

Women's Perceptions of Successful Financial Retirement Planning

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Abstract

Financial retirement planning is an important component in ensuring that individuals accumulate sufficient wealth for retirement. Previous research suggests that many individuals are unable to accumulate sufficient wealth for retirement with the problem being particularly acute for women as they tend to spend less time planning financially for retirement when compared to men. Consequently, many women are unable to accumulate sufficient wealth for retirement.

Despite the growing need to investigate women's financial retirement planning, much research tends to focus on financial retirement planning for males. Consequently, there is a growing need to investigate women's perceptions of successful financial retirement planning, particularly in Grahamstown. After conducting an in-depth literature study and using the study done by Doa (2014), six independent variables were identified: values, time horizon, attitudes, working life-cycle, risk tolerance and financial literacy. These independent variables were identified as factors which could potentially influence women's perceptions of successful financial retirement planning. A set of hypothesis were formulated to test the relationship between these independent variables and the dependent variable (women's perceptions of successful financial retirement planning). The study comprised of 101 participants.

A principle component analysis was performed to determine the key variables, with the relevant independent factors being renamed: cultural values, personal values, affective attitudes, time horizon knowledge, time horizon consideration, risk tolerance, financial literacy. An ordinal logit regression analysis was then conducted on these renamed variables to determine the influence of these key independent variables on the dependent variable. After controlling for a set of demographic variables the results of the ordinal logit regression analysis revealed that only affective attitudes, time horizon knowledge, and personal values had a significant relationship with women's perceptions of successful financial retirement planning. Cronbach's alpha revealed that the measuring instrument of the significant extracted factors was reliable, while Pearson product moment was used to determine correlations between extracted key independent variables and the dependent variable.

The investigation into women's perceptions of successful financial retirement planning enabled insightful information to be gathered which adds to the body of knowledge. In addition, recommendations were formulated in an attempt to assist women when making financial retirement decisions.

Key Words: Women, Financial retirement planning, Perceptions

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Chapter 1: Introduction to the study

1.1 Introduction

The retirement income system around the world has seen a dramatic shift from defined benefit retirement plans towards privately managed defined contribution retirement plans (Neelakantan & Chang, 2010). Defined contribution plans have many attractive features such as profitability and flexibility (Benartzi & Thaler, 2007). However, as a result of the shift to privately managed plans, decision making responsibilities have moved away from plan sponsors and have thus increased the responsibilities of the individual investor in terms of retirement decision making. Individuals also have the option of planning for financial retirement through individual retirement accounts, whereby retirement decision making responsibilities rest solely on the individual investor. However, if the individual is unable or unwilling to take on the complex financial retirement responsibilities which are associated with private retirement planning, the individual can seek financial assistance from a financial advisor (Hayhoe, 2001).

Financial retirement planning is the process of determining how much the cost of living will be, based on an individual's expected living expenses, once the individual ceases to work. Financial retirement planning is an important part of one's retirement plan, yet many individuals often undertake minimal financial planning, and as a result individuals often leave retirement planning until it is too late (Grace, Weaven & Ross, 2010:3). Consequently, many individuals are unable to accumulate sufficient wealth to fund a comfortable retirement.

Financial planning for retirement is a good example of a long term financial goal. It is thus important that individuals take time to understand the financial planning process. Moreover, it is important that individuals understand that planning for financial retirement is essential, and individuals must take the time to ensure that sufficient wealth will be accumulated through their financial retirement plan (Jacobs-Lawson, Hershey & Neukam, 2004). In addition, it is vital that individuals understand that retirement planning is an on-going process which requires continuous revision and adjustments (Tannahill, 2014).

According to Malroutu and Xiao (1995:17) perceptions of an individual can be crucial in determining whether retirement will be emotionally and financially satisfying as it creates an awareness and understanding of the problem. A perception is the process by which

individuals interpret sensations in order to produce a meaningful experience in the world (Pickens, 2005:52). In other words, “a perception is the absorption of an external stimulus, the recognition of the stimulus by the brain according to previous experience, its organisation and interpretations” (Pickens, 2005:52). Subsequently, various individuals have different perceptions of the same situation and that perception refers to a purely subjective notion (Kretschmann & Wrobel, 2015:19).

According to previous research, women only understand financial independence if they have made the best use of their specific level of income by proper financial planning (Critical habits, 2010:23). In addition, Grace, Weaven & Ross (2010) state that gender has a significant impact on financial retirement planning. This is because males and females tend to adopt different perspectives when it comes to financial retirement planning (Grace, Weaven & Ross, 2010) with women tending to spend less time thinking about financial retirement planning than men (Jacobs-Lawson, Hershey & Neukam, 2004). Previous research indicates that most women are unable to accumulate sufficient wealth for retirement, which is cause for grave concern (Jacobs-Lawson, Hershey & Neukam, 2004). Consequently, a large portion of women end up relying on family members for financial retirement support.

Despite the considerable importance that gender plays in financial retirement planning, most of the research done on retirement planning has focused specifically on males (Dahl, Nilsen, Vaage, 2003; Sarath & Beal, 2002) therefore there is a growing need to investigate women’s perceptions of successful financial retirement planning.

Previous research (Bucher-Koenen & Lusardi, 2011; Klapper & Panos, 2011; Van Rooij, Lusardi & Alessie, 2009) indicates that women have a lower financial literacy than men, resulting in many women being unable to understand the complexities of financial retirement planning. Thus, due to the complexity of financial retirement planning, women may seek retirement assistance from a financial advisor who has an in-depth knowledge about retirement planning and its workings (Hayhoe, 2001). Although there are many benefits associated with acquiring a financial advisor such as time and focus, experience and expertise, there are also many downfalls such as increased cost, lack of objectivity as well as complicated fee structures (Wallick, 2011). It is therefore important that women evaluate their financial knowledge in order to determine whether they have sufficient financial

knowledge or whether they are in need of a financial advisor to assist with the complexities of retirement planning.

There are a number of factors, such as financial literacy, working life-cycle, time horizon, attitudes, values and risk tolerance, which play a contributing role to women being unable to accumulate sufficient wealth to meet their liabilities and to maintain their desired lifestyle during retirement (Watson & McNaughton, 2007:52). Former studies indicate that on average a women's working life-cycle is shorter than that of males, and as a result women have less income to contribute to their retirement plan (Jacobs-Lawson, Hershey & Neukam, 2004). Income has a direct effect on retirement planning and wealth accumulation, as money needs to be earned before it can be invested for retirement (Grace, Weaven & Ross, 2010:3). Moreover, women tend to be more risk averse than men, which may result in women not being able to accumulate as much retirement wealth as men, who are said to be greater risk takers (Watson & McNaughton, 2007).

According to Kim, Kwon and Anderson (2005:79) active financial retirement planning positively affects attitude towards retirement and can thus have major positive implications to the success of one's financial retirement plan. But many women have rarely been encouraged to take part in financial decisions such as financial retirement planning (Alderson, 2012:8) therefore women tend to have limited financial planning experience (Alderson, 2012) resulting in many women seeing no value in saving for financial retirement. In addition, women tend to retire earlier than men (Grace, Weaven & Ross, 2010) and will therefore have a reduced time frame in which they can save for financial retirement.

For the purpose of this study, the model developed by Doa (2014) has been used to investigate women's perceptions of successful retirement planning. It was initially thought that the model developed was grounded in theory and was supported through the empirical research in the study. However, it became evident at a very late stage of the study that the model used was flawed. Despite the use of the flawed instrument in this study, relevant and significant results were obtained. The research design issue is further elaborated on in chapter 4 and is addressed as a limitation of this study.

Doa (2014) model was based on women's perceptions of investment planning. The factors influencing investment planning and financial retirement planning are based on the same theoretical principles as those influencing women's perception of investment planning.

Unlike other retirement models (Elder, 1995; Hershey, 2004) the model developed by Doa (2014) focuses purely on perceptions and is easily adapted to investigate the perceptions of financial retirement planning. In addition, although the models developed by Elder (1995) and Hershey (2004) provide great insight into financial retirement planning, these models aim to investigate the quality of retirement planning as opposed to the financial retirement planning process itself. For the above reasons, the model of Doa (2014) was thought to be the most suitable for investigating women's perceptions of retirement planning. A more in-depth discussion of the above models can be found in Chapter 3.

Due to the important role that perceptions play on retirement planning, and due to the lack of literature specific to women's perceptions of retirement planning, the purpose of this study was to investigate and gain a better understanding of women's perceptions of financial retirement planning in Grahamstown. By attempting to understand women's perceptions of retirement planning, work can be done to change the poor well-being of many women in retirement through increased education, training and advocacy, thereby addressing many of the fears faced by ageing individuals. Consequently, recommendations were developed that would guide women during the retirement planning process.

1.2 Problem statement

According to Gitman, Joehnk & Billingsley (2013:539) no financial goal is more important than achieving a comfortable standard of living during retirement. Despite this importance many individuals fail to save adequately for retirement, as they are often disinterested and confused about financial retirement planning and the associated financial products (Vidler, 2003) with many individuals seeing more value in paying off current debt than saving for retirement (Grace, Weaven & Ross, 2010:6).

Saving for financial retirement remains a major challenge for many South Africans (Van Zyl, 2003), with many South Africans failing to save for retirement, or leaving it too late to save enough for retirement (Nevondwe, 2010:289). Early withdrawals, low income and inadequate financial literacy also result in many South Africans being positioned poorly for financial retirement (Kaniki & Ntuli, 2011). Consequently, only 6% of South Africans above the age of 60 are able to save sufficiently so that they are financially independent during their retirement years (Gradidge, 2014:53). In addition, the state pension fund system is only available to those individuals in dire financial need (O'Donovan, 2002:13). Thus, the South

African financial retirement system relies heavily on private pension fund investment, resulting in South Africa having the world's highest private and occupational pension contributions (O'Donovan, 2002:13).

The majority of financial retirement planning models focus on individuals (Lundberg & Ward-Batts, 2000). Although not the focus of this study, mention must be made that financial retirement planning is not conducted in isolation, as spouses tend to make financial retirement decisions jointly (Hurd, 1990; Lundberg & Ward-Batts, 2000).

