and qualitative approaches can enhance a researcher’s ability to answer complex questions in a manner which is efficient, internally valid and generalisable’.

Consequently, a mixed method was adopted using a combination of case studies and questionnaires. This approach was adopted to gain benefit from the advantages inherent in both methodologies. Whilst self-administered questionnaires are more suited to the use of closed questions, the case study approach enabled advantage to be taken of more open questions. As a result, by using a mixed design, rich data could be collected via the case studies, whilst the frequency of the traits and interrelationships between the behaviours was investigated via the information collected via the self-administered questionnaires.

3.4 Measuring the variables

The next section details the methods used to measure the independent, moderating and dependent variables used in this research.

3.4.1 Measuring the independent variable - Involvement

As detailed in Chapter 2, there has been much debate over measuring involvement and several versions of the original Zaichkowsky PII were produced by other researchers. What was not outlined in Chapter 2 was the development undertaken to by Zaichkowsky

to produce the Zaichkowsky Revised Personal Involvement Inventory (Zaichkowsky RPII). .

The ZPII had been criticised on two main areas. It was argued that it could not be used in the area of advertising research as some scale items were not applicable to involvement in advertising and that it was too long for repeat testing (Park & McClung 1986 cited in Foxall and Pallister 1988). In addition there was concern about potential attitudinal contamination (McQuarrie and Munson 1987). As detailed in Chapter 2, a number of researchers attempted to produce modified versions of the original scale developed by Zaichkowsky (the ZPII).

In response, Zaichkowsky undertook further research and demonstrated that the ZPII could be reduced by half without significantly reducing reliability, and at the same time could capture emotional and cognitive types of involvement enabling it to be used in advertising research as well (Zaichkowsky 1994)¹⁵. Through testing and analysis, the original 20-item ZPII was reduced to the new 10-item Revised PII (Zaichkowsky RPII) with all but one pair coming from the original. It was found that the Zaichkowsky RPII could be divided into two sub-scales representing a cognitive aspect and an affective aspect of involvement with scores proving to be stable in test re-test reliability (Zaichkowsky 1994).

The new Zaichkowsky RPII used the same type of scale, a semantic differential type (Osgood et al. 1957 cited in Zaichkowsky 1985b) consisting of a series of bipolar items. Each was measured on a seven point rating scale with the descriptors or phrases being

¹⁵ This Revised Personal Involvement Inventory was initially released as a working paper from Simon Fraser University entitled 'The Personal Involvement Inventory: reduction, revision and application to advertising' in 1987.

easy to relate across product categories. Consequently, the minimum score was 10 and the maximum 70. Once again, the distribution of scores was utilised to determine the cut off for high and low positions on the scale. Scores in the bottom quartile were regarded as illustrating low involvement and those in the top quartile, high involvement. Consequently subjects who obtained a score of between 10 and 30 were considered to be illustrating low levels of involvement. Those who produced a score of between 51 and 70 were considered to be illustrating high levels of involvement.

The Zaichkowsky RPII was subsequently used in a number of additional studies where satisfaction was expressed with the reliability and predictive validity of the scale and its capacity to discriminate across products and situations (Foxall and Bhate 1993; Goldsmith and Emmert 1991). The Zaichkowsky RPII was found to be easy to administer and provided a good measure of involvement (Flynn and Goldsmith 1993) and for purchase decision involvement exhibited high levels of reliability, convergent and discriminant validity (Foxall and Pallister 1988).

Consequently the level of involvement was measured using the Zaichkowsky RPII. The questions were exactly those used and tested by Zaichkowsky with only the opening statement altered from the original to reflect the nature of this research. A copy of the questionnaire is contained in Appendix 1.5

3.4.2 Measuring the moderating variables

The information collection primarily uses self-reported measures based upon material provided by the respondents who are required to make their own judgements. This can be classified as second-hand information, as relevant behaviour is not being observed directly (Herzog 1996). The disadvantage of second-hand information is that there is the danger

of bias or distortion. This is particularly true in relation to the reporting of potentially sensitive information, i.e. where respondents are asked to provide their income before tax. Consequently, the confidentiality and anonymity of the information was stressed in the introductory letters and the questionnaire itself. These letters are presented in the appendices.

Five factors were measured; the level of education completed, the respondents age on their last birthday, their level of annual income before tax, the number of dependants they supported, with a note stating that this referred to dependants of all ages, and the gender of the respondent. In order not to restrict the potential richness of the data, it was decided that for questions where answers were on a continuum (e.g. age), rather than use a simple choice (e.g. younger than 20, 21-30 etc.), the subject would be asked to write their answer in the space provided. This removed the need to impose artificial categories. A further benefit of this approach was to avoid potential confusion with regard to education and a possible reluctance to provide an answer when confronted with simplistic categories such as school, or undergraduate. Therefore the only choice via a tick box related to gender which was then scored 1 for male and 2 for female.

3.4.3 Measuring the dependant variable – Financial preparation for retirement

The questions on financial preparation for retirement have evolved from previous research studies as outlined in Section 2.8. As a result, where practical, the wording used in previous research was replicated in both the question and the answer. By way of example, the use of the four options of ‘a lot’, ‘some’, ‘a little’ and ‘not at all’ have all been taken from the correlational studies on financial preparation conducted by Lusardi who utilised information from the Health and Retirement Survey (Lusardi 2002a; Lusardi 2001;

Lusardi 1999; Lusardi 2003b; Lusardi 2002b; Lusardi 2003c; Lusardi 2000b). The scoring of those questions follows that outlined in the 2000 study (Lusardi 2000b).

Financial Preparation for Retirement Scale (FPRS)

In order to assess the degree of financial preparation of the respondents, an overall measure of the financial preparation was devised, based on questions used in previous research. Ten questions made up the Financial Preparation for Retirement Scale (FPRS). These questions were all factually based but asked the respondent to rate their response on a four-point ordinal scale, i.e. the choices differed in relative magnitude and therefore could be ordered from smaller to larger (Herzog 1996). A four-point scale was used to force a response as no neutral or indifferent position logically exists (Peterson 2000). Either a person has done something or they have not. Consequently the questions provided broad categories for those who had given the issues some thought and a simple response for those who had not.

The questions were scored in manner consistent with previous studies (Lusardi 2002a; Lusardi 2001; Lusardi 1999; 2003b; Lusardi 2002b; Lusardi 2003c; Lusardi 2000b), i.e. each of the answers was translated into a score with 4 points scored for the highest level of preparation and 1 for the lowest.

The answers to several questions led directly to the following question when a positive answer was given. Those that provide a negative answer were directed to skip the following question. In such instances the default score of 1 point applied to the missed question as this corresponds with the answer of taking no action. As a result, the maximum score that could be gained in the FPRS was 40 points and the minimum score 10.

In order to make the task of completing the questionnaire as clear and simple for the respondents, the wording of the answers was kept constant in a number of instances. Consequently five questions had exactly the same response options; another three shared a (different) set of response options whilst only two questions had unique answers. In four of the questions the rating scale was reversed with the lowest scoring option being on the left of the answer set.

To decide the cut off points for low and high scores on this scale, the current study adopted the process followed by Zaichkowsky in her development of the original PII scale (Zaichkowsky 1985b). The overall distribution was based on the data collected from the sample of 463 subjects with a mean FPRS score of 21. The distribution derived from the data was used to classify scorers into either low (bottom 25% of distribution) with scores ranging from 10–14; medium (middle 50% of distribution) with scores ranging from 15–27; or high (top 25% of distribution) with scores ranging from 28–40.

The rationale behind each of the questions was as follows:

Q1. *Thinking about retirement*

This was to provide an indication of how many respondents had given some thought to life in retirement.

Q2. *Collecting information about retirement*

This was to establish if the respondent had made the effort to locate any information about preparing financially for retirement, rather than where or how they collected it or even the nature of that information. The answer given was used in question 3 for the first three

response options (i.e. 'a lot', 'some', or 'a little'). When the answer given was 'none', the instruction is to move ahead to question 4, skipping question 3.

Q3. *Using information collected about financial preparation for retirement*

Having established if the respondent had collected information about the issue, this sought to determine if that had given rise to any action, or at least the consideration of action. This question reversed the scoring of the response options.

Q4. *Attending seminars or meetings about preparing financially for retirement*

This enquired as to whether the respondent had attended any relevant seminars. The answers to the first three response options (i.e. 'a lot', 'some', or 'a little') led into question 5 whilst the final response box (none) included the direction to move directly to question 6.

Q5. *Taking action after attending a seminar or meeting about preparing financially for retirement*

Having established that the respondent has attended at least one seminar or meeting about preparing financially for retirement, this question aimed to determine if this had given rise to any action, or at least the consideration of action. This question also reversed the scoring of the responses with no action as the first option.

Q6. *Discussing their financial preparation with others*

This sought to determine if the respondent had discussed their financial preparation for retirement with anyone. More weight was given to discussing the issue with a financial planner or an accountant than family or friends. Where a respondent replied to both options, the highest scoring option was used in determining their FPRS score. This

question also reversed the scoring with the first option being the negative response ('not at all) and included a directive to skip question 7 and move directly to question 8. The next three options were utilised in question seven ('only in passing', 'yes with my family etc'. 'yes with a financial planner etc.').

Q7. Taking action after discussing their financial preparation with others

Having established that the respondent had discussed their financial preparation for retirement with others, this aimed to determine if they had taken action as a result, or at the very least thought about taking action. This question also reversed the scoring system.

Q.8 Thinking about setting a date or age at which the person expects to retire

Respondents were asked if they had determined either the date or the age at which they wished to retire. This was asked as it required that the respondent had given thought to how long they hde remaining in the workforce and thereby the time left to contribute to their retirement savings.

An additional sub-question was incorporated for those who answered that they had thought about a date or age at which they wished to retire. They were requested to specify their target age for retirement as this enabled the number of years to their desired retirement to be calculated. Where subjects did not specify an age (e.g. they answered with 'Not at all') the desired retirement age of 65 was the default.

Q9. Giving thought to how long they expect to be retired for

This sought to establish if consideration had been given to how long retirement savings were expected to last in retirement by asking if the respondent had thought about how long they expect to be retired for.

Q.10 *Thinking about how much is needed for a comfortable retirement*

Respondents were asked if they had thought about how much money they would need to have saved by the time they retired in order to live comfortably in retirement. The definition of 'comfortable' was left to the respondent as was their assessment of when they would retire and how long they would live in retirement. Despite its subjective nature, the question was designed to provide an indication of how many have made an attempt at analysing their financial preparation for retirement.

3.5 Research implementation strategy

This section sets out the implementation of the study design. It provides details of the self-administered questionnaire, including the rationale behind its design, the type of appeal used and the procedures used. It then gives details of the case studies and the procedure used.

3.5.1 Structural features of the survey

It has been argued that it is the respondent to a survey that ultimately defines what can and cannot be done, the types of questions that can be asked, the types of words that can be used and the concepts that can be explored (Gendall 1998). Consequently, it was accepted that design choices can have an impact on survey participation and therefore response rates (Groves et al. 1992). As a result, significant efforts were made to develop a design that would encourage participation.

Surveys which provide respondents with information prior to asking for information have been shown to produce higher response rates than surveys that do not (Groves et al. 1992).

Such an approach provides reassurance, especially if the respondents have some understanding of how important their help is and how it will be useful (Fowler 2002). Response rates for self-administered questionnaires may also be enhanced if the cover of the questionnaire contains a picture (Gendall 1996). However, all mail surveys require some form of introduction and some have argued that the covering letter may be the most important element in what is a direct mail approach (Beard et al. 1990). All such letters make some form of appeal to the recipient in order to attempt to encourage participation in the survey. This must take into account the fact that people frequently decide whether to perform a requested activity on the basis of the attractiveness or unattractiveness of the inherent features of the activity itself, namely the interest value and personal relevance of the activity as well as the cost in time, energy and resources required to perform it (Groves et al. 1992). The letter was required to describe the purpose and importance of the study and to try to establish a rapport with the subject (Leaver 2000), convincing them to adopt a positive attitude to the questionnaire when it arrived. In order to do this, two types of appeal can be used, egoistical or altruistic.

Egoistic appeals are designed to emphasise the importance of the survey to the respondent, stressing the value of their opinions. Altruistic appeals are generally of two types. The help-the-sponsor approach emphasises the opportunity to help those conducting the study, whilst the social utility approach stresses the benefit of the research to the general population of which the recipient is a member (Gendall et al. 1995). Surveys that emphasise the sponsor of the survey, (defined as the organisation conducting the research), may be more successful in generating participation if the sponsor is generally seen as having legitimate authority to collect the information (e.g. an education institution such as a university), but the affect can be reversed if the sponsor is not seen as having such status (Groves et al. 1992). The ability to combine the aspects of who is conducting

the research (a university) and the different types of appeals was utilised in the design of this research.

The initial introductory letter came from the partner organisation and introduced the nature of the study¹⁶. It also introduced the university and researcher who would be conducting the actual research. The letter provided an explanation as to why the respondents' had been chosen (their association with the superannuation fund) and provided a valid introduction for the university which added credibility as a research institution. The type of appeal used in this introductory letter was egoistic, stressing that it would be an opportunity for the subjects to express their opinions and have their voices heard and potentially make their views known to policy makers. Consequently, the subjects were urged to make the most of the opportunity to make their opinion count. Such an appeal is based upon the concept of reciprocation, namely that if the survey provides information specifically intended to benefit the respondent (albeit indirectly at some future date) it is likely to achieve a higher response rate (Groves et al. 1992). This appeal from the industry partner was consistent with the findings of Houston & Nevin (cited in Gendall et al. 1995).

However, Houston & Nevin also found that an altruistic appeal generated a higher response rate when it came from a university. Consequently, the follow up letter from the researcher used this type of appeal. Respondents were explicitly asked for help in the university research program and thanked for their assistance. The basis of the appeal used was two pronged. It emphasised the social utility of the research with its potential to influence the conditions of those who will be retiring in the future. This was emphasised

¹⁶ Copies of all the letters used in this research are contained in the Appendix.

by stating that it would require as many people as possible completing the questionnaire in order for any findings to carry sufficient weight to be affective. The letter ended with a help-the-sponsor approach based on the notion that a helping norm exists in most cultures and motivates individuals to help others who are in need. This is consistent with findings that requests to participate in a survey may be significantly more successful when they include an appeal to the helping norm (Groves et al. 1992). This has been demonstrated by the use of a simple message such as ‘it would really help us out’ at the end of the request producing a significant increase in participation (Mowen and Cialdini 1980). This approach was continued in the reminder cards that were sent to subjects who had not completed the questionnaire. Remaining non-respondents received another letter using the social utility approach, stressing the need to have as many people as possible complete the questionnaire so that the results would be meaningful and therefore be more likely to be used to help others. This letter included a second copy of the questionnaire for those who had lost or thrown away the original copy.

In order to encourage participation, the anonymity of the survey was stressed to the respondents. However, this could have created difficulties in terms of tracking those who had responded and those who had not. Consequently the initial mailing of the questionnaire contained a post card with a coded identifier¹⁷. Such an approach maintains the anonymity of the respondent whilst ensuring the researcher can recall that the respondent had completed the questionnaire. Despite fears that the post card would be sent without the completed questionnaire, research has shown that this does not usually occur with the number of postcards returned almost always matching the number of completed questionnaires (Fowler 2002).

¹⁷ A copy of this is also contained in the Appendix.

A common question in the survey context is ‘How well do the responses of a subset of actually represent the underlying perceptions or feelings of the population’ (Crano and Brewer 2002). The industry partner used in this study operated an open entry superannuation fund, meaning that anyone can use them as a vehicle for their retirement savings. As a result the fund database contained potential subjects from a range of backgrounds, occupations, educational attainment, salary etc.

Based upon the concept of making the task of reading the questions easier, guidelines developed by Gendell (1998) were followed to facilitate the recording of answers by respondents. A questionnaire that was considered too long would increase the potential for subjects either not to complete it, or simply not attempt it at all. Consequently, short, structured, closed questions were utilised where answers were predetermined by the researcher. It was also acknowledged that whilst control would be maintained over the order the questions would appear on the questionnaire, there was no affective control over the order in which they would be answered. To facilitate easy return of the completed questionnaire, the survey material included reply paid envelopes.