Globally it appears that there is more concern for women being able to sufficiently save for retirement than there is for men. Women in South Africa are generally poorer and more financially vulnerable than men (Goldblatt, 2009). According to Van Zyl, (2003:104) 75% of women are not contributing to a retirement plan compared to 59% of men. These alarming figures could largely be due to women having low labour market participation, higher unemployment rate, lower financial literacy level and family and childbearing responsibilities (Van Zyl, 2003; Grace, Weaven & Ross, 2010; Jacobs-Lawson, Hershey & Neukam, 2004).

Adequate financial retirement planning could help individuals, and women in particular bring more financial control and greater financial independence to their lives. By actively partaking in financial retirement planning, women will be better equipped to achieve their financial retirement goals and objectives. Financial retirement planning can help women gain a clear understanding of their financial planning strengths and weaknesses. Consequently, women will be able to assess if they have sufficient financial literacy to carry out their financial decision making responsibilities (Boone, 2005). However, if women are unable or unwilling to take on the complexities of financial retirement planning, they may seek the assistance of financial advisors in order to simplify the complexities of financial retirement planning (Hirsch, 2005).

According to Noone, Alpass and Stephens (2010:715) previous research indicates that there is a positive relationship between financial retirement planning and individual's perceptions of financial retirement. Thus, the more an individual engages in financial retirement planning, the greater the likelihood of the individual having a positive perception towards financial retirement planning. In addition, the only way women can become more confident towards financial retirement planning is by actively partaking in more financial decisions (Savage, 2008).

Despite the importance of financial retirement planning, women have rarely been encouraged to interest themselves in financial matters such as retirement (Alderson, 2012:8). In addition, little research has been conducted on women's perceptions of successful financial retirement planning in South Africa, and specifically in the Eastern Cape. Due to the many benefits associated with financial retirement planning, and due to the complexities associated with financial retirement planning specifically for women, the main purpose of this study was to investigate women's perceptions of successful financial retirement planning.

1.3 Research Objectives

In order to investigate women's perceptions of successful financial retirement planning, the following primary and secondary objectives were created:

1.3.1 Primary research objectives

Due to the complexity of financial retirement planning, and the benefits derived from actively taking part in financial retirement planning, the primary aim of the study was to investigate and report on the factors which influence women's perception of successful financial retirement planning in Grahamstown. The primary research objective was developed to be in line with the problem statement of the research objective.

1.3.2 Secondary Objectives

In order to give effect to the primary purpose of this study, the following secondary objectives have been formulated:

- To conduct a literature review to understand the nature and importance of retirement planning.
- To embark on a detailed theoretical investigation into the factors which influence women's perceptions of successful financial retirement planning.
- To create a hypothesized model which will enable the researcher to test the relationships between the independent variables (working life cycle, risk tolerance, financial literacy, time horizon, values and attitude) and the dependent variable (women's perceptions of successful retirement in Grahamstown).

- To generate hypotheses to test the relationship between a set of selected demographic variables (age, marital status, ethnic background and investment experience) on the independent variables as well as the dependent variable.
- To demonstrate a clear understanding of the methodology implemented in the study, in order to investigate women's perceptions of successful financial retirement planning.
- To make conclusions as well as recommendations based on the findings of the investigation, in order to contribute to women's retirement planning process.
- To investigate the suitability of the measuring instrument developed in the study by Doa (2014).

1.4 Hypotheses to be tested

The following section will include the hypothesised model as well as the hypotheses tested in the study.

1.4.1 Hypothesised model

Based on an in-depth literature study, and in conjunction with the model developed by Doa (2014), six independent variables were identified, namely: values, working life-cycle, attitudes, risk tolerance, financial literacy and time horizon. The above mentioned independent variables had a potential influence on women's perceptions of successful financial retirement planning. Based on the variables encompassed in literature, and in conjunction with the model developed by Doa (2014) the following hypothesised model was developed.

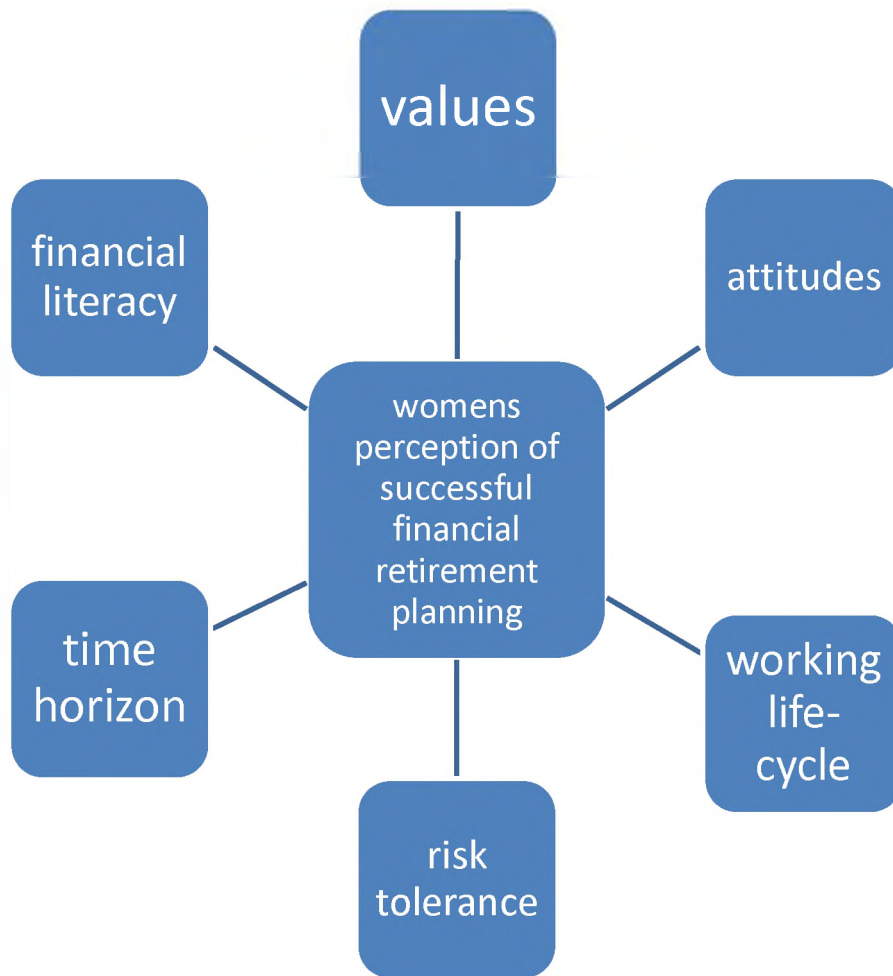


Figure 1.1 Hypothesized model

1.4.2 Hypotheses tested in the study

In an attempt to determine whether or not the independent variables had a significant influence on women’s perceptions of successful financial retirement planning, the following hypotheses was formulated and tested. In addition, a second set of hypotheses were developed to determine whether or not a set of selected demographic variables had a relationship with the independent variables (values, attitudes, working life-cycle, risk tolerance, time horizon and financial literacy) as well as the dependent variable (women’s perceptions of successful financial retirement planning).

The following hypotheses were developed to determine the relationship between the independent variables and women’s perceptions of successful financial retirement planning:

1. Relationship between financial literacy and women's perceptions of successful financial retirement planning
 - H₀₁: There is no relationship between financial literacy and women's perceptions of successful financial retirement planning.
 - H_{A1}: There is a relationship between financial literacy and women's perceptions of successful financial retirement planning.

2. Relationship between risk tolerance and women's perceptions of successful financial retirement planning
 - H₀₂: There is no relationship between risk tolerance and women's perceptions of successful financial retirement planning.
 - H_{A2}: There is a relationship between risk tolerance and women's perceptions of successful financial retirement planning.

3. Relationship between time horizon and women's perceptions of successful financial retirement planning
 - H₀₃: There is no relationship between time horizon and women's perceptions of successful financial retirement planning.
 - H_{A3}: There is a relationship between time horizon and women's perceptions of successful financial retirement planning.

4. Relationship between values and women's perceptions of successful financial retirement planning
 - H₀₄: There is no relationship between values and women's perceptions of successful financial retirement planning.
 - H_{A4}: There is a relationship between values and women's perceptions of successful financial retirement planning.

5. Relationship between attitudes and women's perceptions of successful financial retirement planning
 - H₀₅: There is no relationship between attitudes and women's perceptions of successful financial retirement planning.

- H_{A5}: There is a relationship between attitudes and women's perceptions of successful financial retirement planning.
6. Relationship between working life-cycle and women's perceptions of successful financial retirement planning.
- H₀₆: There is no relationship between working life-cycle and women's perceptions of successful financial retirement planning.
 - H_{A6}: There is a relationship between working life-cycle and women's perceptions of successful financial retirement planning.

The following hypotheses were developed to test the relationship between a number of selected demographic variables against the dependent and independent variables

1. The relationship between age and the independent variable as well as the dependent variable
 - H_{0a}: There is no relationship between age and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
 - H_{Aa}: There is a relationship between age and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
2. The relationship between education and the independent variable as well as the dependent variable
 - H_{0b}: There is no relationship between education and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
 - H_{Ab}: There is a relationship between education and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
3. The relationship between ethnic group and the independent variable as well as the dependent variable

- H_{0c}: There is no relationship between ethnic group and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
 - H_{Ac}: There is a relationship between ethnic group and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
4. The relationship between marital status and the independent variable as well as the dependent variable
- H_{0d}: There is no relationship between marital status and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).
 - H_{Ad}: There is a relationship between marital status and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

1.5 Research methodology

In order to investigate the factors that influence women's perceptions of successful retirement planning the following methodology was adopted.

Due to the quantitative nature of the data being collected in this study, a positivistic research paradigm was adopted. According to Leedy & Ormrod (2005:94) quantitative research which is based on positivistic methodologies is undertaken to answer questions about relationships between variables with the purpose of explaining, predicting and controlling phenomena. Moreover, Denzin & Lincoln (1994:4) states that a positivist research methodology does not involve the investigation of processes, but emphasizes the measurement and analysis of simple or casual relationships between variables in a value free context. Given the nature of the goals of the study, a post positivistic approach was the most appropriate to gauge the perceptions of the respondents to the factors influencing women's perceived successful retirement planning.