Once the nature of the questionnaire had been determined, (in terms of wording and order of questions) the questionnaire was professionally designed by one of the design team at the industry partner and used design features that were consistent with those regularly used by that organisation in order to make the questionnaire ‘look and feel’ familiar to the potential respondents.

Pilot study for the self-administered questionnaire

A pilot study was developed to test the material and was conducted in three stages. It was designed to establish whether:

- the information about the survey that was to be provided to the subjects would be suitable and would lead them to actually take part in the study
- the subjects would be able to understand the questions
- the subjects would be able to answer the questions
- the subjects would actually answer the questions
- the information recording and data entry process would work affectively¹⁸.

In the first stage, three subjects were provided with all the introductory material, letters and follow-up cards to be used in the study. They were then asked their opinions on the material in terms of whether they considered it explained the purpose of the study and would lead people to take part. No adverse comments were received and the subjects all reported that the information was easy to understand and felt that it was likely to encourage participation.

The subjects were then given the questionnaire and asked to complete it as if they had been sent it in the post, i.e. they were not allowed to seek clarification. After completing the survey the subjects were asked whether they considered the instructions were clear or whether they had any difficulty in answering the questions. All three subjects reported that the instructions were clear and easy to follow and stated they had no difficulty in answering any of the questions. One subject did however raise the issue as to whether all respondents would fill in their salary details as opposed to ticking one of a set of boxes

¹⁸ A copy of the Pilot Study Protocol is contained in the Appendix

showing salary ranges. The other two subjects did not feel that this was an issue. Consequently it was decided to retain the questionnaire in its prepared format and move on to the next stage of the pilot study.

In the next stage, 24 new subjects were provided with the questionnaire which they were asked to complete. None of the subjects reported any difficulty in completing the questionnaire and all found it only required a few minutes. No one in this stage of the study indicated they had any issue with completing the salary question. The information from all 27 subjects (the 24 subjects who completed this stage plus the three subjects from the interview stage) was then used in refining the data entry process and critical testing on the analysis model prior to the main survey.

3.5.2 Survey sample breakdown

Based on the results of the pilot study, it was decided to move to the main study. A sample of 1000 subjects was randomly selected from the industry partner's database.

The timeline for the survey was as follows:

Table 8 Survey Timeline

Source	Activity	Timeline
Industry Partner	First introductory letter mailed	Day 1
Researcher	Letter introducing the researcher & the survey mailed	Day 3
Researcher	First follow up letter sent to initial non respondents	Day 13
Researcher	Second follow up letter and 2nd questionnaire sent to remaining non respondents	Day 23
Researcher	Final cut off for replies	Day 35

The introductory letter was mailed by industry partner in early November 2004 to 1000 of its members randomly chosen from their database of over 850,000 members spread across

Australia. Once incorrect address material was filtered out, the approached produced the following response rates:

Table 9 Sample Response Rates

	Percentage
Overall Response Rate	53.40%
Fully Usable	49.80%
Zaichkowsky RPII Usable	50.10%
FPRS Usable	53.10%

The sample of respondents was compared to Australian population statistics as provided by the Australian Bureau of Statistics (ABS 2000b). The total superannuation fund database was compared to the Australian population and was found to have a spread of ages indicating that the mean age was slightly lower than that of the Australian population. Given that the superannuation fund would not have so many people in the older age groups as the broader Australian population, this was expected. However, the respondents to the survey were found to be weighted towards the older end of the age range. Given that the questionnaire was focused on preparing for retirement this was hardly surprising. However the sample demonstrated a broad spread of ages with approximately a quarter reporting they were younger than 30, almost half stated that they were aged between 30 & 49 and the remainder stated they were 50 or older.

Allowing for the higher numbers of very old in the ABS information, the sample distribution appeared similar to that of the general Australian population. Kruskal-Wallis analysis was conducted on the distribution of the sample compared to the distribution of the Australian population and no significant difference was found ($p < 0.05$).

In terms of the amount of time subjects had to their retirement, the sample showed a wide range of responses, i.e. just over 22% of the sample had less than 10 years to their retirement, slightly more than 27% stated they were between 10 & 19 years away from retiring, almost 24% said they were between 20 and 29 years away from retiring, just over 17% said this figure was between 30 & 39 years and almost 9% claimed they were more than 40 years away from retirement.

The sample showed a slight bias towards women with 55% being women, slightly above the general population. In terms of the level of education completed, the sample illustrated a broad spread of responses with just over 2% stating they were post graduates, almost 18% claimed they were undergraduates, 4% said they had undergone some professional education, almost 9% stated they had been to TAFE whilst almost 68% stated that their education finished at school. Just over half the sample reported they had no dependants whilst a little over 30% reported one or two and another 10% reported three. The income ranges of the sample were compared to the Australian population using the most recent statistics from the Australian Taxation Office (Office 2004). The income distribution of the sample was found to be closely aligned to that of the Australian population. This comparison was analysed and it there was found to be a significant correlation between the income distribution of the sample and the general Australian population with a Kruskal-Wallis test indicating no significant difference between the two groups. Consequently it was considered that the sample was not dissimilar to the general Australian population.

3.5.3 Reliability analysis

Involvement and financial preparation for retirement were both assessed by the use of the scales described in Section 3.4. Reliability analysis was conducted on both the RPII and FPRS by means of Cronbach alpha scores.

Zaichkowsky RPII reliability analysis

Zaichkowsky conducted reliability analysis on the RPII when developing the scale. The Cronbach alpha scores achieved in this study were consistent with those found by Zaichkowsky (Zaichkowsky 1994):

Table 10 Zaichowsky RPII Reliability Analysis Scale (ALPHA)

		Mean	Std Dev	Cases
1	Important/Unimportant	6.0907	1.3012	463
2	Boring/Interesting	4.4255	1.7917	463
3	Relevant/Irrelevant	6.0238	1.2899	463
4	Exciting/Unexciting	3.7905	1.7412	463
5	Means nothing/Something	5.5032	1.471	463
6	Appealing/Unappealing	4.4147	1.7876	463
7	Fascinating/Mundane	3.7279	1.6368	463
8	Worthless/Valuable	5.9136	1.3584	463
9	Involving/Uninvolving	4.7883	1.6614	463
10	Notneeded/Needed	6.2311	1.2538	463

The Zaichkowsky RPII produced a mean of 50.9 with a variance of 129.9 and a standard deviation of 11.4.

Table 11 Item-Total Statistics for Zaichkowsky RPII

	Scale Mean if item Deleted	Scale Variance if item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if item Deleted
Important/Unimportant	44.8186	109.8242	0.6728	0.6678	0.8984
Boring/Interesting	46.4838	100.7438	0.7204	0.5982	0.8949
Relevant/Irrelevant	44.8855	110.7986	0.6409	0.6587	0.9001
Exciting/Unexciting	47.1188	104.0313	0.642	0.6661	0.9002
Means nothing/Something	45.406	105.5447	0.7331	0.6618	0.8942
Appealing/Unappealing	46.4946	100.3804	0.7339	0.6449	0.8939
Fascinating/Mundane	47.1814	104.9497	0.6631	0.6976	0.8984
Worthless/Valuable	44.9957	109.2251	0.662	0.6413	0.8987
Involving/Uninvolving	46.121	105.1455	0.6445	0.4582	0.8997
Notneeded/Needed	44.6782	112.1018	0.6099	0.6636	0.9018

Reliability coefficients

N of Cases =463.0

N of Items = 10

Alpha = .9074

Standardised item Alpha = .9103

The reliability coefficient for the RPII in this research was therefore .91 and no removal of items that make up the scale would have enhanced this reliability measure.

FPRS reliability analysis

The FPRS was developed for this study so Cronbach Alpha scores were used to assess the reliability of measure.

Table 12 FPRS Reliability Analysis Scale (ALPHA)

	FPRS Items	Mean	Std Dev	Cases
1	Thought About Retirement	2.8294	0.9040	463
2	Collected Information	1.9784	1.0084	463
3	Taken Action as a Result	2.0821	1.2681	463
4	Attended Seminars/Meetings	1.4017	0.8695	463
5	Taken Action as a Result	1.4924	1.0483	463
6	Discussed Retirement Preparation	2.3434	1.1755	463
7	Taken Action as a Result	2.1058	1.2706	463
8	Thought About Retirement Age	2.2678	1.0719	463
9	Thought About Length of Retirement	2.1361	1.0654	463
10	Thought About Money for Retirement	2.3391	1.0660	463

The FPRS produced a mean of 21.0 with a variance of 69.1 and a standard deviation of 8.3.

Mean	Variance	Std Dev	No. Variables
20.9762	68.1142	8.2531	10

Table 13 Item-Total Statistics for FPRS Reliability Analysis

	Scale Mean if item Deleted	Scale Variance if item Deleted	Corrected Item Total Correlation	Squared Multiple Correlation	Alpha if item Deleted
Thought About Retirement	18.1469	57.9221	0.6813	0.5425	0.9117
Collected Information	18.9978	54.9026	0.8161	0.7362	0.904
Taken Action as a Result	18.8942	51.8178	0.8046	0.7724	0.9037
Attended Seminars/Meetings	19.5745	58.9852	0.6269	0.774	0.9143
Taken Action as a Result	19.4838	56.904	0.6393	0.7886	0.9134
Discussed Retirement Preparation	18.6328	53.6484	0.7598	0.6709	0.9065
Taken Action as a Result	18.8704	52.7797	0.7432	0.7083	0.9079
Thought About Retirement Age	18.7084	56.7958	0.6295	0.5523	0.914
Thought About Length of Retirement	18.8402	57.1086	0.613	0.536	0.9149
Thought About Money for Retirement	18.6371	55.8507	0.6674	0.5153	0.9119

Reliability Coefficients

N of Cases =463.0

N of Items = 10

Alpha = .9186 Standardised

item Alpha = .9194

Nunnally (1978) and Garson (2006) suggest that the widely accepted cut-off is that the reliability coefficient should be above 0.7 for a set of items to be considered a scale whilst Dijkers et al. (2002) argue that it should be above 0.8. The Zaickowsky RPII is a widely used and accepted measure that is considered reliable whilst the FPRS is a new scale, albeit one based on questions that have been used in previous research relating to preparation for retirement. When tested, the reliability coefficient for the FPRS was found to be .92, i.e. higher than that of the Zaichkowsky RPII, and no removal of any of the items making up the FPRS would have enhanced this reliability coefficient. The literature reviewed in Chapter 2 revealed that different researchers have used a variety of methods to measure financial preparation for retirement. However, such an approach has inherent problems as to paraphrase Zaichkowsky (1985b):

- If conflicting results are obtained from different researchers, questions are likely to arise as to whether such findings are the result of the behaviour or the measure used.
- Single item measures may not fully reflect financial preparation for retirement behaviour.

These results suggest the FPRS is a reliable measure and consequently is one that will enable future research to compare behaviour relating to financial preparation for retirement across groups thereby avoiding such problems.

3.5.4 Case studies

The initial information provided to the prospective case study subjects was virtually identical to that provided to the subjects for the self-administered questionnaire. The only major difference was the indication that they were being asked to take part in an interview rather than a questionnaire. Reassurance of confidentiality of case study participants is

slightly more difficult than in an anonymous self-administered questionnaire. However, complete confidentiality for the case study participants was stressed during the interview and repeated once again.

Sample

Ideally each case is selected so that it either predicted similar results and provided literal replication, or predicted contrasting results but for predictable reasons and provided theoretical replication (Yin 2003). This approach was followed as conducting five case studies arranged affectively within a multiple-case design is analogous to conducting five experiments on related topics. In order to select appropriate subjects, the industry partner mailed 200 Sydney- based subjects requesting that they volunteer to be considered for the study. Those who agreed mailed back a form providing their consent and some basic demographic details. The final subjects were selected in order to provide a broad spread of ages and were within 200 kilometres of the researcher. The case studies were conducted after the pilot study for the self-administered questionnaire and the initial mailing of that questionnaire to the selected sample, but prior to the analysis of the survey data. Each of the case study subjects is outlined below:

Case study 1

HT (HT) was an 18 year-old female who stated that the highest level of education she completed was Year 11 in High School, meaning that she completed her School Certificate but did not complete her Higher School Certificate (university entrance level examinations). She revealed that she earned approximately \$18,000 p.a. before tax and that neither she nor her partner had 'much money'. She and her partner lived in a single storey rented duplex and stated that they did not have any dependants to support. It emerged during the interview that the couple felt they did not have a great deal of discretionary money as

normal living expenses including rent were major factors in their weekly expenditure. She stated that she was very keen to take part in the interview as the initial correspondence had made her think more about the issues.

Case study 2

GR was a 37 year old male, married with two children. His wife worked and so he classed his children as his only dependants. He lived in a small town located outside a major industrial centre. *GR* was a blue-collar worker and the suburb consisted of mainly single storey timber-board houses. The local shops were very few in number, with the nearby large industrial town the centre the main focus of activity. *GR* revealed that the highest level of education he completed was Year 9, meaning he left before completing his School Certificate. He stated that he earned approximately \$42,000 per annum.

Case study 3

ES was a 42year-old male who is the Chief Executive Officer of the Australian subsidiary of a German manufacturing company. He was married with two children who are cared for by his wife. He therefore had three dependants. His highest level of education completed was an Associate Diploma and he reported that his current income before tax was approximately \$150,000 per annum. The family lived in a four-bedroom house in the outer suburbs of Sydney and had a mortgage on their house. They operated two cars and have what they described as a comfortable lifestyle.

Case study 4

DM was a 67 year-old woman living in a de facto relationship. She was married for 25 years but is now divorced after her former husband developed a serious addiction to illicit drugs. She was left virtually penniless with 7 children to support after the divorce and as

a result worked two jobs. *DM* was formerly a government employee and eventually accepted a payout when made redundant. With this money she purchased a unit, put some money into a savings account and some stocks and shares. The latter she claims represents what are her retirement savings. *DM* currently works four days a week to save some extra as she says she only has \$80,000 tucked away. Her partner with whom she has been living for the past year is retired but after a year of retirement, he is keen to return to work, at the very least on a part time basis. *DM* completed Year 12 at night school but did not progress beyond that point. She currently earns approximately \$28,000 per annum, working part time for one of her sons and has no dependants.

Case study 5

CL was a 52 year old married woman earning \$55,000 per annum as an accountant. She was also studying for a Bachelor's degree in Business Administration having previously earned an accountancy qualification through TAFE. *CL*, her husband and her two dependant children, lived in a single storey rented detached house as they were waiting to move into part of the duplex property they are having built.

Consequently the case studies illustrated a broad diversity across a range of factors:

Table 14 Case Study Profiles

	Age	Gender	Education	Income p.a.	No. Dependents	High or Low Involvement	High or Low FRPS
Case Study 1 - HT	18	F	School (Yr 11)	\$18,000	0	Low	Low
Case Study 2 - GR	37	M	School (Yr 9)	\$42,000	2	Low	Mid Range
Case Study 3 - ES	42	M	Professional (Assoc Dip)	\$150,000	3	High	High
Case Study 4 - DM	67	F	School (Yr 12)	\$28,000	0	High	High
Case Study 5 - CL	52	F	TAFE (Degree)	\$55,000	2	Upper Mid Range	High

Analysing case study evidence is especially difficult because strategies and techniques have not been well defined (Yin 2003). However, the case studies enable investigation of ‘how’ and ‘why’ various factors had an impact on the behaviour of the case study participants. Consequently, all five case study transcripts were analysed which invariably involved a degree of pattern matching in order to establish any common themes. Each individual case study transcript was then re-examined to establish if and where such themes emerged with them. Conclusions were then drawn relating these themes to the level of involvement illustrated by each case study subject.

Chapter 4

Findings & discussion

4.1 Introduction and chapter overview

This chapter presents the analysis of the quantitative data collected using the survey methodology and the qualitative data collected from the case studies. When conducting analysis of the quantitative data, significance of tests throughout are reported in the three ways suggested by Coolican (1990):

- ‘significant’: $0.05 > p > 0.01$
- ‘highly significant’: $0.01 > p > 0.001$
- ‘very highly significant’: $0.001 > p$

The first part of the chapter is related to the analysis of the survey information with the interpretation of the case studies contained in the second half.

The chapter is set out as follows:

Section 4.2 presents the findings pertinent to the independent variable, involvement and Hypothesis 1.

Section 4.3 discusses the findings relating to the impact of each of the moderating variables and provides the conclusions with regard to Hypotheses 2, 3, 4, 5 & 6.

Section 4.4 provides the richer description of how and why involvement impacts upon financial preparation for retirement as per the Research Question.

Section 4.5 presents an integrated discussion of these findings.

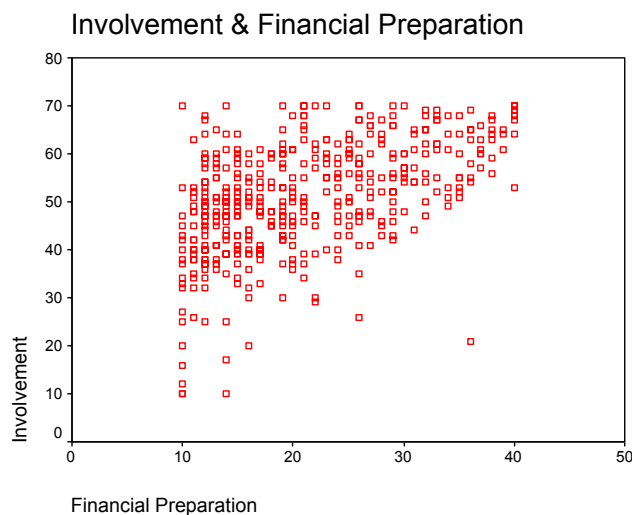
4.2 Hypothesis 1 - Involvement and financial preparation

Evidence from the survey was used to address *Hypothesis 1*, namely:

‘The level of involvement in the retirement-savings decision, as measured by the Zaichkowsky RPII, is positively related to the level financial preparation for retirement, as measured by the FPRS.’

To test this hypothesis the RPII and FPRS scores obtained from the survey respondents were compared. The relationship between the two sets of scores was demonstrated when all the scores were illustrated in a scatter chart.

Figure 6 Scatter Chart of Involvement and FPRS Scores



The scatter chart illustrated an outlier that was not surprising as the individual stood out when the information was initially entered into the model. This subject had reported an annual income almost 10 times the median of the sample. In order to determine if the outlier had any significance, casewise diagnostic analysis was conducted to establish whether there were any subject scores with residuals greater than (plus or minus) 3 standard deviations:

Table 15 Casewise Diagnostics

Casewise Diagnostics a				
Subject	Std Residual	Fin Prep	Predicted Value	Residual
181	3.696	36	9.82	26.18

a. Dependent Variable: Financial Preparation

The analysis revealed that the subject that had been identified as an outlier in the scatter chart was the only outlier with an absolute standardised residual greater than 3. It was therefore decided to conduct the regression analysis with the identified outlier filtered out. This was tested via a bivariate one-tailed Pearson correlation. The results revealed a very highly significant correlation between involvement and financial preparation ($r = 0.531$, $n = 462$, $p < 0.0005$, one-tailed), i.e. as the level of involvement increased, so did the level of financial preparation undertaken, providing strong supportive evidence for *Hypothesis 1*. The information was then analysed by use of a simultaneous linear regression model:

Table 16 Initial Regression Analysis Results

Descriptive Statistics			
	Mean	Std. Deviation	N
FPRS	20.94	8.23	462
RPII	50.97	11.32	462

Model Summary b			
R	R Square	Adjusted R Square	Std Error of the Estimate
0.531a	0.282	0.281	6.98

a. Predictors: (Constant), Involvement

b. Dependent Variable: Financial Preparation

However, in order to produce results that were as realistic a representation of the general population as possible, it was decided that tests should be conducted to determine if the relationship between involvement and financial preparation illustrated above was robust enough to be significant even when the outlier was included. Consequently the results from the entire sample were tested via a bivariate one-tailed Pearson correlation. The results revealed a very highly significant correlation between involvement and financial preparation ($r = 0.515$, $n = 463$, $p < 0.0005$, one-tailed). For the reasons outlined in

Chapter 3 non parametric correlations analysis was also conducted producing the following results, Kendall's Tau = 0.377; $n = 463$; $p < 0.0005$, Spearman's rho = 0.524; $n = 463$ $p < 0.0005$ ¹⁹.

As these results all indicated a very highly significant correlation between involvement and financial preparation, the information was then analysed by use of a simultaneous linear regression model. The result demonstrated a very highly significant relationship illustrating that even with the outlier, more than 26% of the variance in FPRS could be explained by involvement. Consequently, all subsequent analysis included the outlier.

Table 17 Final Regression Analysis Results

Descriptive Statistics				Model Summary <i>b</i>			
	Mean	Std. Deviation	N	R	R Square	Adjusted R Square	Std Error of the Estimate
FPRS	20.98	8.25	463	0.515 ^a	0.265	0.264	7.083
RPII	50.91	11.40	463				

a. Predictors: (Constant), Involvement
b. Dependent Variable: Financial Preparation

This is the first time that the relationship between involvement and financial preparation for retirement has been demonstrated. Given that the sample was found to be statistically similar to the Australian population (as outlined in Section 3.5.2) and was therefore diverse in terms of age, education, income, number of dependants and gender, the results are potentially very important. These results suggest that the use of the involvement construct can provide the opportunity to encourage greater levels of financial preparation for retirement, potentially alleviating some of the economic strains relating to ageing populations outlined in Chapter 2.

¹⁹ Given that these two tests have different theoretical foundations it is not surprising that they produce different values (Kinneer & Gray, 2000).

Therefore the results of this analysis supported Hypothesis 1, i.e. that, the level of involvement in the retirement-savings decision, as measured by the Zaichkowsky RPII, is positively related to the level financial preparation for retirement, as measured by the FPRS. Consequently Null Hypothesis 1 was rejected.

4.3 The impact of the moderating variables

The impact of each of the five moderating variables is discussed in the following sections:

4.3.1 Hypothesis 2 - Education

Hypothesis 2 proposed that the affect of involvement on financial preparation for retirement is moderated by the level of education such that the lower the level of education completed, the less the affect of involvement. A Kruskal Wallis non parametric ANOVA was conducted to establish whether there was any significant difference between the involvement and FPRS scores obtained by the various education groups.

Table 18 Kruskal Wallis Analysis of Education Groups

Kruskal-Wallis Test			
	Education	N	Mean Rank
Involvement	School	303	222.191
	TAFE	43	254.690
	Professional	20	276.100
	Undergraduate	85	234.220
	Postgraduate	12	309.460
	Total	463	
Financial Preparation	School	303	224.930
	TAFE	43	230.690
	Professional	20	260.300
	Undergraduate	85	252.180
	Postgraduate	12	225.080
	Total	463	

Test Statistics <i>a. b.</i>		
	Involvement	Financial Preparation
Chi-Square	9.095	3.719
df	4	4
Asymp. Sig.	0.059	0.445

a. Kruskal Wallis Test

b. Grouping Variable: Education

The results indicated no significant difference between the different results for the different educational groups in either involvement or financial preparation. Consequently Null Hypothesis 2 cannot be rejected in this instance, i.e. that the level of education completed by the individual does not significantly moderate the influence of involvement on financial preparation for retirement.

4.3.2 Hypothesis 3 - Age

Hypothesis 3 stated that the affect of involvement on financial preparation for retirement is moderated by the age of the individual, i.e. the younger the individual, the less the affect of involvement. The sample consisted of a wide age range with 461 subjects aged between 16 and 67 as only two subjects declined to provide their age. A Kruskal Wallis non parametric ANOVA was conducted to establish whether there was any significant difference between the involvement and FPRS scores obtained by people of different ages.

Table 19 Kruskal Wallis Analysis of Age

Test Statistics <i>a. b.</i>		
	Involvement	Financial Preparation
Chi-Square	64.270	109.501
df	50	50
Asymp. Sig.	0.084	0.000

a. Kruskal Wallis Test

b. Grouping Variable: Age

The results indicated that involvement scores did not differ significantly ($p > 0.05$). However, the scores for financial preparation did illustrate a very highly significant difference ($p < 0.0005$). Analysis of CoVariance was therefore conducted to establish whether the age of the individual moderated the affects of involvement on financial preparation:

Table 20 CoVariance Analysis for Age

Tests of Between-Subjects Effects								
Dependent Variable: Financial Preparation								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Noncent. Parameter	Observed Power
Corrected Model	14029.662 ^b	50	280.593	6.629	0.000	0.446	331.452	1.000
Intercept	4794.138	1	4794.138	113.262	0.000	0.216	113.262	1.000
AGE	2719.730	1	2719.730	64.254	0.000	0.135	64.254	1.000
Involvement	10118.375	49	206.497	4.879	0.000	0.367	239.048	1.000
Error	17439.077	412	42.328					
Total	235190.000	463						
Corrected Total	31468.739	462						
a. Computed using alpha = .05		b. R Squared = .446 (Adjusted R Squared = .379)						

The results illustrate a very highly significant affect ($p < 0.0005$) indicating that 13.5% of the variance in the FPRS scores is due to age. These results provided support for Hypothesis 3, namely that the affect of involvement on financial preparation for retirement is moderated by the age of the individual, i.e. the younger the individual the less the affect of involvement. Null Hypothesis 3 is therefore rejected. The results also demonstrated that after controlling for age, the relationship between involvement in the personal retirement-savings decision and financial preparation for retirement was very highly significant (adjusted r square 0.367, $p < 0.0005$).

4.3.3 Hypothesis 4 - Income

The subjects recorded their level of annual pre-tax income resulting in a wide range of incomes being recorded. A Kruskal Wallis non parametric ANOVA was conducted to establish whether there was any significant difference between the involvement and FPRS scores obtained by people with different income levels.

Table 21 Kruskal Wallis Analysis of Income Groups

Test Statistics <i>a. b.</i>		
	Involvement	Financial Preparation
Chi-Square	110.978	136.967
df	87	87
Asymp. Sig.	0.042	0.001

a. Kruskal Wallis Test

b. Grouping Variable: Income

The results indicated that there was a significant difference between the involvement scores of those with differing levels of income ($p < 0.05$) and a highly significant difference between their financial preparation scores ($p < 0.001$). Analysis of CoVariance was conducted to establish whether income had a moderating affect on the influence of involvement on financial preparation.

Table 22 CoVariance Analysis for Income

Tests of Between-Subjects Effects								
Dependent Variable: Financial Preparation								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Noncent. Parameter	Observed Power
Corrected Model	12773.402 ^b	50	255.468	5.630	0.000	0.406	281.495	1.000
Intercept	32326.617	1	32326.617	712.400	0.000	0.634	712.400	1.000
INCOME	1463.470	1	1463.470	32.251	0.000	0.073	32.251	1.000
Involvement	9745.634	49	198.890	4.383	0.000	0.343	214.770	1.000
Error	18695.336	412	45.034					
Total	235190.000	463						
Corrected Total	31468.739	462						
a. Computed using alpha = .05		b. R Squared = .406 (Adjusted R Squared = .334)						

The results illustrated a very highly significant affect ($p < 0.0005$) indicating that 7.3% of the variance in the FPRS scores was due to income. These results provided support for Hypothesis 4, namely that the affect of involvement on financial preparation for retirement is moderated by the income of the individual such that the lower the level of income, the less the affect of involvement. Null Hypothesis 4 is therefore rejected. The results also demonstrated that after controlling for income, the relationship between

involvement in the personal retirement-savings decision and financial preparation for retirement was very highly significant (adjusted r square 0.334, $p < 0.0005$).

4.3.4 Hypothesis 5 – Number of dependants

The number of dependants each subject is responsible for was recorded in the survey. The question stated that it referred to dependants of all ages and so incorporated spouses as well as children or elderly parents etc. Analysis was conducted to establish whether there was a significant difference in the involvement scores and also the financial preparation scores for people of different ages.

Table 23 Kruskal Wallis Analysis of Number of Dependants Groups

Test Statistics <i>a. b.</i>		
	Involvement	Fin Prep
Chi-Square	2.555	3.958
df	6	6
Asymp. Sig.	0.862	0.682

a. Kruskal Wallis Test

b. Grouping Variable: Dependents

The results illustrated no significant difference between either the involvement scores obtained by the people with different numbers of dependants, or their financial preparation scores. Consequently Null Hypothesis 5 cannot be rejected in this instance, i.e. that the number of dependants a person is responsible for does not significantly moderate the influence of involvement on financial preparation for retirement.

4.3.5 Hypothesis 6 - Gender

The gender of each subject was recorded in the survey revealing that 55% of the respondents were female. However, women were under-represented amongst those that gained a high involvement score (i.e. 48% of this group), and over-represented amongst those who gained a low involvement score (i.e. 60% of this group). Whilst the

composition of the FPRS scores was not as pronounced, it did suggest that women were under represented in the high financial preparation group (50% women) and over represented in the low financial preparation group (59% women). A Mann-Whitney U test was conducted to establish if these differences were statistically significant.

Table 24 Mann Whitney Analysis of Gender Groups

Mann - Whitney Test				
	Gender	N	Mean Rank	Sum of Ranks
Involvement	Male	210	241.77	50771.0
	Female	253	223.89	56645.0
	Total	463		
Financial Preparation	Male	210	247.51	51976.5
	Female	253	219.13	55439.5
	Total	463		

Test Statistics a.		
	Involvement	Financial Preparation
Mann-Whitney U	24514.0	23308.5
Wilcoxon W	56645.0	55439.5
Z	-1.432	-2.275
Asymp. Sig. (2-tailed)	0.152	0.023

a. Grouping Variable: Gender

The results indicated that there was no significant difference for involvement ($p > 0.05$) but that there was a significant difference for financial preparation ($p < 0.05$). Whilst this indicated that overall, females undertook lower levels of financial preparation, it did not answer the question of whether, with a given level of involvement, females undertake a lower level of financial preparation than their male counterparts.

Correlational analysis using a bivariate one-tailed Pearson correlation was utilised to explore the relationship for both gender groups along with Kendall's tau and Spearman's rho (as detailed in Chapter 3). The results were as follows:

Table 25 Correlation Analysis of Gender Groups

	Male	Female
Pearson's Correlation	0.473	0.548
Kendall's Tau	0.346	0.399
Spearman's rho	0.487	0.549
n	210	253

All results were very highly significant ($p < 0.0005$) and indicated that, contrary to expectations, the relationship between involvement and financial preparation for retirement was stronger in females than males. Regression analysis was then conducted on the two gender groups.

Table 26 Regression Analysis for Gender Groups

Gender									
	Descriptive Statistics				Model Summary b				
Gender		Mean	Std. Deviation	N	R	R Square	Adjusted R Square	Std Error of the Estimate	Beta Significance
Males	FPRS	51.71	11.35	210	.473a	0.224	0.220	7.550	0.000
	RPII	21.98	8.55	210					
Females	FPRS	50.25	11.41	253	.548a	0.300	0.297	6.64	0.000
	RPII	20.14	7.92	253					
a. Predictors: (Constant), Involvement b. Dependent Variable: Financial Preparation									

The regression analysis indicated that there was a stronger relationship between involvement and financial preparation amongst females than males, i.e. whilst 22% of the variance in FPRS scores can be explained by involvement in men, 29% of the variance in FPRS scores can be explained by involvement in women. As there were notable differences between males and females, analysis of covariance was conducted to establish whether gender was a significant moderator of involvement.

Table 27 CoVariance Analysis for Gender

Tests of Between-Subjects Effects								
Dependent Variable: Financial Preparation								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared	Noncent. Parameter	Observed Power
Corrected Model	11514.541	50	230.291	4.755	0.000	0.366	237.744	1.000
Intercept	17462.204	1	17462.204	360.547	0.000	0.467	360.547	1.000
GENDER	213.762	1	213.762	4.414	0.036	0.011	4.414	0.554
Involvement	11126.603	49	227.074	4.688	0.000	0.358	229.734	1.000
Error	19954.198	412	48.433					
Total	235190.000	463						
Corrected Total	31468.739	462						
a. Computed using alpha = .05		b. R Squared = .366 (Adjusted R Squared = .289)						

The results illustrated that gender significantly moderates the affect of involvement on financial preparation for retirement ($p < 0.05$), providing support for the first part of Hypothesis 6, meaning that Null Hypothesis 6 must be rejected. However, the second part of Hypothesis 6 predicted that males would perform better than females, the opposite of what occurred. Consequently the second part of the Hypothesis is not supported. The results also demonstrated that after controlling for gender, the relationship between involvement in the personal retirement-savings decision and financial preparation was significant (adjusted r^2 0.289, $p < 0.05$).