According to Welman and Kruger (2001) a population is the study object, which may be individuals, groups, organizations, human products and events, or the conditions to which

they are exposed. According Melville and Goddard (1996: 29) in reality it is often not practical or possible for a research to study the entire population. Thus, for the purpose of this study, a sample of respondents was used. In line with Doa (2014) study, the target sample for the study at hand was women in the Eastern Cape, who are older than 20 and involved in retirement investing. The sample size consisted of 250 women. This study aimed to investigate the factors which influence the perceived successful retirement planning taking into account age, demographics and education.

A sample frame is the listing of accessible population from which a researcher can draw (Welman, Kruger & Mitchell, 2005:57). It is therefore important to note that it was not possible to obtain a sample frame as the researcher could not obtain a database from which data could be extracted. Thus for the purpose of this study snowball sampling and convenience sampling techniques were used.

For the purpose of this research study a survey was chosen as the research instrument for gathering the primary data. The survey was adapted from that used by Dao (2014). The pre-existing survey was tested for reliability and had a Cronbach alpha coefficient of 0,7. The survey consisted of a self-administrated survey which was made available to participants electronically (e-mail) and via physical hard copies. The statements of the measuring instrument were phased using a 7 point Likert scale.

Data was thereafter analyzed using both descriptive and inferential statistics. Descriptive statistics is concerned with describing and summarizing the features of the data in the study (Trochim & Donnelly, 2001). Descriptive statistics involves measuring the mean, median, mode, frequency distributions and standard deviation of the data (Wilson, 2010:217).

A principle component factor analysis was conducted to extract factors associated to the various variables within the study as well as determine the validity of the construct. Based on the results, significant factors which were found to have an association with the dependent variable became the key reformulated variables to be used for all testing that followed. An ordinal logit regression analysis was then used to assess the relationship between the dependent variable and two or more key independent variables (Zikmund,

Babin, Carr & Griffin, 2010:581). Lastly, Pearson's correlation coefficient was used to determine the strengths between the dependent and independent variables.

1.6 Contribution to the study

As discussed above, planning for financial retirement planning is a complex process (Grace, Weaven & Ross, 2010). As a result of these complexities many individuals are unable to create sufficient wealth for retirement (Benartzi & Thaler, 2007). Financial retirement planning is said to be a major concern, especially for women (Rosenman & Scott, 2009:287) with Noone, Alpass and Stephens (2010:715) opining that women in general do less financial retirement planning than men. Consequently, women are continuously found to be more likely to suffer from poverty and poor wellbeing during their retirement years (Noone, Alpass and Stephens, 2010:715). It is therefore important that women actively partake in financial retirement decisions in order to avoid having insufficient funds for retirement.

Most studies on financial retirement planning focused on males, and were not conducted in South Africa (Noone, Alpass and Stephens, 2010; Grace, Weaven & Ross, 2010; Klapper & Panos, 2011; Talaga & Beehr, 1995). Therefore, this study aims to add to the undernourished research area of financial retirement planning, with focus on women in South Africa, specifically focusing on women in Grahamstown. This investigation into women's perceptions of successful financial retirement planning produces recommendations to be made to assist women when making financial retirement decisions.

1.7 Definition of concepts

To provide clarity on concepts used within the study, the following definitions of terms is provided. (It is important to note that the followings definitions have been taken and adapted from the study of Doa (2014)):

1.7.1 Perceived successful financial retirement planning

For the purpose of this study, perceived successful financial retirement planning is defined as the degree of satisfaction women experience with the growth, income, or profits of their retirement investment, which will enable them to be in control of their financial affairs during

retirement and enable the individual to be financially independent during their retirement years.

1.7.2 Financial literacy

For the purpose of this study, financial literacy is referred to as women having the basic knowledge and understanding of the different types of investment vehicles, having the knowledge about different retirement options, past investment experience, as well as knowing how/where to obtain financial assistance and guidance when making financial retirement decisions.

1.7.3 Risk Tolerance

For the purpose of this study, risk tolerance is referred to as women's awareness of risks and returns of their retirement investments, women's willingness to take on risk in their retirement investments, and an understanding of the positively correlated relationship between investment risk and return.

1.7.4 Time horizon

For the purpose of this study, time horizon is referred to as the knowledge and preference women have of the time horizon (length) of their retirement investment, the understanding that the risk in one's retirement portfolio needs to be reduced the closer one gets to retirement, and the knowledge that saving for retirement needs to commence as early in one's working life-cycle as possible (Basu & Drew, 2009:1).

1.7.5 Values

For the purpose of this study, values is referred to as women's personal, family, religious, ethical and cultural values which guide and influence the manner in which they take part in the financial retirement planning process.

1.7.6 Attitudes

For the purpose of this study, attitudes is referred to as women's confidence and tendency to partake in financial retirement planning in a comfortable, positive and successful manner.

1.7.7 Working life-cycle

For the purpose of this study, working life-cycle is referred to as the time spent actively working, as well as changes women experience in their working life-cycle due to changes in their personal life-cycle. Women need to monitor changes in their working life-cycle and adapt their retirement investments accordingly.

1.8 Summary of the structure of the research

The following section provides a summary of the structure of the study.

Chapter 1: Introduction to the study

Chapter 1 involves a discussion on the background of the research. Firstly, the research topic is introduced. Thereafter, the research goals and objectives are addressed. In addition, the hypotheses to be tested is stated and a brief discussion of the research methodology to be used in the study is addressed. Lastly, definitions of the concepts to be used in the study are provided.

Chapter 2: The financial retirement planning process

Chapter 2 provides an introduction to financial planning and financial retirement planning. Thereafter, the retirement system in South Africa is discussed. In addition, the types of retirement planning options and their tax implications will be addressed. Lastly, the different types of retirement plans are discussed.

Chapter 3: Conceptualization of financial retirement planning

Chapter 3 introduces the problems women face when financially planning for retirement. In addition, a discussion of the factors which influence women's perceptions of financial retirement planning are discussed and defined. Lastly, the hypothesised model is developed and discussed.

Chapter 4: Research design and methodology

Chapter 4 involves a discussion of the research methodology and design used in the study. A discussion on the research instrument and the sample of the study will be addressed.

Thereafter, a discussion on the data collection process and the statistical tests to be run is done.

Chapter 5: Empirical results

The results of the statistical tests run are addressed in Chapter 5. Firstly, the background of the participants is provided. Thereafter, the results of the validity and reliability are presented and addressed. In addition, a discussion based on the results of the ordinal logit regression and Pearson's product moment correlation coefficient are discussed.

Chapter 6: Discussion

Chapter 6 provides a discussion on the results of the study. The results of the study are linked to the corresponding theory presented in Chapter 2 and Chapter 3. Lastly, recommendations based on the findings are provided.

Chapter 7: Concluding remarks, limitations and recommendations for future research

Chapter 7 focuses on the concluding remarks of the study. In addition, the research limitations and recommendations for future research are addressed.

Chapter 2: The financial retirement planning process

2.1 Introduction

Planning for retirement plays an important role in many individuals' lives. However, with the recent shift from defined benefit contributions to defined benefit plans, planning for financial retirement has become a complex and integrated process (Grace, Weaven & Ross, 2010). These increased complexities associated with financial retirement planning have resulted in many individuals being unable to accumulate sufficient wealth for retirement (Lusardi, 2006). It is thus important that individuals ensure that they plan for retirement sufficiently, taking into account the different retirement options and investment vehicles, as well as the associated tax implications.

Chapter 2 will firstly address financial and retirement planning, thereafter financial retirement in South Africa will be addressed. And lastly, a discussion on the financial retirement options and their tax implications is presented.

2.2 Financial planning

Financial planning is considered to be a key component to the success of an individual's financial status (Bodie, 2003) with Garman & Fogue (2011:5) stating that "financial success is the achievement of financial aspirations that are desired, planned or attempted". According to Collins and Shemko (2009:67) financial planning is considered to be a systematic process that considers the important elements of an individual's financial affairs, and is aimed at fulfilling the individual's goals. It has been recognised that financial planning can accelerate an individual's financial security (Mina & Wise, 2003). Financial security has been defined as "achieving and maintaining a desired lifestyle for a pre-determined planning horizon" (Mina and Wise, 2003). It is however important to note that financial success will be defined in accordance with the individual who seeks it.

Robinsons (2000:8) suggests that financial planning is based on four aspects of neo-classical economics, namely utility maximization, goal-directed planning, risk management and family life cycle. While according to Botha *et al* (2010) financial planning is a complex and integrated process which covers the following major financial areas: personal financial management, business financial planning, risk management, tax planning, retirement planning, estate planning and investment planning. It is due to these complexities that

individuals need to ascertain a degree of financial literacy (the knowledge and understanding of investment vehicles and retirement options) in order to ensure they are able to sufficiently deal with the complexities associated with financial planning (Klapper & Panos, 2011).

Most guides to personal finance recommend beginning the process of financial planning by defining one's financial goals (Bodie, 2003:2). These goals are used as a map to provide direction and guidance to ensure the processes and procedures needed to achieve the financial goals are clearly outlined (Botha, Rossini, Geach, Goodall, Du Preez and Rabenwitz, 2010). These financial planning goals provide individuals with a sense of financial direction, and it is thus important that individuals actively partake in financial planning as early as possible. It is also important that the financial planning process is customised to suit the specific needs of the individual, as no two individuals face the same financial circumstance and financial needs (Hirsch, 2005). However, if the individual is unable or unwilling to partake in the financial planning process, individuals also have the option of seeking financial assistance and guidance from a financial advisor (Hirsch, 2005).

Despite the importance of financial planning, many individuals fail to actively take part in financial planning (Gitman, Joehnk & Billingsley, 2013). According to Hallman and Rosenbloom (2003) this is largely due to the fact that individuals lack sufficient financial assets to warrant financial planning or because individuals tend to find financial planning overwhelming and time consuming (Hallman & Rosenbloom, 2003).