4.3.6 Discussion of the survey results

The six Hypotheses produced a mixed set of results. The analysis indicated that there was a significant positive relationship between involvement and financial preparation, thereby providing support for Hypothesis 1. The relationship was even robust enough to withstand the disruptive influence of the outlier, suggesting that it could be utilised to modify financial preparation behaviour across a wide diversity of people. Given the problems of ageing population and the lack of financial preparation evidenced around the world (as illustrated in Chapter 2), this is potentially a highly significant finding. The involvement construct provides the opportunity to develop new and potentially more affective messages to enable people to meaningfully grasp the responsibility many now have to prepare themselves for retirement.

Exploring these results further, preliminary analysis was conducted to determine if there was a significant relationship between involvement and the various behaviours that comprised the FPRS. Given the correlation between the various aspects of the FPRS it was not surprising that the results indicated that all aspects of behaviour measured by the

FPRS were significantly correlated with involvement. However, further research should be conducted on whether increased involvement can be a stimulus for specific types of financial preparation behaviour and moreover, whether triggering one type of behaviour will lead to others. Unfortunately such research is beyond the scope of this investigation.

The results did not provide support for Hypothesis 2 and Hypothesis 5, i.e. it did not provide evidence that the affects of involvement was moderated by either the education of the individual or the number of dependants they support. Consequently in both instances the Null Hypotheses could not be rejected.

The results did provid support for Hypothesis 3, i.e. that the affects of involvement are moderated by the age of the individual. This finding is consistent with previous research that found a primary issue with regards financial preparation for retirement is the expected time horizon (Waggle and Englis 2000), therefore the further an individual is away from retirement, the greater the time horizon. However, the sample in this research provided a range of desired retirement ages such that an individual aged 40 could have a shorter time horizon than another person aged 50. Despite this, involvement was found to be a significant factor in terms of financial preparation for retirement, albeit less so for younger subjects than older. Consequently, encouraging involvement can lead to higher levels of financial preparation across all ages although greater emphasis may need to be given to younger individuals in order to achieve the same level of financial preparation.

The results also provided support for Hypothesis 4, namely that the affects of involvement are moderated by the income of the individual. Previous research relating to income and financial preparation have produced mixed results (Engen et al. 2001) although low income workers are more likely to be liquidity constrained (Munnell et al. 2001) and

therefore be more attracted to what any social safety net may offer. However, these results revealed that involvement is still significant, albeit less so for lower income individuals. Consequently, the task moving forward should be to encourage increased involvement, especially for low-income individuals.

The results for Hypothesis 6 were mixed. Whilst the results indicated that gender does moderate the affects of involvement on financial preparation, it did not provide support for the proposed directionality. On the contrary it illustrated that, when involved, women undertake greater levels of financial preparation than men. This in itself is a notable finding as the literature discussion in Chapter 2 provided support for Hypothesis 6, i.e. prior research has shown that women tend to undertake less preparation for retirement than men. The results from this study however imply that for a given level of involvement, women will undertake more financial preparation than men. This was explored by considering whether there was any significant difference between the variance in financial preparation that could be explained by involvement, when comparing the moderating affects of education, age, income and number of dependants, for the both males and females. By way of example, when considering those who completed their education at the undergraduate level, 31% of the variance in financial preparation could be explained by involvement in women, compared to 22% in men. When examining the amount of financial preparation undertaken by those aged 50 and over, approximately 37% of the variance could be explained by involvement in women compared to 24% in men. When considering income, taking an arbitrary income figure of up to \$50,000, 30% of the variance in financial preparation could be explained by involvement in women, compared to 19% in men. Finally, those who had a maximum of two dependants, 31% of the variance in financial preparation of women could be explained by involvement, compared to 21% in men. In any regard these results add weight to the assertion that

when women are involved in their personal retirement savings decision, they are likely to undertake greater levels of financial preparation than their male counterparts.

4.4 Research Question – How involvement impacts upon an individual's financial preparation for retirement

When the case study transcripts of the interviews were examined a pattern became apparent with a higher prevalence of some themes in subjects who produced a high involvement scores, i.e. control, awareness and linkage. In contrast, other themes were more prevalent in those case study subjects who had produced a low involvement score, i.e. dependency and deferment. The themes of personalisation and responsibility were common to both high and low involvement subjects, although the former appeared to better able to translate these themes into action.

A number of core themes were identified across the case study subjects, namely:

- Personalisation:** Relating to the issues on a personal level
- Responsibility:** Acceptance of the responsibility to prepare financially for retirement.
- Dependency:** Not wanting to be dependant upon others in retirement.
- Control:** The desire to maintain control over their lives in retirement.
- Awareness:** Understanding the need to prepare financially for retirement.
- Linkage:** Acceptance of the link between current actions and future life in retirement.
- Deferment:** The tendency to put off action until a later date.

Each of the themes is discussed in turn:

Personalisation - Relating to the issues on a personal level

In line with the definition of involvement illustrated in Chapter 2, a number of the subjects referred to personal experiences relating to close family and/or friends. When the subjects were able to relate to the issue on a personal level they stressed the importance and relevance of that issue, often citing examples of the plight of relatives and/or friends struggling on limited retirement incomes. Such an approach was emphasised when they felt the issue related directly to their standard of living now and in the future. Whilst all subjects quoting such experiences used them to reinforce their opinions, the willingness to actually carry this through into action was varied. Those who had produced high involvement scores appeared to use such experiences to reinforce their desire not to be in such a position in the future. Those who produced low involvement scores on the other indicated a reluctance to experience such things first hand but appeared unwilling and/or unable to do very much to prevent it.

HT for example quoted the experience of her parents and indicated that she has to provide them with some degree of financial support (without specifying exactly what that was) stating 'I don't want to be stuck living off \$50 a week'. HT used this as a justification for continuing to contribute above the minimum to her superannuation²⁰. GR had a low overall Zaichkowsky RPII score but where the individual question raised issues that he could relate to on a personal level he rated himself near the maximum. In this regard GR constantly referred to hearsay evidence and personal experiences. Whilst such anecdotes were about money and financial security, in most instances they were only remotely related to retirement savings, if at all. Consequently, such experiences did not appear to actually lead to action. Both HT and GR illustrated low levels of involvement.

²⁰ As she later revealed, this was not the original reason for the extra contributions.

ES in contrast referred to the experiences of his mother who is living on the state-provided age pension and stated that ‘knowing how my mother lives today on the pension, I cannot see myself living at that sort of comfort level’. Such experiences appeared to have focused his attention on the needs of himself and his family and his determination to take action illustrated by his comment ‘I know I have got to do something’. For *DM*, her personal experiences were a great motivator. She stated repeatedly that she was more than a little afraid of not having enough money in retirement having experienced poverty once before. She also stated that she did not want to be like her friend (retired) who ‘blew all her money in 18 months and now has to rely on the aged pension’ adding ‘I do not want to be like that’. *DM* referred to her experiences repeatedly during the interview, stressing her fear resulting from her time of poverty and her determination to ensure that it would not be repeated stating ‘it has to be what I do or nothing’. The approach of the final subject (*CL*) was also guided by a number of personal factors. The guaranteed lifetime indexed pension that her husband would receive upon his retirement impacted upon her decision-making. She was very focussed on her future personal needs and the experiences gained through her studies (in accountancy and business) guided her attitude towards the investing of any money for retirement.

Responsibility - Acceptance of the responsibility to prepare financially for retirement

All the subjects indicated to some degree that they felt it was their responsibility to prepare themselves financially for retirement. However, there appeared to be a difference between those with low involvement scores and those with high scores. The former, whilst tacitly accepting it was their responsibility, did not appear willing to carry this through to action, whilst those with higher levels of involvement gave the impression that this acceptance of responsibility was leading directly to action to prepare for their retirement. *HT* for example, when asked to expand upon her answer as to why she felt preparing financially for

retirement was needed, simply answered that she felt she had to take responsibility to do things herself. She later stated that ‘I need to have some financial support when I get old or retire’ explaining that she felt ‘you can’t just expect it all to happen’. Apart from paying an extra \$4 a week into her superannuation her pay, she did not carry this through into action. Moreover, the rationale behind the extra payment was not the result of detailed consideration of her future life. The reason emerged when she revealed that receipt of the survey had prompted her to think about her actions. She stated that she had ‘never thought about it’ before, implying that her decision to make additional contributions to her super fund was not based upon any rationale concerning her eventual retirement or the plight of her parents. This was revealed when she explained, ‘How I came to pay a bit extra was because my wage came to an odd figure every week. My boss said “Do you want to put some money into super” and I said “Yes, round it off and pay the extra \$4.00 into the super fund so then I get the even figure in my bank account”. That’s because I am so organised’. Consequently, only after the fact (upon receipt of the survey) did she really think about the long-term implications of her action.

In a similar manner, *GR* stated that he felt it was not possible to rely on the government to provide ‘pensions in the future’ and argued that he could not rely on anybody else for a pension and so had to look after himself. However, at no stage did he indicate exactly how he intended to do this. Both *HT* and *GR* produced low involvement scores

ES also stated that he felt it was clear the government was not going to provide for him and argued that if he wanted financial security he needed to provide it himself. However, this attitude was carried forward into other answers where he explained his approach to turn such views into action. This was most clearly demonstrated by *DM*. when she stated ‘It is important as it is my future’ arguing that she had to look out in terms of what she was doing

for the rest of her life. This was further emphasised when she stated 'It has to be what I do or nothing' reiterating her fear of not having enough money. She felt that if a person did not take care of such things (as preparing financially for retirement) they would have problems in the future stating 'I can't rely on anyone else to do it for me. I must decide what to do'. This attitude was consistent throughout her answers and was used to both justify and reinforce her actions to prepare financially for retirement. Both *ES* and *DM* produced high involvement scores.

CL produced a score on the Zaichkowsky RPII that was below what can be classified as a high involvement, but was nevertheless in the upper levels of the mid range. She indicated that she felt preparing for retirement was important 'because it is unlikely we will get anything from the government' suggesting that in her opinion, the government would not be able to provide adequately for them. She was very much aware of what she and her husband would get from their various retirement saving schemes, arguing that 'What he gets [her husband] and basically anything I have got will be it'. She reinforced this attitude with the view that she felt she had got to look after her own financial future as 'you have got to plan, you have got to look at where you are, consequently, I am going to plan for my retirement, it is one of those essential things a person has to do'.

Dependency - Not wanting to be dependant upon others in retirement

This was a theme that appeared to emerge with the two subjects who had produced low involvement scores. *HT* for example stated four times in response to different questions that she did not 'want to live off other people' and argued that she did not want 'to be relying on my children'. This last point seemed to be in reference to the fact that she had to provide some degree of financial support to her parents. However, she did not provide any indication as to action that she was considering that would lead to this outcome. *GR* simply

argued many times that a person needs to be prepared 'so you are not reliant on anyone else'. However, at no stage did he reveal any thoughts as to how he intended to produce this outcome.

Control - The desire to maintain control over their lives in retirement

This was frequently expressed by the three subjects that produced the highest scores on the Zaichkowsky RPII. *ES* for example stated that 'I want financial security for both me and my family'. Whilst he too felt unable to rely on the government for support he expressed it differently stating that if he were to rely on the government he did not feel he would be able to live his life at a level he desired. This reluctance to rely on the government was illustrated again when responding to another question. *ES* argued that he 'could not rely on the government to provide an adequate income in retirement' reinforcing this view with 'I want that control'.

The past experiences of *DM* provided her with very strong motivation, i.e. 'I have always worked hard and had some independence and I want to stay that way. Without savings how can I do that?' Fear was a common theme with *DM* and a powerful motivator, illustrated by her continued reference to the fact that she was 'somewhat afraid that I will not have enough money. She argued that 'if I want to keep a standard of living that I want, I need to have some money to do that'. Further she stated 'I want some independence and to be able to have some control over my life'. She put this succinctly when she said 'because I want to have enough money to be able to live the way I want to, and if I don't have this [money] I cannot'.

CL revealed a slightly different approach, but still indicated a desire to maintain some control over her life in retirement when she said ‘If you are going to want to be looked after and if you want to travel or do anything then you need to look after such things as preparing financially for retirement’. She argued that they [she and her husband] wished to be independant but also wanted to leave their children something [when they died] but not at the cost of being destitute. She demonstrated a desire to be able to have the ability to decide upon her own future and did not want to be “penny pinching until my dying days”.

Awareness – Understanding the need to prepare financially for retirement

The subjects with the low involvement scores illustrated little awareness in their comments. By way of example, whilst stating that preparing for retirement was relevant and important (scoring herself at almost the maximum on these factors), *HT* did not make any comment that demonstrated she was aware of the need to do more to prepare for her retirement, other than contribute to her retirement savings fund. However, this should be put in the context of the young age of *HT* who was only 18 and who indicate that she felt retirement was a long way away. *GR* on the other hand was 37 and illustrated some degree of awareness when he suggested he thought preparing for retirement was relevant stating that ‘income would be needed’. However, whilst suggesting that preparing for retirement was ‘something that needed to be done’, he stated that it was ‘not necessarily something that actually got done in good time’.

The subjects with the higher involvement scores indicated higher levels of awareness, and were usually more directed in their comments. *ES* stated that ‘preparing financially for retirement is ‘a financial imperative’ arguing that ‘if you want to be self-funding it has to be done’. He revealed his rationale by commenting that he felt he could potentially live half his life in retirement and therefore ‘I need to be self-funded to provide some security’. *DM*

was very focused stating that ‘when there is no regular pay cheque it focuses your attention’, reinforcing this view with ‘it means a lot to me as it is my life, without money I cannot survive’. She further demonstrated her awareness of the need to prepare by admitting on a number of occasions to feeling ‘a little frightened at the prospect of not having enough money to live on’. *CL* argued that ‘one needed to prepare for when you do not have a regular income’ stating that she felt it can be all too late when the time comes to retire’. She went on to add that ‘thinking ahead, knowing that when it comes to retirement you’ve got to have money behind you’ reiterating that she felt that ‘people needed to look after themselves’.

Linkage – Acceptance of the link between current actions and future life in retirement

This was another theme that was illustrated by the case study subjects with the highest involvement scores. Those with low scores espoused a level of understanding in terms of suggesting some degree of responsibility. However they did not overtly indicate an understanding of the link between current financial activities and their future life in retirement. Those with higher involvement scores on the other hand indicated such an understanding. *ES* argued that preparing financially for retirement was important as ‘that’s what my livelihood will depend on’ stating that it was part of his ‘wealth creation strategy’. *DM* revealed that she was aiming to work for a few more years as the money she was saving was the money she needed to live on. She stated that she had a little invested but ‘it is not much so I am very aware that I must be careful’. She reinforced this by indicating ‘I know I have to do something and it scares me. I am a little frightened at not having enough money to live on’. She added ‘I have no other money to use. I cannot rely on anyone else. It has to be what I do or nothing’. She returned to this theme constantly stating repeatedly that she did not have much money and therefore ‘was careful with what I have and try to save more each year’. *CL* continued this theme by arguing that ‘what we get is what we have and that

will be it, we will have to survive on that alone” stating that she and her husband felt they ‘needed to prepare for when they did not have a regular income’.

Deferment - The tendency to put off action until a later date

This theme was illustrated by the two subjects with low involvement scores but not by the subjects with the highest scores. *HT* rated herself almost at the maximum when asked if she thought preparing financially for retirement was important stating that she felt it was important but argued that ‘it’s not exactly 100% important but it’s up there’. *HT* explained that she reached this assessment because she felt she had ‘more important immediate priorities’, e.g. ‘I am more worried about paying the rent each week’. *HT* also stated that she felt the issue was ‘not really interesting but it’s not something I would class as boring either, as I have to think about it sometime’. When probed as to how she came to this assessment *HT* took her time and then stated that she compared the issue of preparing for retirement to her everyday life, which was ‘full of more immediate priorities’. This was reinforced when she argued that ‘some day I am going to have to deal with it’. *HT* indicated that she did not consider preparing financially for retirement very appealing, ‘because it’s about money. She stated that the her rationale was that she ‘needs money for other things’, suggesting that whilst she thought that saving towards her retirement was important, she felt her day-to-day issues and responsibilities overrode such priorities.

When asked whether he considered the issue boring or interesting, *GR* rated himself just above the middle, ‘a little bit lower than interesting’ stating that ‘it is something that is so far away’. He explained, ‘when you are young, you are fully concentrating on working and your family, that’s the main priority’. *GR* went on to add that ‘I am not that young. I’m 37, but I am not that old either, so I have other priorities’. He explained his answer further by

stating that ‘If you were 55 and looking to finish up at work, then it would be more important’.

When asked if he thought it was exciting or unexciting, *GR* gave himself the lowest rating, implying that it was not for people of his age, arguing that ‘it’s just mainly more for that [older] age group’. He explained why he had the view that it was not exciting. ‘It’s not really an exciting thing to talk about or get interested in’. *GR* argued that ‘It is in the back of your mind, like you need to do it but you always think, the next year or the year after and then it’s too late’. He also suggested that more immediate priorities had a higher profile indicating that he was at the age where he was ‘thinking about it, but you are at that age where your not really being pushed into doing anything’ suggesting that it was not a major priority for him at this point. When asked how he came to formulate this view he replied that it was ‘something to be aware of but it’s not as if you have got to say, well right I’ve got to go out and start doing that tomorrow’.

Conclusion

Research Question 1 asked

How and why does involvement impact upon an individual’s financial preparation for retirement?

The analysis of the responses of the five case study subjects suggests the following conclusions:

Personal relevance

The subjects are able to relate on a personal level to some of the relating to the personal retirement savings decision, especially where close relatives and/or friends providing living examples. However, whilst expressing a desire to avoid such experiences for themselves, those with low levels of involvement appeared unwilling/unable to convert this desire into

action. Those with high levels of involvement on the other hand appeared to use such experiences as a form of motivation for action.

Responsibility, the acceptance of the responsibility to prepare financially for retirement

All subjects demonstrated that they felt a degree of responsibility to prepare financially for their retirement. However, those with low levels of involvement appeared unwilling to convert this into action. In contrast, those with high levels of involvement indicated that this responsibility translated directly into action to prepare financially for their retirement.

Dependency, not wanting to be dependant upon others in retirement

This may be a variation on the theme of control but appeared to be expressed in a passive manner in contrast to the control theme that implied action. In this regard, dependency was expressed by those with low levels of involvement, but with no real indication of how they would avoid such a situation.

Control, the desire to maintain control over their lives in retirement

This theme was expressed by the subjects with the highest levels of involvement, and at times quite forcibly. They indicated a strong desire to be the ones making the decisions in connection with their retirement, including when they retired, i.e. to continue working as a matter of choice as opposed having to out of economic necessity.

Awareness, understanding the need to prepare financially for retirement

The subjects with low levels of involvement indicated relatively low levels of awareness of the need to take affirmative action. In both instances they appeared content do little more than the minimum required by the mandatory system. Those with higher levels of involvement on the other hand gave the strong impression of awareness of the need to do more than just the minimum and were all actively taking action of one form or another.

Linkage, the acceptance of the link between current actions and future life in retirement

The subjects with the highest levels of involvement indicated a very strong link between current actions and future consequences in terms of their retirement.

Deferment, the tendency to put off action until a later date

This was a theme that was clearly evident amongst the low involvement subjects. In contrast, the high involvement subjects all gave examples of the need to take action and were actively doing so.

4.5 Integrating the results

The mixed method approach enables the results from the two types of investigation to be integrated, with the qualitative results suggesting potential reasons for the behaviour demonstrated in the quantitative research.

The first survey finding was the very highly significant relationship between involvement and financial preparation for retirement. The themes elicited from the case study subjects suggested that those who are involved are more likely to react as can relate to the relevant issues on a personal level and appear to have strong motivation to turn such attitudes into affective action. This was consistent with the findings of Lusardi (2001) who found that people whose parents had suffered health problems or who had spent time in nursing homes, were more likely to consider preparing for retirement. The case study subjects indicated that one of their priorities was the ability to retain an element of control over their lives in retirement therefore they appeared to be aware of the need to act accordingly and as a result were cognisant of the link between their current actions and their future consequences. Integrating the results from both the qualitative and quantitative research suggests that, increasing involvement by enabling individuals to relate to the issues on a personal level and by illustrating ways of maintaining control over their lives, can lead to increased

financial preparation behaviour. Further research is required to establish if the themes outlined in Section 4.4 above lead to the types of financial preparation behaviour illustrated by those case study subjects illustrating high levels of involvement, e.g. the collection of relevant information, attending seminars, discussing the issues with others, consideration of when to retire, its potential duration and how much money is likely to be needed to fund the type of lifestyle they desire.

In terms of the moderating variables, the number of subjects in the case study was insufficient to provide any guidance as to why some variables moderated the impact of involvement and others did not. By way of example, whilst the younger subjects had lower levels of involvement than the older subjects, higher income did not automatically lead increased involvement and there was no clear pattern in terms of gender. Consequently, further research would be required to establish if any of the themes illustrated in Section 4.4 are affected by the variables found to moderate involvement in the quantitative study.

Chapter 5

Conclusions

5.1 Introduction and chapter overview

Chapter 5 brings together the findings from both the quantitative and qualitative findings and considers them against the relevant literature and draws key conclusions. Consequently the Chapter is set out as follows:

Section 5.2 considers the practical implications of the affect of involvement on financial preparation. In particular it considers the decision process undertaken by high involvement individuals in contrast to that undergone by low involvement individuals when considering financial preparation for retirement.

Section 5.3 considers the findings against the relevant literature.

Section 5.4 overviews the results regarding the moderating variables, particularly the finding relating to gender.

Section 5.5 illustrates a revised model of personal financial preparation for retirement based upon the findings of this study

Section 5.6 considers the potential consequences of the underlying themes of involvement.

Section 5.7 discusses suggestions for future research. .

Section 5.8 provides concluding remarks.

5.2 Practical implications of involvement's affect on financial preparation for retirement

The findings of this research supported *Hypothesis 1*, namely that there is a strong positive relationship between involvement and financial preparation. The results illustrated a very highly significant correlation between the level of involvement and the amount of financial preparation undertaken. This suggested that as involvement levels increase, so will the amount of financial preparation undertaken. The regression analysis demonstrated that almost 30% of the variance in financial preparation could be explained by involvement. The analysis indicated that the relationship was robust as even with the inclusion of the outlier, who had an income 10 times the sample median (and almost 10 times the national average). These results indicated that more than 26% of the variation in financial preparation could be explained by involvement. The results also provided an indication that particular types of financial preparation behaviour may follow from increased involvement.

To put this in context, in a mandatory system it is relatively easy for the individual to have little involvement in the retirement-savings decision, as by definition, retirement saving will occur regardless of their involvement. In an ideal world such a situation would not be problem. However, as outlined in Chapter 2, contribution levels may not match lifestyle expectations (IFSA 2003) and investment decisions are not always optimal (Bernheim 1998). These results indicate that the level of involvement can potentially make a significant difference to the amount of financial preparation undertaken and therefore may help address these issues.

What this means in practice can be determined from the involvement literature reviewed in Chapter 2, namely that involvement revolves around personal relevance (Aldlaigan and Buttle 2001; Poiesz and de Bont 1995) and perceived importance (Engel et al. 1995; Kapferer and Laurent 1993; Zaichkowsky 1985a). This implies that individuals must perceive that preparing financially for retirement is something that is relevant and important to them. This suggests that for messages about retirement savings to be affective, they should contain elements that individuals are likely to perceive as personally relevant and/or important to them. In other words, they must be able to identify with the issues on a personal level. However, the case studies suggest that such identification is in itself not enough to trigger financial preparation behaviour. The individual needs to translate this personalisation into motivation for taking action.

Emphasising the need for people to take individual responsibility for preparing financially for retirement is another area that can form part of any such message. However, the case study findings illustrated that indicating personal responsibility, the difference between those with high levels of involvement and those with low levels, appears to be the willingness to translate that personal responsibility into action. As one of the case study subjects illustrated (*GR*), as far as he was concerned, he was not contributing to his retirement savings fund, it was all from his employer. Consequently, whilst enunciating the line of taking of responsibility for preparing financially for his retirement, in his mind, he did not need to take action at this time as it was being done for him. The high involvement subjects on the other hand demonstrated their understanding of personal responsibility by illustrating what action they had taken and were planning to take, in order to provide for their own future.

Awareness of the need for individual action was another area of differentiation indicated by the case studies. The high involvement subjects indicated such awareness and used that awareness as a call to action. The low involvement subjects in contrast showed little awareness of the need to act other than to rely upon the mandatory system. This suggests that a shift in the mind set is required to move people away from an expectation that the state will provide for all their needs, to the realisation that support from the state is a safety net designed to relieve the extreme privations of poverty. By way of illustration, there is awareness that funding for retirement benefits comes from taxes levied by the government. However, the government is impersonal and as a result those with low levels of involvement are unable and/or unwilling to relate to what that actually means. In order to produce a form of communication that can lead to increased involvement, any message needs to move from the impersonal to the personal. Take the funding of such benefits from the impersonal nature of taxes to the personal nature of individual pay packets would be one potential approach. If individuals were more aware of where funding actually comes from and how they, as individuals, provide support for current retirees, it is easier for them to relate to the message on a personal level. It is then a relatively short step to demonstrating where the funds for future retirement benefits would have to come from and the lack of people to provide for them when they retire. Such an approach emphasises the personal nature of the process enabling individuals to identify with the message.

The literature outlined in Chapter 2 suggests that the decision process for high involvement individuals can be summarised in the following five steps:

Step 1: A decision is activated by a perceived difference between the desired state of affairs and the actual situation.

This implies that the individual must perceive a difference between what they are doing and where it will take them in terms of their retirement savings and/or expected lifestyle in retirement, and where they actually want to be. At the very least, this implies that they question where their current level of financial preparation will take them in terms of their retirement.

The case study findings indicated that linkage between current actions and their future life in retirement is one of the differentiators between high and low involvement subjects. Illustration of the link between current actions, irrespective of their age or income, and potential future lifestyle outcomes, would seem to be a means to reinforce the message. Consequently, if individuals can be convinced that certain future lifestyle scenarios are relevant to them, it may prompt the questioning of current levels of financial preparation and what it actually implies for their life in retirement. The case study results suggested that illustrations of the potential levels of control/dependency that can result from action/inaction can encourage involvement. Demonstration of the type of control people can exert over their life in retirement could encourage involvement whilst visualisations of dependency could potentially discourage a lack of involvement.

Step 2: High involvement individuals move on to explore existing options with a view to satisfying the need identified in the first step.

This is likely to include a comprehensive search for information with evidence of high involvement consumers seeking information that is beyond the scope of what is easily and readily available (Zhang and Markman 2001).

This would suggest that those involved will aim to become better informed by sourcing information related to their financial preparation. Such an assertion is supported by findings from the case study where those with the highest levels of involvement all collected and discussed information with others. Consequently individuals with high levels of involvement may not just rely on information that is provided by their fund provider, but may well seek additional sources of information as they look to improve the basis of their decision making.

The literature review in Chapter 2 illustrated that individuals with low levels of involvement are likely to undertake a minimal search for relevant information if at all and are likely to go with what is offered to them. This was found to be the situation in the case studies with both individuals that demonstrated low levels of involvement either not collecting any information, or failing to understand the information that was provided by their superannuation fund (i.e. *GR*). The literature review indicated that in many instances this may mean individuals using a default option for their retirement savings. Once again, the evidence from the case studies supported this notion with neither of the low involvement subjects aware of where their money was invested or with whom, let alone what the potential consequences of that approach could be.

Consequently, the findings from this research suggested that until such individuals become more involved and perceive greater levels of relevance and/or importance to their financial preparation, they are unlikely to improve their levels of knowledge through information searches. In contrast involved subjects appeared to be motivated by a desire to ensure they and not others are making decisions about their lives in retirement.

Step 3: In this next step, individuals with high levels of involvement are likely to use the information gathered in step two to evaluate their options.

In Australia, this now involves the opportunity to change not only their asset mix (investment choice) but also their service provider (choice of fund). However, for such options to be used affectively, it requires active decision-making by the individual. Both the quantitative and qualitative research undertaken in this study indicates this is unlikely to occur unless the individual is involved. The case study subjects with the highest levels of involvement all used the information collected and acted as a result in some manner. They also discussed their situation and then proceeded to act as a result of those discussions. The motivation of achieving control over their lives was evident as the subjects with the highest levels of involvement actively used the information collected and discussed to work towards their stated objectives. The low involvement subjects on the other hand either did not collect or discuss relevant information, if they held discussions, they were of a general nature and not specific to their financial preparation. As a result there was no indication that they led to any action.

Both the findings of previous research and the results of this study suggest that low involvement individuals are likely to conduct relatively poor comparisons from any options they encounter in Step 2. Consequently, these results suggested that it is important to increase involvement levels at an early stage in the decision making process to ensure that a meaningful comparison of available options is conducted. At the very least, making people aware of the personal relevance of their choices, what the implications are for them and their lives, especially in terms of future dependency and/or control is likely to encourage people to go back and re-appraise their options.

Step 4: The fourth step refers to the high involvement consumer making a decision as to which option best suites them based upon their deliberations outlined above.

These findings indicated that once perceived relevance and/or importance had been established, the individual would make a decision based on what they considered to be the best outcome for their circumstances. The case study results suggested that high involvement subjects may frame such decisions in the context of meeting their control objectives. In fact the results suggested a number of themes that could be used as triggers for financial preparation behaviour.

In the case of low involvement individuals, if they make a decision at all, it is likely to be based upon the limited evaluation conducted in the previous step. Once again this implies that it is important to encourage involvement at an early stage in the decision process, or at the very least, get people to go back along the decision path to conduct more meaningful evaluations.

Step 5: In the final step, a decision is made to either proceed, or not.

If the decision is not to proceed, but the evoked need still exists, the process is likely to start over for high involvement people. If the decision is to proceed, the person is likely to make an emotional appraisal of their decision (Steinhart 2003a). The results of this study suggested that high-involvement individuals will critically assess their decisions regarding their financial preparation. The two subjects illustrating high involvement indicated that they constantly review their financial preparation to ensure it still meets their desired aims and needs. In contrast, the low involvement subjects displayed very limited knowledge of their overall position in terms of their financial preparation. Whilst

espousing certain desires in terms of not wanting to depend upon others, they did not appear to have established goals against which they could measure themselves.

5.3 Consideration of the findings against the relevant literature

Several key studies set out in chapters 1 & 2 can be extended by the findings of this research:

Elder & Rudolph (1999) reported that planning for retirement was positively related to satisfaction in retirement. They measured planning by reference to how much individuals thought about retirement and attended meetings but did not consider involvement as one of their variables. Whilst this study did not set out to measure satisfaction in retirement, it did demonstrate that increased involvement can lead to greater levels of financial preparation. It would not be unreasonable to suggest that individuals who are more involved are more likely to be cognisant of their position in relation to their benefits and entitlements and what their financial preparation will produce in terms of income during retirement. If this is correct then such individuals are more likely to have realistic expectations regarding their standard of living in retirement, consistent with Elder & Rudolph's (2000) study on expectations and financial preparation. Therefore, relating these findings to the work of Elder & Rudolph, increased involvement can not only produce higher levels of financial preparation for retirement, it could also lead to more realistic expectations in retirement as well as higher levels of satisfaction in retirement.

Clarke-Murphy and Gerrans (2001) found that females, younger members [of retirement savings funds] and those in the lowest income groups were all significantly more likely to

consider themselves less knowledgeable about financial preparation, which impacted negatively upon their decision making. This study also found that such factors were significant moderators of the impact of involvement on financial preparation. This work has extended the research of Clarke-Murphy and Gerrans by demonstrating that the impact of involvement on financial preparation for retirement is greater in females than in males. Consequently, this research has shown that involvement can provide an opportunity to reverse the trend where females tend to undertake less financial preparation than their male counterparts.

Neukham and Hersley (2003) argued that individuals are likely to consider both positive and negative images of the future and these would likely impact upon their financial preparation for retirement. Images of the future were not examined in the survey from this study, however, the views of the case study participants did reveal ideas about life in retirement. The subjects with low levels of involvement illustrated concern about being dependant upon others. Whilst this may not be a negative view of the future, it is not overly positive. The high involvement subjects on the other hand spoke of wanting to be in control of their lives, which could be viewed as being more positive about their future, especially as they seemed able to translate such attitudes into affirmative action. Consequently, this research has built upon the work of Neukham and Hersley as the impact of involvement demonstrated through the survey and the themes identified through the case studies extends their view that planning activities can be good predictors of financial preparation.