Women's involvement in financial decision making is growing due to a number of converging trends including longer female versus male life span, a rise in the number of female heads of households, and a delay in the age of marriage (Morrin, Broniarczyk & Inman, 2011:437). However, even with women's financial responsibilities rising, women have rarely been encouraged to take part in financial matters (Money tips for single women, 2012). Due to the increase in women's financial responsibilities, it is becoming more important to understand the gender effects of financial planning so as to ensure the future financial well-being of women (Garman & Fogue, 2011).

2.3 Financial retirement planning

Retirement and retirement related issues have been the topic of research for over 40 years (Joo & Pauwels, 2002:2). Issues related to retirement and retirement planning have

traditionally focused on the male gender however, because the number of women in the working environment has increased, the importance of retirement issues pertaining to women has also increased dramatically (Grace, Weaven and Ross 2010). Retirement occurs when an individual withdraws from his normal occupation and reduces his work efforts or stops altogether (Burtless, 2004:5).

Financial retirement planning is an integral part of financial planning (Botha et al, 2010). Gitman, Joehnk & Billingsley (2013:539) are of the opinion that no financial goal is more important than achieving a comfortable standard of living during retirement. However, funding a comfortable retirement is not an easy task. It takes time, patience and sound investment advice (Fouquereau, Fernandez, Fonseca, Paul & Uotinen, 2005).

According to Singh (2007:29) “comprehensive retirement planning includes planning for retirement income, investments, long-term health care, lifestyle and wealth transfer, and the possible implementation and continuing management of planning strategies.” From the above, it is clear that financial retirement planning is a complex and integrated process, and individuals must ensure that sufficient time is spent on planning for retirement to ensure sufficient retirement wealth is created (Lusardi, 2006). It is also vital that individuals understand that financial retirement planning is an on-going process which requires continuous revision and adjustments (Tannahill, 2014).

Insufficient financial retirement planning has significant consequences for savings as well as portfolio choice, and results in far less accumulation of wealth when compared to those who have planned effectively. However, in order to perform financial planning for retirement, an understanding of the retirement planning process is required. According to Bodie (2002:1) there is an abundance of evidence which indicates that individuals constantly make certain financial retirement planning mistakes due to a lack of knowledge, faulty logic, and cognitive dissonance and bias statistics.

In order to plan for retirement, individuals must make a number of important financial retirement decisions (Grace, Weaven & Ross, 2010). “Workers who anticipate reaching old age must make three choices about retirement; the age when they will retire, the percentage of wage set aside so they can live comfortably when they cease to work, and the allocation of their retirement savings across different kinds of investments, such as stocks and bonds, banks and insurance accounts and real estate” (Burtless, 2004:1). Over and above, wealth

is considered to be one of the most important considerations which need to be accounted for when planning for retirement (Kim, Kwon and Anderson, 2005:1).

A number of factors influence the consumer's likelihood of accumulating wealth for retirement. Issues relating to life expectancy, taxation policy and income level are important external variables that exert considerable influence on wealth accumulation for retirement (Grace, Weaven and Ross, 2010:3). Gitman, Joehnk & Billingsley (2013:539) suggest that there are three pitfalls to accumulating sufficient wealth in retirement, namely "starting retirement saving too late, putting away too little, and investing too conservatively". Accordingly, individuals must make a concerted effort to ensure the above factors are taken into consideration when financial planning for retirement.

A major cause linked to the above mentioned problems is individual's lack of financial literacy (Klapper & Panos, 2011, Gallery, Gallery, Brown Furneaux and Palm, 2011). Due to many individuals lacking financial literacy they are often unaware of when and how much to save for retirement (Calcagno & Monticone, 2015). Consequently, an individual's lack of financial literacy impacts the individual's ability to successfully plan for financial retirement.

"As public and private pension systems around the world continue the ongoing shift from traditional defined benefit plans which typically pay benefits for life, to defined contribution structures which rarely require annuitization, retirees find themselves increasingly exposed to longevity risk – the risk of being unable to sustain their consumption should they live longer than average" (Mullainathan & Wrobel, 2008:1). The above-mentioned shift has resulted in individuals being faced with greater financial responsibility to save, invest, and accumulate their retirement wealth in a sensible manner (Lusardi, 2003).

Determining the amount of wealth needed to meet liabilities during retirement plays a key role in the financial retirement planning process (Mullainathan & Wrobel, 2008). Retirement fund calculations allow individuals to determine how much money they need to live comfortably during retirement. It is an initial step in financial retirement planning that lets individuals develop subsequent plans to achieve their financial retirement goals (Kim, Kwon and Anderson, 2005:2). Financial advisors seem to agree that the ultimate goal of a financial retirement plan is to maintain one's standard of living in retirement (Bodie, 2001:2). "Most financial planners estimate that you'll need about 70% of your preretirement household income (the amount you're making the year before retirement) to maintain your standard of living" (Bodie, 2001:2).

Many individuals fail to save adequately for retirement as they are often disinterested and confused about financial retirement planning and the various associated financial products (Vidler, 2003). They see more value in paying off current debt than saving for retirement (Grace, Weaven & Ross, 2010:6). The reason for the above is that the payoff for financial retirement planning is in the distant future and many people overlook the many benefits which are associated with early retirement saving (Selnow, 2003). According to World Bank (2011:2008) the above problem is specifically acute in South Africa as South Africa's saving rate is lower than any other emerging economy.

There is often a serious underestimation of how long one will live and how much money one will require during retirement (Bodie, 2002). Consequently, many individuals fail to adequately provide for themselves in the long-run. According to Kim, Kwon and Anderson, (2005:77), studies have indicated that many individuals may not have sufficient resources to maintain their financial independence during retirement. Moreover, women represent a large portion of the non-planners and there is thus severe concern over how female headed households will fare during retirement (Lusardi, 2006). Another observation by Aron and Muellbauer (2000:2) is that "since the early 1980s, South Africa has experienced substantial rises in the ratios to income of consumption and household debt".

From the above, it is clear that financial retirement planning is an important part of the financial planning process, and individuals must ensure an active retirement planning attitude is adopted. According to Kim, Kwon and Anderson (2005:79) active financial retirement planning has been shown to positively affect attitude toward retirement, and can thus have major positive implications on the success of one's retirement plan.

2.4 Financial retirement in South Africa

During the late 1980s most private sector funds converted from defined benefit plans to defined contribution plans (Van Zyl, 2003). The majority of funds within South Africa's private sector are now made up of defined contribution plans (Kaniki & Ntuli, 2011:56). Defined contribution plans seemed attractive to both members and trade unions as these funds allowed for greater democratic control of funds, offered better withdrawals and offered greater flexibility (Benartzi & Thaler, 2007; Van Zyl, 2003:102). Furthermore, employers welcomed the shift as it released them from the risk of having to underwrite the risks associated with defined contributions (Van Zyl, 2003:102). However, as mentioned above,

the shift from defined benefits to defined contributions retirement plans has resulted in the financial retirement planning processes becoming more complex (Benartzi & Thaler, 2007). Consequently, many countries worldwide, South Africa included, are concerned that many individuals will be unable to accumulate sufficient wealth for retirement (De Beer, 2015).

Saving for retirement remains a major challenge for many South Africans (Van Zyl, 2003) with many South Africans failing to save for retirement, or leaving it too late to save enough for retirement (Nevondwe, 2010:289). In addition, South Africans tend to have high levels of debt, and tend to be consumption driven, both of which have negative implications on an individual's ability to accumulate sufficient wealth for retirement (Nkoutchou & Eiselen, 2012). Moreover, early withdrawals, low income and inadequate financial literacy, poorly position many South Africans for financial retirement (Kaniki & Ntuli, 2011). This has resulted in only 6% of South Africans above the age of 60 being able to save sufficiently in order to be financially independent during retirement (Gradidge, 2014:53).

According to Van Zyl (2003: 101) the South African old age pension system comprises of three components, namely contributory employment-related pension funds, private savings and a social assistance programme which is commonly known as the State Old Age Pension. However, due to factors such as high unemployment and HIV/AIDS rates, the state has insufficient wealth to provide adequate pension funding, and thus there is heavy reliance on the private retirement sector (O'Donovan, 2002:13). Consequently, South Africa has one of the world's highest private and occupational pension contributions (O'Donovan, 2002:13).

Eligibility for The State Old Age Pension Fund is means tested and based on the income of the individual beneficiary, and his/her partner - if married (Barrientos, 2005). O'Donovan (2012) however, suggests that the State Old Age Pension Fund is almost meaningless as it is only available to individuals who are in dire financial need. Therefore, the South African pension system is mainly based on and reliant on private pension fund systems, with over 13 million individuals being members of private pension funds at the end of 2008 (Financial Service Board, 2008). As a result of the major limitations of the State Old Age Pension Fund, greater emphasis needs to be placed on the importance of actively saving for future financial retirement needs.

Like in many countries worldwide, retirement in South Africa is far more of a concern for women compared to men. Women in South Africa are generally poorer and more financially vulnerable than men (Goldblatt, 2009). Van Zyl (2003:104) reports an alarming 75% of

women are not contributing to a retirement plan compared to 59% of men. Women's greater exclusion from contributing to pension funds is largely due to their low labour market participation, their higher unemployment rate, lower financial literacy as well as family and childbearing responsibilities (Grace, Weaven & Ross, 2010; Jacobs-Lawson, Hershey & Neukam, 2004; Van Zyl, 2003). This is cause for grave concern for many women in South Africa. However, the issues pertaining to women and financial retirement planning will be dealt with in more detail in Chapter 3.

2.5 Financial retirement plans

Financial retirement plans comprise of three categories, namely: defined benefit plans, defined contributions plans and individual retirement accounts. Each financial retirement plan is comprised of different characteristics and components. The following section provides a discussion on the characteristics and components of each financial retirement plan.

2.5.1 Defined benefit plans

Over the past decade there has been a major decrease in the number of defined benefit retirement plans offered to employees (McCarthy, 2003). In a traditional defined benefit pension plan, workers accrue a promise of a regular monthly payment from the date of their retirement until their death, or, in some cases, until the death of their spouse (Boardman, Palumbo & Woodman, 2006:2). In other words, a defined benefit plan specifies an output for the individual. Upon retirement, the individual is entitled to an annual income equal to a percentage of their average salary multiplied by the number of years employed with the sponsoring employer (Zelinsky, 2004:545).

Within a defined benefit plan, the employer makes the retirement savings decisions. Therefore, the employer decides who participates, what contributions are made to the retirement plan, and how the plan's assets are invested (Coronado & Hewitt, 2005:41). As a result, less financial responsibility is placed on the individual participant (Boardman, Palumbo & Woodman, 2006:5). Resulting in a reduction in the participant's longevity risk. Longevity risk is the risk that plan beneficiaries will live longer, on average, than originally expected, increasing the time period for paying the benefit (Boardman, Palumbo & Woodman, 2006:5). Despite the decreased longevity risk associated with defined benefit

plans, these plans have lost favour with many employers, which is largely due to their cost and cost volatility (Boardbent, Palumbo & Woodman, 2006:5; Coronado & Hewitt, 2005).

A major shortcoming of defined benefit plans is their lack of portability and flexibility (Benartzi & Thaler, 2007). Thus, unless the defined benefit pension plan is portable, which is uncommon in private sector plans, the back loading of defined benefit plan benefits is significant for employees who change employers during their working career (Mitchell, 1999). The lack of portability associated with defined benefit plans means that when individuals change jobs the individual could lose a portion or all wealth accumulated in their defined benefit plan.

2.5.2 Defined contribution plans

Defined contribution plans were originally positioned as extra saving programs, meant to supplement defined benefit plans, which provided additional guaranteed retirement income (Rafaloff, 2014:21). However, the introduction of defined contribution plans has resulted in a major shift in the landscape of pension plans. The shift from defined benefit plans towards defined contributions plans has resulted in defined contributions becoming the dominant pension scheme in a number of countries worldwide (Boardbent, Palumbo & Woodman, 2006:1). Many individuals no longer have access to defined benefit plans, consequently that source of guaranteed retirement income can no longer be relied on (Rafaloff, 2014).

A defined contribution plan specifies a specific input for the individual (Lockem, 2010) such that workers accrue funds in individual accounts administered by the plan sponsor (Boardbent, Palumbo & Woodman, 2006:3). The contributions to these funds are usually deducted directly from the individual's monthly income (Boardbent, Palumbo & Woodman, 2006:3). The wealth accumulation of the defined contribution plan which is accumulated during the employee's working career will depend on the contributions made while working and the investment returns earned on the plan balances (Yoa, Ying & Micheas, 2013).

Defined contribution plans are considered to be important vehicles for retirement savings and have many advantages. (Huberman, Iyengar, Jiang, 2007). A major advantage associated with defined contribution plans is the portability of the plans (Benartzi & Thaler, 2007). Within a defined contribution plan the assets belong to the worker, meaning that previous contributions are portable across employers (Boardbent, Palumbo & Woodman,

2006:8). As a result, individuals may leave a plan under a previous employer and transfer the pension plan to a new employment plan or to an individual retirement account.

Defined contributions plans are more flexible, and enable participants the freedom to make active decisions in the design of their contribution plan (Benartzi & Thaler, 2007). As a result, individuals have the opportunity to decide what investment vehicles their retirement savings will be invested in. However, this may be considered a hindrance to individuals (Choi, Laibson, Madrian & Metrick, 2002:68) as the ability to make sound retirement decision requires a degree of financial literacy and understanding.

Defined contribution plans result in individual participants being subjected to greater financial responsibility (Yoa, Ying & Micheas, 2013). Individuals who are eligible to participate in defined contribution plans must decide whether they will participate, how much they must contribute and how their contributions should be invested (Yoa, Ying & Micheas, 2013:55). According to Choi *et al* (2002:68) making good plan design decisions requires an understanding of the relationship between plan rules and participant choices. Thus, although defined contribution plans enable individuals to be more actively involved in their pension plans, the increased freedom results in greater financial responsibility placed on individuals. Consequently, individuals are under greater pressure to manage their retirement accounts in an effective manner.

According to Rafaloff (2014:21) one of the toughest challenges for a defined contribution participant is determining the amount to save that will ensure their retirement savings won't be outlived. However, many individuals fail to accurately forecast their financial retirement needs and thus many individuals tend to outlive their retirement income (Most & Wadia, 2015). This creates challenging circumstances for people to properly manage their investments and withdrawals from their retirement accounts (Most & Wadia, 2015:23).

2.5.3 Individual retirement accounts

Individuals saving for retirement can also do so through an individual retirement account. Over the past 10 years, the use of so-called self-directed individual retirement accounts used to invest in assets outside of the publicly traded securities market has increased dramatically (Baker, 2014:33). Conceptually, an individual retirement account can be defined as a fund or accumulation of money or other assets created by an individual for the general purpose of saving and investing for the future (Craine, 1975:2). Individual retirement

accounts are similar to defined contribution pension plans, in that each individual contributes a fraction of annual earnings so that, upon reaching retirement, the individual then has a potentially large stock of wealth from which to finance consumption in the remaining years of life (Brown, 2002: 401).

Individual retirement accounts provide individuals with the greatest level of discretion and flexibility in terms of retirement planning. Individual retirement accounts provide individuals with opportunities to make financial decisions about the investment of retirement plan assets and about the distribution of these assets after retirement age (Proberta & Wise, 1998:366). Thus the individual investor undertakes tremendous financial responsibility, and it is imperative that individual makes sound financial decisions to ensure the longevity of their retirement wealth. Poor investment decision-making by individuals in their retirement account could have a detrimental impact on their future income (Waggle & Englis, 2006: 80).

The portfolio decision-making of individual investors is an issue of increasing importance as more and more individuals take personal control of their investment and retirement accounts (Waggle & Englis, 2006: 79). This is largely due to the fact that individuals have great amounts of freedom when investing their savings through an individual retirement account. Akin to a defined contribution plan, if an individual is unwilling or unable to take on the complexities of retirement planning through an individual retirement account, the individual may seek help from a financial advisor (Benartzi & Thaler, 2007).

2.6 Retirement funds

In essence there are three private retirement vehicles which an individual can partake in, namely; annuities funds, provident funds and pension funds (Lockem, 2010:7). The main objective of the above retirement vehicles are to save in order to provide a secure and comfortable lifestyle during retirement (Godden, 2010). These retirement vehicles are structurally different and have different tax implications. In the following sections the characteristics of retirement funds will be discussed.

2.6.1 Retirement annuities

Retirement annuities have traditionally been regarded as a safe and effective manner to save for retirement (Finweek, 2010:56). A retirement annuity is an insurance product which

serves a contract between the buyer and the seller, whereby the buyer makes a series of tax deferred payments over a period of time in return for estimated monthly payments once the individual has retired (Sammer, 2013:41). Hence, retirement annuities are considered a good way that individuals can achieve a financially comfortable retirement (Lailey, 2015:35).

Retirement annuities operate on the same basis as a pension fund, except the employer/employee relationship does not exist within such a fund (Lailey, 2015:35). Employees join a retirement annuity in their own capacity, resulting in the individual having more control over their retirement savings (Klinger, Ryan & Gray, 2013). Therefore, individuals have the option of selecting their investment options from a number of unit trusts and from a number of different providers (Lailey, 2015:35; Klinger, Ryan & Gray, 2013). Annuities come in a number of different forms, they include: certain annuities, which provide periodic pay-outs for a fixed number of years, and life annuities which provide pay-outs for the duration of an individual's life (Taxing time for retirement annuities, 2010:56).

A retirement annuity can be created by an administrator, an asset manager or an insurer for the benefit of the individual (Godden, 2010). According to Godden (2010:24) the main objective of a retirement annuity is to provide regular income to individual members upon their retirement. Generally, a retirement annuity is similar to a defined contribution fund with the retirement income being dependent on the individual's contributions and interest earned on contributions (Lockem, 2010:7). Consequently, great responsibility is placed on the individual to ensure that sufficient contributions are made and enough wealth is created for retirement.

There are a number of benefits associated with retirement annuities. Firstly, retirement annuities are hugely tax efficient (Lailey, 2015:35). Contributions to retirement annuities are gross of tax, thus all income on a retirement annuity is tax free (Lailey, 2015; Finweek, 2010). Many individuals tend to favour retirement annuities due to these tax deductions on contributions that ultimately lower their tax liability (Finweek, 2010). Subsequently, the tax benefit compounded by the life-cycle of the retirement annuity can have a significant impact upon retirement (Lailey, 2015:35). Secondly, individuals tend to be highly mobile in the workforce (Klinger, Ryan & Gray, 2013:5). As mentioned above, retirement annuities are individually owned which makes them extremely flexible. Thus, annuities are extremely beneficial as they are not affected by individuals changing jobs.

It is important to note that retirement annuity funds do not allow individuals to receive any benefits before the age of 55 (Finweek, 2010). Once the individual has reached the age of 55, the individual can only commute one third as a lump sum, while the remaining balance can be taken up in the form of a pension or annuity fund (Lockem, 2010).

From the above, it is clear why retirement annuities are regarded as safe and effective retirement options (Lailey:2015; Finweek, 2010). Moreover, annuities seem to be a common retirement option for self-employed individuals as well as individuals wishing to make additional provisions for retirement (Godden, 2010:24).

2.6.2 Provident funds

Provident funds are a form of occupational retirement schemes (Asher, 2009). A provident fund is set up by an employer for the purpose of benefiting its employees. According to Munro & Snyman (1995) provident funds were traditionally created for individuals who had irregular income or whose income might decrease before retirement. A major benefit associated with a provident fund is its simplicity. According to Gerdes (1971: 573) provident funds are simple in form and thus easy to explain to all workers. Provident funds can take the form of either a defined benefit fund or a defined contribution fund (Finweek:2015).