Bernheim and Garret (2003) concluded that appropriate financial education can stimulate financial preparation for retirement but were unable to offer reasons why this was the case. This is not surprising as Braunstein and Welch (2002) pointed out that results from

various financial education studies have been mixed. However, Hersley et al. (2003) found that the most affective sessions were those where financial education was linked to goal setting. Whilst involvement was not considered in any of these studies, introducing financial education provides the potential to increase involvement. Unfortunately, unless the individual considers the information to be personally relevant or important, it is unlikely to increase involvement. The Hersley et al. study however, would have placed the educational material in context, thereby facilitating the understanding of its relevance and importance. In such instances it is likely that the level of involvement would have increased. Consequently, this research has extended the work of Bernheim and Garret as well as Hersley et al. by demonstrating that where involvement is raised, increased financial preparation for retirement can result. The research also extends the work of Braunstein and Welch by offering an explanation of why previous studies on the impact of financial education have been mixed.

5.3.1 Previous research on involvement and financial preparation for retirement

The previous study that linked involvement and financial preparation for retirement (Hersley and Mowen 2000) came to a number of conclusions that can be compared to the findings from this study. However, given that the measures used were different (as outlined in Section 2.6.5) caution must be exercised in drawing conclusions on the comparisons.

Importance

Hersley & Mowen predicted that as the perceived importance of retirement planning increased there would be an increased level of retirement planning. Whilst this could not be tested in exactly the same manner as in the Hersley & Mowen study, it was possible to

establish if there was a significant correlation between the important/unimportant question on the Zaichkowsky RPII and the FPRS scores.

Table 28 Correlations Between Importance & FPRS Scores

Pearson's Correlation	0.361
Kendall's Tau	0.313
Spearman's rho	0.391
N	463

All results were very highly significant ($p < 0.0005$) which provides some support for the assertion made by Hersley & Mowen.

The case study enabled subjects to be probed on this question. All five subjects stated that they felt preparing for retirement was important. However, only the two who produced high levels of involvement (and financial preparation) actually scored this question at the maximum. The two subjects who produced low levels of involvement stated that they felt it was important, but then proceeded to provide reasons why more immediate matters took priority.

This suggested that stating preparing financially for retirement is important is not the sole determinant of either involvement or financial preparation. Translating that expression of importance into action only occurred in those subjects who produced the highest overall involvement scores. This supports the view that the Zaichkowsky RPII measures a range of factors that together make up involvement.

Perceived financial preparedness

Hersley & Mowen developed a scale to measure perceived financial preparedness. This emphasised an understanding of how much would be needed to fund expenses and whether

the person had calculated how much [money] they would need in retirement. In an attempt to provide results that could be compared with this aspect of Hersley & Mowen's investigation, analysis was conducted to establish if there was a significant correlation between involvement and the three measures of the FPRS that came closest to those used by Hersley & Mowen, i.e. whether the subject had considered an age/date for their retirement, whether they considered how much money they would need to fund their retirement and whether they had thought about how long they would be in retirement for.

The analysis revealed a significant correlation ($p < 0.0005$) for each of the three questions, supporting the suggestion by Hersley and Mowen that retirement planning behaviour requires the ability to think into the future and that this would be positively associated with retirement involvement.

Exciting, appealing or interesting

Hersley and Mowen found that whether a person considered retirement planning exciting, fun, appealing or interesting was unrelated to the degree of financial preparedness. These four factors were taken from the version of the Zaichkowsky Personal Involvement Inventory they developed for their study. Three of these questions formed part of the Zaichkowsky RPII used in this study (exciting, appealing and interesting) whilst the fourth (fun) did not. Consequently analysis was conducted to determine if there was any significant correlation between the answers to these three questions and financial preparation. The results indicated a very highly significant correlation ($p < 0.0005$) between involvement and the combined scores from these three questions;

Table 29 Correlation Between Exciting/Appealing/Interesting & FPRS Scores

Pearson's Correlation	0.483
Kendall's Tau	0.338
Spearman's rho	0.469
N	463

The results from the quantitative study therefore do not support the supposition of Hersley and Mowen, rather they suggest the opposite is the case.

The case studies enabled opinions to be probed further on these three factors of the Zaichkowsky RPII. In response to the question on whether the subjects felt the issue was exciting, there was consensus amongst four of the subjects that preparing financially for retirement was a more like a chore and a necessity rather than something that was done by choice whilst the fifth thought it was unexciting. With the exception of this last subject, the rest all scored this question at or around the middle of the range.

With respect to whether these subjects consider the issue appealing or unappealing, the scores of the subjects who demonstrated the highest levels of financial preparation were slightly higher than those with low levels of financial preparation. However, with the exception of one subject, four subjects all scored the question around the middle of the scale. This was reinforced when they expressed their reasons. In varying degrees they all felt that preparing financially for retirement was something that simply had to be done but was not particularly looked forward to. The exception was ES who scored a maximum 7 on this question and produced high scores for both involvement and financial preparation. He stated that he saw financial preparation was an integral part of his overall wealth creation strategy and was therefore appealing.

The two subjects that produced a maximum score on the question relating to whether preparing financially for retirement was boring or interesting, based their interest on the fact that they both felt it was extremely important. They argued that it was not boring because it was concerned what they were doing as part of their financial preparation to retirement. Both these subjects produced high involvement and high financial preparation scores.

The two subjects that rated themselves towards the boring end argued that retirement was something in the future, somewhat distant from their present focus of attention which was more targeted towards immediate priorities. They both produced low involvement scores and the answers to their questions revealed they had conducted relatively little financial preparation.

Consequently the evidence from both the quantitative and qualitative research conducted as part of this study does not appear not support the supposition of Hersley & Mowen.

Relevance

Hersley & Mowen found that the retirement relevance dimension was inversely related to preparedness. This they argued suggested that individuals who were the least prepared found retirement issues to be the most personally significant. The quantitative study enabled analysis of the question on the Zaichkowsky RPII asking whether subjects considered preparing for retirement was relevant with their FPRS scores. The results indicated that there was a very highly significant ($p < 0.0005$) correlation between relevance and financial preparation.

In summary

Notwithstanding the significance differences in the Hersley & Mowen study and this research, there were some areas of commonality. However, the case studies indicated that the underlying themes are more important than individual factors on the scales that are used. Whilst all subjects may express a view that preparing for retirement is important and/or relevant, the ability to translate this into financial preparation behaviour was crucial. This appeared to be related to themes such as the desire to maintain control over their lives in retirement, the awareness of the need to prepare the ability to link current activity with their future lives.

The results from this study demonstrated a very highly significant link between involvement and financial preparation. The case studies provided indications of how this link may be exploited to increase financial preparation behaviour.

5.4 The impact of the moderating variables

Each of the moderating variables is discussed with reference literature reviewed in Chapter 2:

Education

The literature outlined in Chapter 2 revealed the results of previous research showing that the less well educated were least likely to think about retirement (Lusardi 2003b), be less well prepared (Warshawsky and Ameriks 2000) and have limited financial knowledge (Lusardi 2002a). However, unlike previous research, these findings did not show that education had a significant influence. Education did not moderate the impact of involvement on financial preparation. As previous studies did not determine involvement

levels it is not possible to determine if the subjects that demonstrated low levels of financial preparation, would also have illustrated low levels of involvement.

Age

Age was found to moderate the impact of involvement on financial preparation for retirement. The case studies enabled this to be explored as they involved subjects with a broad spread of ages. There was however was some differentiation in terms of the themes illustrated as well as the behaviour demonstrated. The youngest subject at 18 felt that retirement was a very long way away and that she was too young to worry too much about it. Consequently she was relatively relaxed about deferring action and did not illustrate any real awareness of the need to prepare financially for retirement other than the action she was already taking. Whilst she was contributing slightly above the minimum to her retirement savings fund, she rationalised the action after the event stating that it was the receipt of the survey that made her think about what she had done in terms of her retirement. Other than that, she scored the minimum on most of the individual measures of the financial preparation that make up the FPRS.

In contrast, the oldest subject at 67 was very focussed, held very strong views about wanting to have some control over her life once she finally retired and was very active in terms of her financial preparation. Her life experiences played a major role in cementing her attitudes and as a result displayed a steely determination to prevent a re-occurrence of the privations she faced some ten years earlier. Not only was she very involved in her retirement savings decision, she was the most active of the subjects with respect her financial preparation.

The remaining case study subjects were aged 37, 42 and 52 respectively. Their levels of involvement did not follow a linear pattern with age as the 37 year old had both the highest level of involvement and the highest level of financial preparation of the three, whilst the 42 year had the lowest on both counts. Age is not the sole determinant of financial wealth and/or financial preparation. As individuals get older, their financial resources may increase but so also may their level of financial commitments, particularly if they form relationships and/or have children. Within any given cohort, there is likely to be significant heterogeneity in terms of lifestyle, financial resources and/or the extent of their financial commitments. Consequently, whilst there may be a general trend towards the availability of greater discretionary funds as people get older, other lifestyle factors will ensure significant variability which would help explain the results found in this research. A variety of other factors may be exerting influence but investigation of what these are and their relative importance are beyond the scope of this research. As a result, the type and scope of any financial preparation may vary, but, if an individual is involved they can still prepare financially for their retirement at any age.

Income

Income was another moderating variable found to be significant. There was a significant difference in terms of both the level of involvement and the amount of financial preparation undertaken. Further, income was found to be a significant moderator of the influence of involvement on financial preparation for retirement. This suggests that not only can income have an effect on the level of involvement, but that income can also moderate the impact of involvement on financial preparation. However, lifestyle choices may be a factor along with the variability of individuals' propensity to save (Munnell et al. 2001). The case studies involved subjects with a wide spread of incomes, ranging from \$18,000 to \$150,000. Whilst the lowest income earner illustrated a low level of

involvement and the highest income earner illustrated a high level of involvement, the other subjects demonstrated variability in their results. *DM* who earned \$28,000 illustrated high involvement whilst *GR* who earned \$42,000 illustrated low involvement. Consequently, whilst income was found to be a significant moderator of the influence of involvement, the combination of both the quantitative and qualitative results suggest that its affects may be linked to other variables. The investigation of any such links is however beyond the scope of this research.

The link between income and wealth is one of the best documented relationships in economics with higher educated people having higher incomes (Ashenfelter and Rouse 1999) with similar correlations found in Australia (Headey et al. 2004). Indeed the correlation between education and wealth was found to be significant in the sample for this study. However, as research in Behavioural Finance as illustrated, saving and/or investing is not necessarily rational (Aaron 1999; Fromlet 2001; Goldberg and von Nitzsch 2001; Kahneman and Tversky 2000; Mullainathan and Thaler 2000; Simon 1955). Whilst those with higher levels of education may earn higher incomes, it does not follow that they will necessarily use their available funds to prepare financially for retirement. Further, it has been argued that individuals have a wide spectrum of intelligences with key differences between them (Gardner cited in Goleman 1996). This approach suggests that whilst a person who is gifted in one area, they may not be so astute in another. By way of example, a senior medical doctor, who, by definition is highly intelligent, may have poor monetary skills. They may be in a highly paid occupation, as per the correlation already illustrated, but as the literature from behavioural finance suggests, there is no guarantee that this is translated into rational monetary decision-making. In contrast, a skilled mechanic, who may not have an IQ comparable to the medical doctor, may never the less illustrate sophisticated monetary skills in managing their business. Consequently, the

results from this study are not inconsistent with findings in the behavioural finance field as there is no guarantee that high-income individuals will use their available funds to prepare for their retirement. Indeed, the results provide support to the results suggesting that the key factor in retirement preparation is involvement.

Number of Dependants

Chapter 2 outlined research that found that households with children have the lowest success rate with regard to financial preparation for retirement (Warshawsky and Ameriks 2001) and are less likely to have accumulated adequate levels of financial and total net worth (Lusardi et al. 2001b). However the number of dependants of the subjects in this research did not demonstrate any significant affect on either the level of involvement or the amount of financial preparation undertaken. The evidence from the case studies supported this they also did not suggest that the number of dependants had a significant impact upon involvement. By way of example, the subject with the highest number of dependants (*ES*) illustrated high levels of involvement and financial preparation, the two subjects with no dependants produced contrasting different results. *HT* illustrated low involvement and low financial preparation whilst *DM* illustrated high levels of involvement and high levels of financial preparation.

Gender

The literature outlined in Section 2.7.2 indicated that there is a growing body of evidence that gender is an important macroeconomic variable in terms of savings (Seguino and Floro 2003). In Australia, women on average retire from the paid workforce with about half as much money as men and yet are increasingly living longer than men (Olsberg 2003). Previous research has found that even women with higher formal education were less likely than men to have actually planned financially for retirement (ASFA 2004) with

many women unlikely to have their retirement expectations met due to a low level of retirement income (ASFA 2004) and with a large percentage of women indicating that they had hardly thought about retirement (Lusardi 2003c).

Analysis of the results suggested support for the findings illustrated in the literature, i.e. females were over-represented in terms of the numbers of respondents gaining a low involvement score. They also appeared to be over-represented amongst those gaining a low score for their financial preparation. This latter aspect was statistically significant ($p < 0.05$). The covariance analysis of the information revealed that gender did indeed have had a moderating influence on the impact of involvement on financial preparation for retirement. However, the striking aspect of the results was that the nature of the difference witnessed between the sexes. As already outlined, the literature indicated that females should perform less well. In contrast, these results suggested the opposite had occurred.

Analysis of the data indicated a stronger correlation between involvement and financial preparation for females than males suggesting that as involvement increased, it was more likely that financial preparation would be at a higher level in women than in men. This was reflected in the regression analysis with the relationship between involvement and financial preparation stronger in females than males, i.e. almost 30% of the variance in financial preparation could be explained by involvement in women, compared to just over 22% in men. ($p < 0.0005$ in both cases). These results imply that, whilst on aggregate, fewer women may be preparing for their retirement, on an individual basis, if women are involved in their personal retirement-savings decision; they are more likely to undertake financial preparation than their male counterparts. Such a finding is potentially very

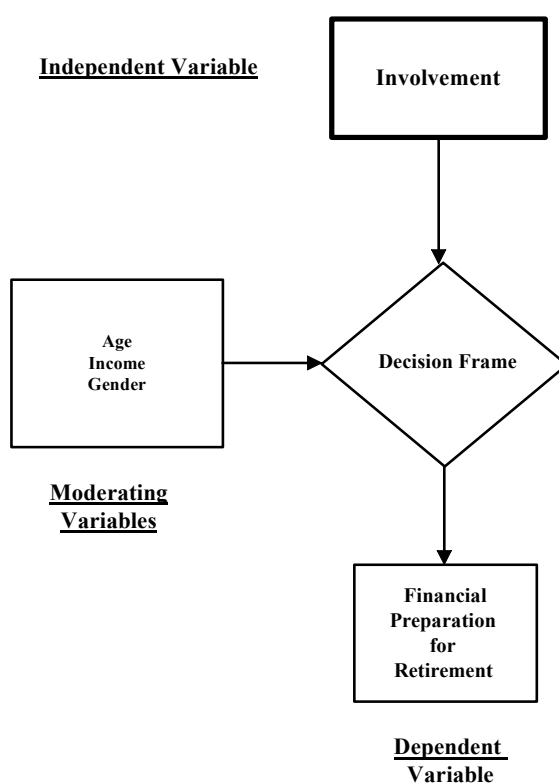
significant as the gender affect has been found to be pervasive across all types of research, prior to this research.

These findings also indicate that involvement may offer the opportunity to reverse the trend that has been evident in the literature and lead to more women preparing financially for their retirement. This would suggest that the challenge going forward is to ensure that women are involved in their personal retirement-savings decision. In this regard, the findings from the case studies can offer potential insights into how people might become more involved. The implication is that women need to be made to feel that preparing for their retirement is something that is personally relevant and important to their future well being.

5.5 Revised Model

The results of the quantitative research indicated that the model outlined in Section 1.5 should be revised:

Figure 7 A Revised Model of Personal Financial Preparation for Retirement



This research has shown that this model can provide an explanation for significant variances in financial preparation and demonstrates the importance of involvement in the personal retirement savings decision.

5.6 Potential consequences of the underlying themes of involvement

The Research Question was concerned with the underlying themes of involvement in the personal retirement savings decision. As illustrated in Chapter 4 a number of key themes emerged with a distinction between high and low involvement subjects. Given that the research has demonstrated a very highly significant link between involvement and financial preparation, the challenge is to find ways of increasing involvement levels. The themes that emerged from the case studies can offer some suggestions for future research.