Provident funds provide pay-outs, where the amount the individual is entitled to will equal the sum of the contributions made by the individual plus the interest earned (Gerdes, 1971:573). Within a provident fund arrangement, member's contributions are paid post-tax income (Godden, 2010). As a result, provident funds are not tax deductible. A provident fund allows the individual to commute their entire fund into a lump sum (Lockem, 2010:7).

2.6.3 Pension funds

Pension funds are set up by the employer for the benefit of the employee upon retirement (Lockem, 2010). A pension fund, much like a provident fund can take the form of either a defined contribution plan or a defined benefit plan (Munro & Snyman, 1995). A pension fund requires that the individual makes monthly contributions which are usually based on a percentage of pensionable salary for each year of service (Munro & Snyman, 1995). In addition to the member's contributions, the employer may also make monthly contributions to the pension plan (Lockem, 2010).

Pension funds can also provide additional benefits such as death or disability benefits (Godden, 2010:24). Contributions made to a pension plan are paid from pre-tax income (Godden, 2010:24). Within a pension fund the individual may only commute one third as a lump sum, and the balance needs to be taken up in the form of a retirement annuity or pension fund (Lockem, 2010:7).

2.7 Tax deductions

Tax deductions can have major implications on an individual's retirement wealth accumulation. It is vital that when doing financial planning for retirement, individuals take the applicable tax deductions into account. In addition, it is important that individuals refrain from withdrawing their retirement savings prematurely to avoid further tax deductions on their retirement savings.

Two tables illustrating possible taxation deductions have been provided below. Table 2.1 illustrates the taxation of lump sum benefits on retirement, death, termination of employment due to redundancy and termination of employer's trade. Table 2.2 illustrates the taxation liabilities an individual will face when withdrawing from a retirement fund prior to the age stipulated by the retirement fund.

Table 2.1: Table illustrating possible taxation on lump sum benefits for the year 2015.

Taxable portion of lump sum	Rate of tax
Between 0- 500 000	0%
Between R500 001- 630 000	18% of taxable amount exceeding R500 000
Between R700 001 and R1 050 000	R36 000 plus 27% of taxable amount exceeding R700 000

R1 050 001 and above	R130 500 plus 36% of taxable amount exceeding R1 050 000
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Source: Tax pocket guide (2015:17)

Table 2.2: Table illustrating taxation on withdrawals of lump sum for the year 2015

Taxable portion of withdrawal	Rate of tax
Between R0 and R25 000	0%
Between R25 001 and R600 000	R0 plus 18% of taxable amount exceeding R25 000
Between R660 001 and R990 000	R114 300 plus 27% of taxable amount exceeding R660 000
R990 001 and above	R203 400 plus 36% of taxable amount exceeding R990 000

Source: Tax Pocket guide (2015:17)

2.8 Alternative investments

There has been a steady increase in the number of alternative investments being used within retirement portfolios (Wagner, 2014). Moreover, it has been said that more South Africans are showing interest in using alternative investments (Doing deals differently, 2007). Alternative investments are investments which do not consist of the typical stock or bond funds (Capone, French & Skinner, 2013). Both alternative assets and alternative strategies are considered forms of alternative investments (Solnik & Mcleavey, 2009: 318). Thus, alternative investments consist of non-traditional strategies such as private equity, hedge funds, real estate, communities and many more (Nobile, 2015: 17).

Alternative investments appeal to many individuals due to the potentially higher returns and diversification which the unique asset class offers (Wagner, 2014). By making use of alternative investments (which are notoriously high risk) and investing in a variety of retirement products, the investor is able to invest in products with inverse investment relationships which may reduce the investment risk of the individual's retirement portfolio. Subsequently, alternative investments offer better diversification of funds which have the ability to provide individuals with new sources of return. These offer greater protection

against market volatilities, inflation as well as interest rate risk (Inderst, 2009:4). The following section provides a discussion on several types of alternative investment options.

2.8.1 Private Equity

Funds which invest in private equity have increased in importance over the past decade (Cummings & MacIntosh, 2007). Private equity is a broad term that generally refers to an individual investing in a potentially successful company, or an asset not publicly traded on the capital market (Solnike & McLeavey, 2009:344). Equity funds generally make long-term investments in private companies and seek to obtain financial returns through long-term appreciation based on active management (Solnike & McLeavey, 2009).

Private equity is made up of two main types of vehicles namely, leveraged buy-out and venture capital. Venture capital is the component of private equity which focuses specifically on supporting start-ups and new businesses in their early stages (Froud & Williams, 2007: 406). Buy-outs on the other hand, occur when investors generally take a majority control in acquired companies. These acquired companies are established and are often publicly traded on some exchange (Solnike & McLeavey, 2009:345) thus buy-outs usually apply to mature firms.

Within an equity investment, the rate of return is based on the performance of the company. Moreover, equity holders generally only recover their investment when they exit (sell their investment) (Salamon, 2014). It is however important for individuals to understand that investing in private equity is considered an extremely complex and risky undertaking. This is largely due to their long-term illiquid nature, their lack of transparency and lack of publicly traded information (Söderblom, 2011). Thus, although private equity may offer high returns, the risks associated with these investments are extremely high (Salamon, 2014).

2.8.2 Property (Real estate)

Real estate investments represent a large portion of individual portfolios (Georgiev, Gupta & Kunkel, 2003). According to Solnike & McLeavey (2009:332) "Real estate is usually considered to be building and buildable land, including offices, industrial warehouses, multifamily buildings and retail space". Real estate can either be invested directly in property or indirectly through real estate shares (Mkhize & Bekwa, 2009:392). Real estate shares or real estate investment trusts (REIT) provide investors with a liquid exposure to real estate via standardized financial securities (Georgiev, Gupta & Kunkel, 2003:3). Individuals in

favour of real estate investment anticipate two main benefits from these investments, namely: diversification and inflation hedge benefits (Mkhize & Bekwa, 2009:392).

Investing in property however, is expensive and is associated with high risk (Guo, 2010:239). Moreover, there is relatively low transparency in the real estate industry which provides a source of high risk (Mkhize & Bekwa: 2009:392). In addition, real estate investment can be a complex process as there are a number of factors such as location and design which can affect the price of the property (Guo, 2010).

2.8.3 Exchange traded funds (ETFs)

ETF's are index based investment products that allow individuals to either buy or sell exposure to an index through a single financial instrument (Solnike & McLeavey, 2009: 323). An ETF can be bought or sold at any time during the trading day at the current market price (Anderson, 2006:48). ETFs trade on stock markets much like shares of individual companies (Solnike & McLeavey, 2009: 323).

ETFs are appealing to individuals as they provide a simple, low cost means of gaining a diversified portfolio (Kosev & Williams, 2011:51). "ETFs are securities which are backed by pools of assets, the return of which is expected to track a specific benchmark as closely as possible" (Kosev & Williams, 2011:51). ETFs are becoming increasingly more popular largely due to their cost effectiveness, transparency as well as their diversification benefits (Brown, 2013; Solnike & McLeavey, 2009). Furthermore, Ergungor, (2012) suggests that ETFs are one of the most successful financial innovations.

Despite their increasing popularity, ETFs are not necessarily the most efficient alternative investment vehicle (Haslem, 2003). This is largely due to their narrow based index-market, small trading volumes and bid-ask spread (Brown, 2013; Solnike & McLeavey, 2009:323). Moreover, many investors do not require the intraday trading opportunities which are provided with ETFs (Haslem, 2003). The above disadvantages could be why few individuals have incorporated ETFs into their retirement plans (Anderson, 2006; Polyak, 2007).

2.8.4 Hedge funds

Hedge funds are legal entities which allow individuals to pool their money which is managed by an investment manager who then exploits pricing inefficiencies in the market in order to generate high returns while trying to assume as little risk as possible (McNeil, 2012: 38).

Academics have defined hedge funds as privately offered, relatively unregulated pooled investment vehicles in the form of limited partnerships or limited liability companies that have the flexibility to invest in a broad range of securities and commodities using a broad range of trading techniques (McNeil, 2012: 38).

Hedge funds provide individuals with exposure to investments which an individual may not already have. This in turn diversifies individual's portfolios (Nicholas, 2010:2). Hedge funds therefore protect individuals from the risk associated with traditional investment options. It is important to note that not all hedge funds are alike. Hedge funds comprise of long/ short funds, Market-neutral funds, global macro funds, emerging market funds, event-driven funds, risk arbitrage and mergers and acquisitions (Solnike & McLeavey, 2009:356).

Hedge funds offer the investor the opportunity to generate great return and the opportunity to invest in a wider range of instruments compared to a mutual fund (McNeil, 2012: 42). Investors benefit from receiving the highest return on their invested capital (Shadab, 2009: 263). However, a major risk of hedge funds is a lack of regulation which results in a lack of transparency (McNeil, 2012). Moreover, there are restrictions in place which restrict the number of participants within a hedge fund (Solnike & McLeavey, 2009). Hedge funds, like many other alternatives are still in their infancy in South Africa with few individuals incorporating hedge funds into their retirement plan (Financial mail, 2010).

2.9 Financial planners

Current and future retirees face circumstances that in previous generations were not as apparent. These circumstances include the decreasing availability of traditional defined contribution pension plans, increasing longevity risk and rising health care costs (Salter, Harness & Chatterjee, 2011:60). In conjunction with a lack of financial knowledge and sophistication, many individuals may be at risk of being unable to save sufficiently for retirement (Martin & Finke, 2014:46). Moreover, rapid advances in product innovation and complexities have led to predictable consumer financial mistakes in the market (Finke & Cummings, 2014:4).

“The complex nature of financial products and the deferring intellectual levels of individuals, validate the existence of financial intermediaries that provide advisory services to consumers on behalf of the product suppliers, either in the form of agents or financial service providers” (Ramchander, 2011:1). Bae and Sandager (1997) noted that due to the complex

economic environment, frequent changes in income and estate taxes, as well as new and diverse ways to invest money, more individuals are seeking professional financial advice. The growing market for professional financial advice has helped fill the gap between the financial skills of most individuals and the skills required for financial assets during retirement (Chatterjee & Zahirovic-Herbert, 2010).