All the subjects indicated that they considered preparing financial for retirement was important, however the weight attributed to that importance varied with the level of involvement. Those with higher levels of involvement appeared to attribute more weight to the issue and converted those attitudes into direct action. In contrast, those with low levels of involvement may have stated that they felt it was an important issue, but appeared unable and/or unwilling to take the next step. The findings from the case studies suggest that if individuals perceived the issues connected with retirement saving on a personal level and considered it important and/or relevant; they were more likely to be involved. When the case study subjects were able to put things on a personal level, they emphasised its importance and were more likely to translate this into action. This was illustrated by reference to retired parents who were facing various degrees of financial difficulty with one subject commenting, 'Knowing how my mother lives on the pension, I

know it's not something I could see myself doing.' This supports findings of previous research that indicate financial preparation can be shaped by the experiences of others such as older siblings (Lusardi 2001) and older parents, especially if they are experiencing financial difficulties (Lusardi 2002a). Once again, all subjects illustrated this to some degree. Those illustrating the highest levels of involvement were the ones who appeared able to use this as motivation for action. This is consistent with the definition of 'involvement' used in this research, i.e. involvement relates to personal relevance (Aldlaigan and Buttle 2001; Poiesz and de Bont 1995) and that when people are involved they pay attention, perceive importance and behave in a different manner than when they are not (Zaichkowsky 1985b). Therefore, messages/advertising relating to financial preparation may be able to utilise this approach. Messages on a personal level that enable the observer to relate to the situation in terms that are relevant to them and their situation may increase involvement and potentially, financial preparation behaviour. The key themes that could be used in such an approach were also suggested by the case studies.

The high involvement subjects also expressed a strong desire to maintain some control over their lives in retirement with this opinion sometimes expressed quite forcibly. Consequently, messages relating to financial preparation could utilise this theme in illustrating the potential to retain some form of control over life in retirement. Demonstrating that an individual who is actively preparing for their retirement has the potential to make his/her own choices on lifestyle, living accommodation and/or activities in retirement is one such approach. In the same vein, the theme of dependency expressed by the low involvement subjects could be utilised to demonstrate the consequences of deferring action. Illustrating the results of inaction in terms of having to depend upon others and what that could mean in terms of individual lifestyle and choices may be an affective means of discouraging a lack of involvement.

The case studies also illustrated a distinction in the level of awareness of the need for financial preparation, i.e. above and beyond the mandatory system. Previous industry research in Australia (Wills 2001) found that there was very limited awareness of what reliance on the state actually means in terms of income and lifestyle. Further there also appeared to be little understanding of how long people could be in retirement for. An illustration of what the safety net system actually is, the type of income it provides and the limited choices that result as a consequence, again in terms that can be personalised, may be an affective means of improving awareness. The themes demonstrating limited understanding of the link between current actions and future life in retirement and the willingness to defer action can potentially be incorporated to further support the approach of such a program of messages.

Therefore, the findings from this research indicated that messages/advertising on issues relating to financial preparation should either aim to increase involvement in the personal retirement savings decision and/or discourage a lack of involvement. Given that that large numbers of Australians now have choices available to them in their retirement savings funds this could potentially have a significant impact upon the financial preparation of many.

5.7 Suggestions for future research

As with all research methods, there are limitations in scope, design and application of this study, as outlined in Chapter 1. These limitations suggest a number of possible directions for future research. The original Zaichkowsky PII has been used in a study of consumer involvement with various common products and services across many countries

demonstrating reliability as a measuring instrument across 15 national cultures (Zaichkowsky 1989). However, there has been very little investigation of involvement in the context of financial preparation for retirement. Consequently such a supposition should to be investigated further, to establish whether there is indeed any country-specific or cultural affect in the context of involvement in the personal retirement-savings decision and whether it has an affect upon personal financial preparation for retirement.

The quantitative analysis from this research indicated that the correlation between all the individual behaviours that make up the FPRS are significant. Whether triggering one activity will lead to others remains to be established but the theory has tentative support from the themes that emerged from the case studies. The desire to ensure some control over their lives suggests that high involvement individuals will do what ever they consider is necessary. The two high involvement individuals for example attended multiple meetings on retirement savings and indicated that they were constantly looking to increase their knowledge and understanding. They also demonstrated that they were very cognisant of the link between their current actions and any future life in retirement, unlike the low involvement subjects who demonstrated a willingness to defer action. Further research is therefore required to establish if such links are indeed significant.

The underlying themes that emerged from the case study also warrant further investigation. Research on the strength on the themes may prove useful in the design of messages to encourage involvement. Such research can be undertaken via a survey, using the measures incorporated in this study but with the addition of questions on the strength of attitudes on the various themes using Likert type scales. Such research could provide opportunity to clarify the themes identified in this research and quantify their relationship with financial preparation behaviour.

A second stage to this approach would be to test various messages to determine their effectiveness in relation to these themes/triggers. Such research would provide the opportunity for financial services companies and governments to determine if the messages they are currently sending out are actually encouraging involvement and therefore financial preparation.

The literature outlined in Chapter 2 on involvement revealed that people with high levels of involvement are likely to have a different reaction to advertising than those with low levels of involvement. Given that significant sums are expended on products relating to financial preparation for retirement, i.e. in excess of A\$70 million in Australia in 2005 alone (Media 2006) further research could determine the attitudes towards and opinions of both high and low involvement subjects. By way of example tapping into the theme of control in retirement may stimulate high involvement subjects, whilst illustrating dependency may generate a reaction in low involvement subjects. Such research could potentially provide information on whether the most appropriate messages are being used to induce increased financial preparation for retirement. Utilizing the involvement construct may lead to more affective communication approaches

This research has also been restricted to a mandatory scheme operating in Australia. Consequently, the significance of involvement upon the level of financial preparation undertaken should be investigated in an environment where voluntary schemes operate, both in 'opt in' and 'opt out' conditions. Such research could investigate whether there are significant differences in the levels of involvement of people in voluntary schemes as opposed to those in mandatory schemes, and whether there are any significant differences between those in 'opt out' voluntary schemes as opposed to those in 'opt in' voluntary

schemes. Under 'opt out' conditions, increasing the level of involvement should in theory increase individual contribution levels and/or use of the available choices within that fund. Under 'opt in' conditions, increasing involvement is likely to increase participation levels and potentially individual contribution rates. However, such suppositions need to be tested.

With the introduction of choice of fund in Australia, investigating links between the degree of involvement and the use of choice would also be a worthwhile exercise as previous research has found that allowing participants some choice in their retirement savings may actually increase their level of financial preparation (Papke 2003). The findings of this research suggested that those who are more involved in their personal retirement-savings decision are more likely to take advantage of choice, but this has yet to be tested. However, as has been pointed out by Mercer, whilst choice may force Australians to think more carefully about their retirement savings, without sufficient education, guidance and advice, employees and employers alike could be left with an 'empty feeling' and potentially significant financial consequences (Mercer 2005). Consequently, financial education is likely to aid and assist people facing such decisions. However, given that findings on education have been mixed (Bernheim and Garret 2003; Braunstein and Welch 2002) it would be useful to structure different types of education programs to establish whether they increase involvement. Programs that emphasise the issues on a personal detail, aimed at providing a way for the individual to control their future life should be tested against more generic programs that simply illustrate the benefits without specific reference to how such actions could benefit the individual. Involvement can be measured before and immediately after such programs (and ideally some time later as well to establish whether any affect is persistent). Ideally this would also aim to establish just what financial preparation the individuals are undertaking at

these points to ascertain whether any change in attitude is translated into increased financial preparation behaviour.

Financial preparation for retirement in this study has been restricted to those behaviours that could be measured by the FPRS. However, future research can extend the type of behaviour considered to ascertain whether there are links between the level of involvement in the personal retirement-savings decision and other types of financial preparation behaviour both in and out of official retirement-savings schemes.

5.9 Concluding remarks

This thesis has substantially enhanced knowledge of personal financial preparation for retirement by bringing together disparate literature on involvement and financial preparation for retirement. This advancement of knowledge contributes both to the literature on retirement savings and retirement preparation as well as the literature on involvement. A number of conference papers and reports have been presented throughout the duration of this research. Consequently, work will now start on developing a series of articles to be presented to appropriate academic journals.

Finally, the development of new knowledge in the production of this thesis has, as well, substantially developed the knowledge and understanding of the author in both the areas of involvement and financial preparation for retirement. Perhaps more importantly, it has enabled the author to apply academic rigor to issues that were developing in his mind as a result of some 25 years of working in the financial services industry and associating with those connected with retirement savings at all levels across four continents. What was an idea based on real life observation, and grew over time has now been explored, developed,

researched, analysed and reconsidered. The challenge now is to try and make sure that the findings from this research contribute to the great social debates and ultimately to informed action by the financial services industry and governments.

Appendices

1. Protocols and letters used in the research

1.1 Survey protocol

The Survey was conducted after a multi-stage Pilot Study.

1.1.1 Pilot Study

The Pilot Study consisted of three stages.

Pilot Study - Stage 1

In order to ensure consistency the following format was developed and used in each of the self-administered questionnaire pilot study interviews.

Selection of subjects

The subjects selected to take part in the pilot study interviews were all based in or around Sydney to facilitate contact by the researcher. They were people known to the researcher but came from diverse backgrounds and were aged between 20 and 55.

Data collection procedures

No recording device was used for the Survey Pilot Study. Detailed notes were taken and observations made concerning how the subject reacted to the various issues either on the Pilot Study Worksheet.

Initial introduction

After the initial greetings, the researcher provided the outline of the research that explained what the subjects were being asked to do.

Informed consent

The subjects were then provided with the Informed Consent Form to read and asked to sign. Once signed the subject was then given a copy to keep with another copy kept by the researcher in accordance with university guidelines. The respondent was then asked if they had any further questions. If so these were answered and where appropriate notes taken.

Review of introductory information

The following information was given to the subjects and their comments sought:

- an introductory letter from Sunsuper
- an introductory letter from the researcher.

After reading each piece of information the subjects were asked if:

- they understood the information
- they had any comments about the information provided.
- having read that information they would feel comfortable proceeding to the questionnaire.

Review of questionnaire

The questionnaire was then presented and the subjects were asked to answer the questions as if they were completing the questionnaire. They were requested to save any comments or enquiries until they have completed all the questions, rather than seek clarification whilst working through the questionnaire. Following completion each subject was asked the following.

- If they understood the questions. If problems emerged with particular questions, the subjects were to be asked to explain in their own words what issues they considered to be problematic.
- If there were any questions they could not answer and if so, what were the reasons. This was designed to establish if there would be certain types of information that may be required in order to provide an answer and that some subjects may not have available. Care was taken at this stage as the questionnaire was designed to determine if some subjects had any knowledge of their retirement savings and therefore perhaps would be unable to answer certain questions.
- If they felt comfortable with answering all the questions. This was designed to discover if there would be any questions that subjects may feel they do not wish to answer as opposed to being unable to answer.
- If they felt that any issues had been missed that perhaps should have been addressed.

Review of the card to be sent back with questionnaire

The subject was shown the card that subjects would send back with the questionnaire in order to let the researcher know they had completed it. Opinions were to be sought on whether the issue of confidentiality was being adequately addressed.

Final comments from subject

The subjects were then to be asked if they have any further comments on the issues discussed which will also be noted. The subjects were then thanked for their time.

Pilot Study – Stage 2

Following Stage 1, the questionnaire itself was tested on a larger group. 24 subjects from the Karate Club that is frequently by the researcher volunteered to complete the questionnaire. They were all told that it was a pilot study to for university research that the researcher was involved with. The subjects in this stage of the Pilot Study came from a broad background in terms of age, income, education and occupation. The questionnaires were all completed in less than 10 minutes and handed back to the researcher. No identifying marks were on the questionnaires that were returned so they were affectively anonymous.

Pilot Study – Stage 3

The data from the completed questionnaires from Stages 1 and 2 was used to test the data entry and analysis models. Once this test had been completed the information was removed from the database and was not used in the main analysis.

Conclusion of the Pilot Study

Upon successful conclusion of the Pilot Study, all letters and related correspondence were mass printed and provided to the industry partner who was responsible for mailing all subjects taking part in the survey.

1.2 Overview of the research for pilot study subjects



This research project has been examining retirement-savings schemes around the world for three years. In particular it has looked at the actions people have taken to prepare financially for their retirement. Based on this research a questionnaire has been developed that looks at two aspects:

- 1) It is aims to examine the attitudes of people about saving for retirement.
- 2) It is designed to investigate the actions people take to prepare financially for their retirement.

However, before the questionnaire can be used with a large number of people we need to test it on a select group of volunteers in order to determine:

- a) If the introductory information would be understood by the subjects.
- b) If this information would encourage people to take part in the survey.
- c) If the subjects would be able to understand the questions.
- d) If the subjects would be able to answer the questions.
- e) If the subjects would actually answer the questions.

This is why we have asked you to take part in this pilot study. The aim is to go through the material with you and then seek your views. Please be free and frank with your comments as we need to establish that the questions are suitable.

After going through the various documents you will be asked for any general comments you may have. Once again, please feel free to offer any suggestions.

Thank you once again for agreeing to take part in this research. We could not continue without the help of people such as you.

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MANAGEMENT
PTY LIMITED
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Yours sincerely

Lester A. Wills
Research Macquarie University

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1.3 Initial letter from Sunsuper for the survey



Sunsuper Pty Ltd
ABN 88 010 720 840
Australian Financial Services
Licence No: 228975
Sunsuper Building
30 Little Cribb Street Milton Qld 4064
PO Box 1896 Milton Qld 4064
Telephone 07 3016 7799
Facsimile 07 3016 7786

12 November 2004

Dear

Sunsuper has been asked to take part in a major research project on people's attitudes towards retirement savings and the actions they take to prepare for retirement. Sunsuper believes that such research is very important as it provides policy makers with information about what people think and do about retirement savings.

As a result, we are writing to a limited number of Sunsuper Superannuation Fund members to ask them to take part in the project. Lester Wills, a researcher from Macquarie University will be contacting you in the next few days to ask you to take part in this important piece of research. He will be asking you to complete a short anonymous questionnaire that will only take a few minutes of your time.

This will be your chance to make your voice heard.

This is important as without such research, policy decisions about retirement savings can be made without the policy makers understanding what people such as you think and do. We believe that it is vital that people make their opinions known. Taking part in this research is one such opportunity.

At the end of the day, the policy decisions that are made concerning retirement savings will affect us all. This is a chance for you to provide some input into the debate in an anonymous manner.

We would like to thank for your time and hope that you will agree to take the few minutes to fill in the questionnaire.

Yours sincerely

A handwritten signature in black ink, appearing to read "Teifi Whatley".

Teifi Whatley
General Manager, Marketing

1.4 Initial letter from researcher for the survey



Dear

Regarding the Retirement Savings Research

Your superannuation fund, Sunsuper contacted you recently to let you know about this important research project into retirement savings. They mentioned that I am a researcher from Macquarie University working on research on the attitudes and actions of people in relation to their retirement savings. In order to complete the research I need your help.



The research is designed to gather information on what people such as you think about retirement savings and what actions they take to prepare for retirement. This is an important social issue that affects people of all ages. Research such as this is an attempt to understand what is happening in our society so that important lessons can be learnt.

However, in order for the findings to be of value, I need as many people as possible to take part. If too few people respond then no matter how important the issue, it will simply not carry enough weight to have any impact.

Therefore can I please ask that you take a few minutes, as that is all it will take, and complete the enclosed questionnaire? To make it easy for you to send the questionnaire back, I have provided a reply paid addressed envelope. As I do not wish to take any more of your time, could you also send back the enclosed reply paid card which will tell us that you have sent the questionnaire back. I have taken this step as I will not know from the questionnaire who has sent it back, as the survey is completely anonymous.

I hope you are able to take a few minutes and help me with this research into what is a very important topic that affects us all.