To ensure sufficient retirement wealth is created, a degree of financial knowledge is required. However, Finke, Huston & Winchester (2011:19) state that rather than investing scarce resources to acquire the financial knowledge needed to plan effectively, relying on the assistance of a professional may be a more efficient approach. The following section will focus on the advantages as well as the disadvantages of financial planners.

2.9.1 Advantages of using a financial planner

Hiring a professional financial planner involves using a scarce resource in order to hire a decision making agent equipped with greater knowledge and ability; in this case, personal finance-specific human capital (Finke, Huston & Winchester, 2011:19). Since defined contribution plans have resulted in the financial retirement process being more complex, seeking a financial planner can help simplify the complexities. Moreover, according to Letkiewicz, Domian, Robinson and Uborceva (2014:3) financial planners can help individuals and households decide which financial decisions are in their best interest. This is largely due to the fact that financial planners have the tools and expertise which is lacking within a large portion of the general population (Letkiewicz *et al*, 2014:3).

According to Evans (2009) the primary reason individuals seek help from a professional financial planner is to start preparing for retirement. Professional financial planners can help households accurately estimate the amount of retirement income needed to fund household retirement goals (Martin & Finke, 2014:46). Moreover, an expert, such as a financial planner, has specific knowledge about financial products and theory, which can be drawn on in order to help a client develop an effective plan to achieve their retirement goals (Martin & Finke, 2014:47). Thus, professional financial planning is an important option which can help an individual's overall financial well-being (Letkiewicz *et al*, 2014:3).

Seeking the help of a professional financial advisor can result in large amounts of the individual's time being saved. Robb (2014:71) states that financial planners save individuals the time of having to master complex financial concepts or sort through various options on

the market place as they have a professional who handles these decisions for them. A financial planner may also increase a worker's awareness of the consequences associated with low savings, reduce the psychological costs of making complex choices, and help improve overall investment performance and tax efficiency within household portfolios (Martin & Finke, 2014:46).

Calcagno and Monticone (2015:2) state that previous research indicates that "households who are financially illiterate are more prone to inefficiency, low participation in the stock market, to portfolio under diversification, to inertia their portfolio management and to over-indebtedness." However, financial advisors have specialized financial knowledge to help the client ensure that the above inefficiencies do not occur. Furthermore, a financial advisor can provide recommendations to help employees meet their retirement goals by suggesting appropriate investments and estimating retirement savings needs (Finke & Cummings, 2014).

A major issue faced by individuals with insufficient financial literacy is the inability to calculate the amount of wealth needed for retirement (Son, 2012). The process of calculating retirement income needs often results in a realization that an individual has not been saving enough for retirement (Martin & Finke, 2014:47).

According to Salter, Harness and Chatterjee (2011:61) research shows that individuals who seek help from financial advisors have higher levels of confidence, greater feelings of financial security, a greater likelihood to have undertaken planning activities such as having a plan for retirement income and estimating retirement income needs. In addition, individuals who make use of financial planners are said to be in a better overall financial position (Evans, 2009).

2.9.2 Disadvantages of using a financial planner

Despite the many benefits associated with seeking professional financial assistance, there are a number of negative attributes which need to be considered before seeking professional financial advice. One of the major disadvantages of seeking financial assistance is the cost involved in hiring professional financial advice. Consumers compensate financial planner's services by paying fees, commissions or a combination of these (Son, 2012:23). The costs of financial planning include commissions on financial products, fees paid for the preparation of financial plans, and recurring fees that are often

levied as a proportion of assets managed by the adviser (Finke, Huston & Winchester, 2011:19).

Financial advisors advice may be biased when financial advisors act as sellers to financial products (Calcagno & Monticone, 2015). Biased advice might not improve an individual's portfolio allocations and may even be to their detriment (Calcagno & Monticone, 2015:2). Due to the fact that many financial advisors have incentives to sell a certain product to their client, agency costs may arise. Agency costs are incurred when the agent (financial advisor) has incentives that encourage recommendations that may not be in the best interest of the client (Finke & Cummings, 2014:4). Finke and Cummings (2014:4) further state that the above problem is particularly acute for the average investor who may have difficulty locating a knowledgeable advisor who acts in the individual's best interests. "Such incentives also relate to the different financial concerns of financial advisors: (1) generating commissions for their financial institution, (2) possibly, generating a performance-based bonus and, (3) enhancing the performance of the investors' portfolio" (Kramer, 2009:4). Ultimately, the need for consumer protection arises from an imbalance of power, thus placing consumers at a disadvantage (Ramchander, 2011:2).

Financial intermediaries generally have better information than their clients with regards to financial products and any non-disclosure, misrepresentation or misleading on their part may lead to clients entering into contracts to their own detriment (Ramchander, 2011:1).

According to Finke, and Cummings (2014:24) a major advantage associated with individuals who use financial planners is the fact that individual's accounts are well diversified. However, individuals who have financial planners tend to have lower returns on their portfolios (Son, 2012). Consequently, lower returns on a portfolio results in less retirement wealth being created for the individual.

From the above discussion it is thus evident that financial advisors are associated with a number of benefits. However, before individuals consider seeking professional financial advice, the above mentioned disadvantages need to be taken into consideration.

2.10 Regulatory environment of financial retirement planning

There are a number of regulatory bodies as well as legislation implemented in the financial service industry to ensure transparency and integrity is maintained within the South African financial service industry. The regulatory bodies in place aim to protect the best interest of

individuals who make use of financial services. The following section aims at highlighting the South African Pension fund Act, the Financial Service Board, The Financial Advisory and Intermediary Act and the Financial Intelligence Centre Act.

2.10.1 The South African Pension Fund Act

The South African Pension Fund Act regulates the affairs of all pension funds as well as trustees. The South African Pension Fund Act was promulgated into law in 1956 (Nevondwe, 2010). In terms of the South African Pension Funds Act No. 24 of 1956 (as amended), all retirement funds, other than retirement funds to which the State contributes and official funds, must be registered by the Registrar of Pension Funds and must comply with the provisions within the South African Pension Fund Act (Pension Fund Act, 1956). The effect of the above recognition is that the fund acquires a legal identity and thus has the power to enforce its decisions, rules and activities under the law (Olaifa, 2012:50). The South African Pension Fund Act serves to protect all individuals who own pension funds. In addition, the South African Pension Fund Act also ensures that the rules and regulations surrounding pension funds are legally binding and enforceable.

2.10.2 The Financial Service Board

The Financial Service Board is an anonymous institution established by government in order to oversee and regulate the South African non-banking financial services industry (Kaniki & Ntuli, 2011:40). Given the lack of compliance and legislation governing the financial service industry, government implemented the Financial Service Board, whose main aim was to protect clients from noncompliance within the financial service industry (Act shifts focus from self-regulatory to regulated, 2004). The main purpose of the Financial Service Board is to promote and preserve a sound investment environment within South Africa (Kaniki & Ntuli, 2011:40). Ultimately, the Financial Service Board ensures that individuals' best interests are taken into consideration when operating in the financial service industry.

The Financial Service Board stipulates that all financial advisors need to obtain the necessary credentials as required by the Financial Advisory and Intermediary Act (FAIS) (Cut-off date approaching, 2006) in order to operate. Moreover, the Financial Service Board has the power to take disciplinary action if the Act is not abided by. Furthermore, the Financial Service Board is enabled to institute civil class claims against inappropriate financial advice or products offered within the financial industry (Act shifts focus from self-

regulatory to regulated, 2004). Lastly, the Financial Service Board plays an important role in promoting a safe and stable environment for all retirement funds in South Africa (Financial Service Board, 2015).

2.10.3 The Financial Advisory and Intermediary Service Act

The main purpose of the Financial Advisory and Intermediary Service Act is to regulate the conduct within the financial service industry in South Africa. The Financial Advisory and Intermediary Service Act aims to protect consumers against poor unprofessional advice that will ultimately result in avoidable financial loss (Harris, 2004). If the above mentioned does occur, the financial advisor can be liable to potential loss claims (Harris, 2004).

The Financial Advisory and Intermediary Service Act applies to all financial service providers, namely: brokers, financial advisors, investment advisors and financial institutions which provide financial advice and services (Cut-off date approaching, 2006). To be classified the individual must meet the requirements of and register with the Financial Intermediary and Advisory Act (Financial Service Board, 2015). In an attempt to uphold transparency, integrity and fairness within the financial service industry, financial advisors operating without the appropriate licencing, can be severely fined or receive a jail sentence (Harris, 2006). Therefore, the Financial Intermediary and Advisory Board services as an ombudsman (Act shifts focus from self-regulatory to regulated, 2004).

2.11 Conclusion

From the above it is clear that the financial retirement planning process is a complex process. Due to the complexities of the process, it is important that individuals take the time to ensure that they are planning adequately for their future financial retirement needs. The increase in the number of retirement options allows individuals to be more flexible and innovative with their retirement planning. However, the increased retirement options have also made the financial retirement planning process more complex. Since the State Old Age Pension Fund in South Africa is only made available to those individuals who are in dire financial need, it is important that individuals take the time to understand the complexities of financial retirement planning, or seek help from a professional.

Chapter 3: Understanding a set of selected factors influencing women's financial retirement planning.

3.1 Introduction

Based on the discussion in Chapter 2, it is evident that the financial retirement planning process plays an important role in individual's lives. However, despite the importance of financial retirement planning, many individuals fail to plan sufficiently for financial retirement. Consequently, many individuals are unable to accumulate sufficient wealth for their retirement.

The inability to successfully plan for retirement is of greater concern for women. The following chapter will highlight the issues surrounding women and financial retirement planning. Existing retirement models will be discussed as well as the hypothesised model. Moreover, the factors which influence women's perceptions of successful financial retirement planning will be addressed. Finally, a number of selected demographic factors will be identified and discussed.

3.2 Gender issues relating to retirement planning

Financial retirement planning is said to be a major concern, especially for women (Rosenman & Scott, 2009: 287) with literature highlighting the significant differences that exist in the area of financial decision making for men and women (Grace, Weaven and Ross, 2010:7). There exist assumptions that most women are less financially stable during retirement compared to men (Trewin & Curatola, 2010) with a major cause of this being

largely due to the fact that women have rarely been encouraged to interest themselves in financial matters such as retirement (Alderson, 2012:8).