Regards

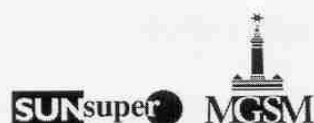
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Website: <http://www.gsm.mq.edu.au>

Lester A. Wills
Researcher Macquarie University

1.5 Questionnaire

SURVEY QUESTIONNAIRE



Part I

Attitudes towards preparing financially for retirement

The purpose of this study is to measure your involvement or interest in your retirement savings. To do this, we need you to answer a series of questions according to YOUR views on preparing financially for retirement. Here is how you answer the questions:

If you feel your answer is very closely related to one end of a scale, you should place your mark as follows:

boring to me	X							interesting to me
--------------	---	--	--	--	--	--	--	-------------------

or

boring to me							X	interesting to me
--------------	--	--	--	--	--	--	---	-------------------

If you feel your answer is quite closely related to one end of the scale (but not extremely) you should place your check mark as follows:

boring to me		X						interesting to me
--------------	--	---	--	--	--	--	--	-------------------

or

boring to me						X		interesting to me
--------------	--	--	--	--	--	---	--	-------------------

If you feel your answer seems only slightly related (but not really neutral) to one end of the scale, you should place your check mark as follows:

boring to me			X					interesting to me
--------------	--	--	---	--	--	--	--	-------------------

or

boring to me					X			interesting to me
--------------	--	--	--	--	---	--	--	-------------------

Important

Be sure to check every scale, do not omit any

Never put more than one mark on a single scale

Make each answer a separate and independent judgement. Work at fairly high speed through these questions. Do not worry or puzzle over individual answers. It is your first impressions, the immediate feelings about the item that we want. On the other hand, please do not be careless, because we want your true impressions.

Please turn to the next page and answer the questions. ➡

SURVEY QUESTIONNAIRE



To me preparing financially for retirement is:

important								unimportant
-----------	--	--	--	--	--	--	--	-------------

boring								interesting
--------	--	--	--	--	--	--	--	-------------

relevant								irrelevant
----------	--	--	--	--	--	--	--	------------

exciting								unexciting
----------	--	--	--	--	--	--	--	------------

means nothing								means a lot to me
---------------	--	--	--	--	--	--	--	-------------------

appealing								unappealing
-----------	--	--	--	--	--	--	--	-------------

fascinating								mundane
-------------	--	--	--	--	--	--	--	---------

worthless								valuable
-----------	--	--	--	--	--	--	--	----------

involving								uninvolving
-----------	--	--	--	--	--	--	--	-------------

not needed								needed
------------	--	--	--	--	--	--	--	--------

Thank you.

Now please move on to **part 2** of the questionnaire ➡

Part 2

Preparing Financially for Retirement

The purpose of this study is to measure your actions in preparing financially for your retirement. To take this measure, we need you to answer various questions and choose the answer that best describes how YOU have prepared financially for your retirement.

All the questions are factual but there are no wrong answers.

If you feel you have thought about retirement a lot, you should mark the box for that answer

a lot	some	a little	not at all
X			

If however you feel that you have spent some time thinking about retirement but would not class it as a lot, mark the box for that answer

a lot	some	a little	not at all
	X		

Alternatively, if you feel you have only thought about retirement a little, mark that box

a lot	some	a little	not at all
		X	

Naturally, if you feel you have not thought about retirement at all, mark that box

a lot	some	a little	not at all
			X

Important

Please be sure to answer all the questions unless you are instructed to skip ahead. Work at fairly high speed through these questions. Do not worry or puzzle over individual items. It is your first impressions, the immediate feelings about the item that we want. On the other hand, please do not be careless, because we want your true impressions.

Now turn the page and please start answering the questions. ➡

SURVEY QUESTIONNAIRE



Q1. How much have you thought about retirement?

a lot	some	a little	not at all

Q2. Have you collected any information about preparing financially for retirement?

a lot	some	a little	none – go to Q4

Q3. If you have collected information about preparing financially for retirement, have you taken any action as a result?

no I have not taken any action	I have thought about it	I know what to do but I have not done it yet	yes I have taken action

Q4. Have you attended any seminars or gone to any meetings on preparing financially for retirement?

more than two	two	one	none – go to Q6

Q5. If you have been to any seminars or meetings on preparing financially for retirement, have you taken any action as a result?

no I have not taken any action	I have thought about it	I know what to do but I have not done it yet	yes I have taken action

go to Q6



Q6. Have you discussed preparing financially for retirement with anyone?

not at all – go to Q8	only passing, not in detail	yes with my family and/or friends	yes with a Financial Planner or Accountant

Q7. If you have discussed preparing financially for retirement, have you taken any action as a result?

no I have not taken any action	I have thought about it	I know what to do but I have not done it yet	yes I have taken action

Q8. Have you thought about a date or the age at which you wish to retire?

a lot	some	a little	not at all



If so, please provide the age you wish to retire at: _____

Q9. Have you thought about how long you expect to be retired for?

a lot	some	a little	not at all

Q10. Have you thought about how much you will need to have saved by the time you retire so you can live comfortably in retirement?

a lot	some	a little	hardly at all

Thank you.

Now please move on to **part 3** of the questionnaire ➡

SURVEY QUESTIONNAIRE



Part 3

Some Information About You

In order to be able to make realistic conclusions from this survey we need some information about you. The information is totally anonymous and simply enables us to make sense of the type of people who provided the information. Therefore please answer all the questions.

Please provide the answer that best describes YOU each time:

Gender

Male

☐

Female

☐

Age on your last birthday

The highest level of education you have completed

Your level of annual income before tax

The number of dependents you support
(note, this refers to dependents of all ages)

Thank you for taking the time to complete this survey.

Can you please put it in the reply paid and addressed envelope and post it back to the university. Can you please also send the reply paid and addressed card stating that you have sent the completed questionnaire. This is so we do not ask you again to complete the survey.

It is very important that we get as many responses as possible in order to be able to draw meaningful conclusion. As your answers are anonymous we would not be able to tell from the survey if you had completed it. Therefore the card is very important as well.

A summary of the results from this research will be available on the following web site:
www.mqsm.edu.au/facultyhome/donald-ross/lw-survey-summary.htm

Thank you once again for your help. It is very much appreciated.

Please note:

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research). If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through its Secretary, (telephone 02 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

1.6 Card sent back by survey subjects to Sunsuper



No stamp
required if
posted in
Australia

Dear Sunsuper,

I am sending this postcard at the same time that I am putting my completed questionnaire in the mail. Since my questionnaire is completely anonymous, this postcard will tell you that you need not send me a further reminder to return the questionnaire.

Sunsuper
Reply Paid 2924
BRISBANE QLD 4001

1.7 First letter to non-respondents



Dear

I recently sent you a letter asking for your help with a major research project. Unfortunately we have not yet received the card from you stating that you have completed the survey.

Your completed questionnaire is very important. Therefore I would be most grateful if you could complete and return the questionnaire along with the post card stating that you have done so.

Thank you in anticipation.

Regards

Lester A. Wills
Researcher Macquarie University

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1.8 Second and final letter to non-respondents



Dear

Both Sunsuper and I recently contacted you and asked if you could help with a major research project on retirement savings. The findings from this research can be used to benefit all those who will face retirement in the future, no matter what age they are now.

It is important that we get as many responses as possible. Therefore can I make one last appeal and ask you take the few minutes it requires to complete the questionnaire. To makes this as easy as possible I enclose another copy in case you have misplaced the original. I also enclose another reply paid and addressed envelope to make it as simple to send it back along with the card indicating that you have sent it.

Thank you in anticipation

Lester A. Wills
Researcher
Macquarie University

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1.9 Case study Protocol

In order to ensure consistency for the case study, the following format was developed and used in each of the case study interviews.

Data collection procedures

A recording device was used with notes taken and observations made concerning how the subject reacted to each raised by the researcher.

Selection of subjects

The industry partner mailed 100 subjects from its database (Appendix 1.10). The only proviso was that they should be based in or around Sydney to facilitate contact by the researcher. The recipients of the letter were asked to complete the response form (Appendix 1.11) and reply directly to the researcher using the reply paid envelope. Five subjects were then selected ensuring that both genders were represented and that there was a spread of ages in the sample.

Response procedure by researcher

The researcher telephoned the selected subjects. The call involved a brief introduction and explanation where the agreement of the subject to take part in the research was confirmed using the script shown in Appendix 1.12:

Interview procedure

Upon arrival at the agreed appointment, the researcher introduced himself, provided identification and gave the subject the following personalised letter from the industry body that both introduced 1.13. The researcher then explained the nature of the research using an outline of the research (Appendix 1.14). The respondent was asked if there were any questions. If so these were answered and where appropriate notes taken. Once the various issues had been addressed the interview started.

Completion of the questionnaire

The questionnaire was then presented to the subject and they were asked to answer the questions. They were requested to save any comments or enquiries until they had completed the questionnaire, rather than seek clarification whilst working through the questions.

Following completion of the questionnaire the subjects were then asked questions designed to explore the 'how' and 'why' dimension of involvement. The process was conducted in four stages:

- (i) The subjects were asked why they answered each question in the Zaichkowsky RPII in the way they did and then they were probed as to how they had come to that opinion.
- (ii) The subjects were then asked a series of questions based on the results of involvement outlined in Chapter 2.
- (iii) The subjects were then asked to explain each of their answers to the FPRS, i.e. if they answered 'a lot' what did they mean by that.

(iv) They were then asked a series of questions relating to financial preparation based on the Literature Review in Chapter 2

Final comments from subject

The subject was then asked if they had any further comments on the issues discussed which were also noted. The subject was then thanked for their time and the researcher left.

Thank you to the subjects

A thank you letter was sent to each subject by the researcher a copy of which is contained in Appendix 1.15

1.10 Introductory letter from Sunsuper for case study

subjects



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ABN 88 010 720 840
Australian Financial Services
Licence No: 228975
Sunsuper Building
30 Little Cribb Street Milton Qld 4064
PO Box 1896 Milton Qld 4064
Telephone 07 3016 7799
Facsimile 07 3016 7786

12 November 2004

Sunsuper has been asked to take part in a major research project on people's attitudes towards retirement savings and the actions they take to prepare for retirement. Sunsuper believes that such research is very important as it provides policy makers with information about what people think and do about retirement savings.

As a result, we are writing to a limited number of Sunsuper Superannuation Fund members to ask them if they would be willing to be considered for this project. Those who take part will be contacted by Lester Wills from Macquarie University and interviewed about their attitudes and actions with regard to retirement savings. The interview can take place at a time and location of your choosing and should take no more than 1 hour of your time.

This will be your chance to make your voice heard.

The interview is strictly confidential and no information identifying who is interviewed will be kept by Lester Wills or anyone else at Macquarie University. As part of the process to ensure confidentiality, even we at Sunsuper will not know who is interviewed.

This is an important project as without such research, policy decisions about retirement savings can be made without the policy makers understanding what people such as you think and do. We believe that it is vital that people make their opinions known. Taking part in this research is one such opportunity.

At the end of the day, the policy decisions that are made concerning retirement savings will affect us all. This is a chance for you to provide some input into the debate.

If you would like to be considered for this research please complete the enclosed form and send it directly to Lester Wills at Macquarie University.

Yours sincerely

A handwritten signature in dark ink, appearing to read "Teifi Whatley".

Teifi Whatley
General Manager, Marketing

1.11 Wording of response form from case study subjects

Dear Lester Wills,

I received the letter from Sunsuper requesting that I take part in the research on retirement savings. I am willing to take part in the research. You can contact me

At work on 02 _ _ _ _ _ between _ _ _ _ _ and _ _ _ _ _

or at home

02 _ _ _ _ _ at home between _ _ _ _ _ and _ _ _ _ _

or on my mobile

_ _ _ _ _ between _ _ _ _ _ and _ _ _ _ _

I understand that in order to determine who will be interviewed you need some basic information and I have given that below:

I am Male: ☐

Female: ☐

My age last birthday was: _ _ _ _ _

My address is: _ _ _ _ _

_ _ _ _ _

_ _ _ _ _

_ _ _ _ _

(Please sign and then print your name.)

Signed

Print name: _ _ _ _ _

1.12 Researcher script to confirm case study appointment

Date of contact: _____

Name: _____

Telephone No. (02) _____

Address: _____

Researcher:

Hello my name is Lester Wills and I am from Macquarie University.

I am calling in regard to the research that **Sunsuper** contacted you about and that you indicated you would be willing to take part in.

Firstly please allow me to say thank you for agreeing to the interview.

I am calling to arrange an appointment to come and see you to conduct the research.

Can I please confirm your address? (*Check with address above.*)
When would be a good time for you?

Date: _____

Time: _____

Where would you prefer the interview take place?
Location if different from above:

Address: _____

Can I please confirm the details? (*Repeat date, time and location.*)
Thank you once again, I will see you on (*Confirm again date and time.*)

1.13 Letter hand delivered to case study subjects



Sunsuper Pty Ltd

ABN 88 010 720 840

Australian Financial Services

Licence No: 228975

Sunsuper Building

30 Little Cribb Street Milton Qld 4064

PO Box 1896 Milton Qld 4064

Telephone 07 3016 7799

Facsimile 07 3016 7786

Dear Sunsuper Member

Thank you for agreeing to take part in this major research project.

It is very important that we study the attitudes and actions of people who are preparing for their retirement so that their needs can be understood. It is also essential that such research is undertaken in order to provide input into future policy decisions that will affect everyone as they prepare for their retirement.

To do this we need to ask questions and interview people to discuss their views. It is only through the cooperation of people such as you that we are able to undertake this task.

Lester Wills is a researcher from Macquarie University who is conducting the research. He will give you an outline of the project and explain what is involved.

A summary of the findings from this research will be available at the following web site:

<http://www.mqsm.edu.au/facultyhome/donald-ross/lw-survey-summary.htm>

Thank you once again for agreeing to give up some of your valuable time. Your input is very much appreciated.

Yours sincerely

A handwritten signature in black ink, appearing to read "Teifi Whatley".

Teifi Whatley
General Manager, Marketing

1.14 Overview of research for case study subjects



This research project has been examining retirement-savings schemes around the world for three years. In particular it has looked at the attitudes and actions towards retirement savings.

There are two major stages for this research in Australia. One stage involves people answering a questionnaire; another involves seeking the detailed opinions of people about the issues raised in the questionnaire. A select number of people are being asked to take part in this second stage of that research and you are one of those.

We would like you to work through the questionnaire and then you will be asked for your comments on various aspects of that questionnaire. The research needs honest opinions so please feel free to provide full and frank answers which will be totally anonymous.

If you have any questions please feel free to ask.

An audio recording will be made during the interview and notes will also be taken. This material will be written up within 24 hours of this interview. If any clarification is needed, with your consent I may need to contact you to follow up on these issues.

Thank you once again for agreeing to take part in this research. We could not continue without the help of people such as you.

Yours sincerely

Lester A. Wills
Researcher Macquarie University

MACQUARIE
GRADUATE
SCHOOL OF
MANAGEMENT
PTY LIMITED
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FACSIMILE 61 2 9850 8630
Website: <http://www.gsm.mq.edu.au>

1.15 Thank you letter to case study subjects



Dear

You very kindly agreed to take part in the major research project on retirement savings. Your input was extremely helpful and detailed analysis of both stages of the project are underway. A summary of the findings will be available on the following web site some time in January:

<http://www.mgsm.edu.au/facultyhome/donald-ross/lw-survey-summary.htm>

Thank you once again.

Your support is very much appreciated

Yours sincerely

Lester A. Wills
Researcher Macquarie University

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1.16 Letter confirming destruction records relating to the individuals taking part in the research



Sunsuper Pty Ltd
ABN 88 010 720 840
Australian Financial Services
Licence No: 228975
Sunsuper Building
30 Little Cribb Street Milton Qld 4064
PO Box 1896 Milton Qld 4064
Telephone 07 3016 7799
Facsimile 07 3016 7786

8 February 2005

Lester Wills
AllThingsConsidered.Biz
P.O. Box 797
Kings Langley NSW 2147

Dear Lester

I am writing to advise you that Sunsuper has now destroyed all records of those individuals who were sent letters asking them to participate in a survey as part of your research on the attitudes of Australians towards retirement and financial planning.

This includes all electronic files and paper copies that were created by either Sunsuper or yourself. Further, all information regarding those individuals that were sent the Case Study packages has been destroyed as well.

I have also deleted all electronic correspondence that identifies any of the individuals in either of the above two categories.

Hopefully this will satisfy the ethical requirements of your research. Please do not hesitate to call me should you require further actions on the part of Sunsuper.

Kind regards,

A handwritten signature in blue ink that reads "Heather Ilsley".

Heather Ilsley
Temporary Marketing Coordinator

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