There is also a perceived notion that women tend to retire earlier than men (Grace, Weaven & Ross, 2010). This suggests that retirement goals cannot be attained in the same manner for women as for men (Embrey & Fox, 1997:33). Therefore, it is important that women engage in financial planning to ensure that their specific financial retirement goals are attainable.

Financial retirement planning can help women gain a clear understanding of their financial planning strengths and weaknesses. Women will then be able to assess if they have sufficient financial literacy to carry out their financial decision making responsibilities (Boone, 2005). However, if women are unable or unwilling to take on the complexities of financial retirement planning, they may seek the assistance of a financial advisor who can simplify the complexities of retirement planning (Hirsch, 2005).

As indicated above, financial retirement planning is an essential component for accumulating sufficient wealth for retirement and sufficient time must therefore be spent on ensuring successful financial retirement is achievable. However, according to Noone, Alpass and Stephens (2010:715) women in general do less financial retirement planning than men. Consequently, women are continuously found to be more likely to suffer from poverty and poor wellbeing during their retirement years (Noone, Alpass and Stephens, 2010: 715).

According to Noone, Alpass and Stephens (2010:715) previous research indicates that there is a positive relationship between financial retirement planning and an individual's perception of financial retirement. Moreover, it has been determined that women are inclined to have more negative perceptions towards financial retirement (Noone, Alpass and Stephens, 2010:715). This negative tendency can have major implications on their ability to become financially independent during retirement (Noone, Alpass and Stephens, 2010). The only way women can become more confident towards financial retirement planning is by actively partaking in more financial decisions (Savage, 2008).

There are a number of factors that contribute to women's inability to accumulate sufficient retirement wealth. "Compared with men, women save less, retire earlier, and live longer lives during which their savings must support them through a long period of non-earning"

(Rosenman & Scott, 2009:287). The above mentioned financial retirement planning problems are compounded by the notion that women tend to earn less income than men, while at the same time need to accumulate sufficient retirement wealth to support a longer retirement (Noone, Alpass & Stephens, 2010). Consequently, women face a greater longevity risk compared to men.

Men and women tend to experience different working patterns throughout their working life-cycle (Grace, Weaven & Ross, 2010:7). Many men still assume the role of being the head of the household with women having a number of household responsibilities and spending much of their adult years in unpaid child-caring roles (Jefferson and Preston, 2005). This results in women having disjointed working patterns with many women often being assigned jobs with lower wage rates, fewer benefits as well as fewer career and pension opportunities (Talaga & Beehr, 1995). Consequently, many women are unable to earn sufficient income in order to sufficiently save for retirement and end up relying heavily on their spouses for financial support. This often leads to circumstances where men exhibit greater financial independence and confidence when dealing with financial matters, while women experience a sense of financial dependence and insecurity (Grace, Weaven & Ross, 2010:7).

Another major issue women face when planning for financial retirement is a lack of financial literacy. It appears that women have lower levels of financial literacy compared to those of men (Fisher, 2010). Individuals who are more financially literate have a better understanding of the financial markets and are therefore better equipped to make personal financial decisions compared to those individuals who have lower levels of financial literacy (Tomaskova, Mohelska & Nemcova, 2011:366). Furthermore, according to Klapper and Panos (2011:600) research has shown that the likelihood of planning for retirement is highly correlated with financial literacy and education. Thus, the tendency for women to be more financially illiterate can have major implications on their ability to perform effective financial retirement planning.

Financial retirement research shows that planning activities are influenced by a variety of demographic and psychological variables (Jacobs-Lawson *et al*, 2004:55). According to Bajtelsmit & Bernasek (1996:1) an increasing number of studies have concluded that women invest their asset portfolios more conservatively than men. "All things equal, a conservative investment strategy results in less retirement income on average compared to that of a more aggressive investment strategy" (Bajtelsmit & Bernasek, 1996:1). In addition,

married women tend to be more financially literate compared to divorced, single and widowed women (Theodos, Kalish, McKernan & Ratcliffe, 2014:6).

Based on the discussion in chapter 2, it is evident that financial retirement planning is not an easy or simple task faced by individuals. It appears that the complexities of financial retirement planning faced by many women are compounded due to the fact that women are faced with many overarching challenges when making financial retirement planning decisions, resulting in many women being unable to accumulate sufficient retirement wealth. It is imperative that women become more proactive and interactive in the financial decision making process and in particular with the financial retirement planning process.

3.3 Hypothesised model

Based on an in-depth investigation surrounding financial retirement planning literature, several factors were identified that may influence women's perceived successful retirement planning, namely: financial literacy, risk tolerance, time horizon, values, attitudes and working life-cycle. Thus, within the proposed hypotheses, these six independent variables could potentially influence women's perceptions of successful financial retirement planning. Theory supporting the above mentioned variables will be discussed in further detail in section 3.6.

As mentioned previously in chapter 1, through in-depth analyses of literature Doa (2014) developed a model to test women's perceptions of successful investment planning. For the purpose of this study, the model developed by Doa (2014) will be adapted such that women's perceptions of successful financial retirement planning is tested. It is important to note that both investment planning and financial retirement planning fall under the border domain of financial planning. Subsequently, investment planning and financial retirement planning are interrelated and comprise of similar components (Winger and Frasca 2006).

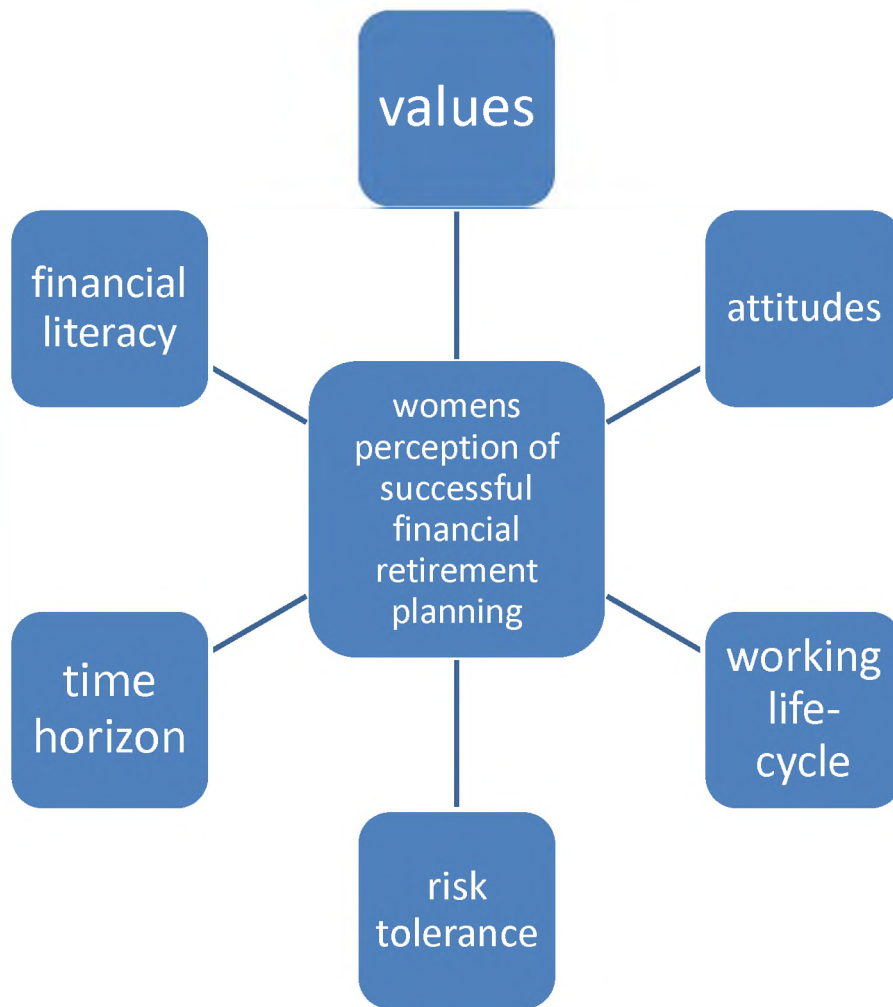


Figure 3.1: Hypothesised model illustrating the factors influencing women's perceptions of successful retirement planning

3.4 Retirement planning models

There are a number of retirement models, each comprising their own factors, and developed in an attempt to gain insight into different retirement spheres. Since the different retirement models were developed to gain insight into different retirement spheres, it is important to note that not all retirement models are applicable to this study. For example, the life course perspective (Elder, 1995) was developed in order to investigate individual's transition into retirement as opposed to the perception of successful financial retirement planning, but models developed by both Doa (2014) as well as Hershey (2004) seem most applicable to the study. Thus, in the following section, a discussion of the two models will allow the researcher to deduce which model best suits the study being conducted, or whether a combination of the models should be incorporated.

Doa (2014) developed a model to investigate women's perceptions of successful investment planning. Although the aim of this model was to investigate investment planning, the model can be adapted in order to investigate financial retirement planning. The reason for the above is largely due to the notion that investment planning and financial retirement planning both form components of financial planning and are thus interrelated (Winger and Frasca, 2006). Doa's (2014) model was developed as a result of theory analysis. The model comprises of six variables namely values, attitudes, time horizon, life cycle, risk and return and financial knowledge. All of the above variables could influence women's perceptions of successful financial retirement planning.

Hershey's (2004) retirement model was based on a number of retirement related studies (Hershey & Mowen, 2000). The model developed comprises "four major qualitatively different sets of influences on investor behavior: (a) psychological influences (including cognitive, personality, and motivational forces), (b) task characteristics (e.g., complexity, prior task experience), (c) the cultural ethos (i.e., societal forces that shape the thoughts, attitudes, and economic forces (Hershey, Jacobs-Lawson, McArdle & Hamagami, 2007:28). These factors are said to influence the quality and tendency of an individual's retirement planning. Although Hershey's (2004) model provides great insight into retirement planning, the model aims to investigate the quality of retirement planning as opposed to the individual's perceptions of successful financial retirement planning.

Based on the model of Doa (2014) seemed the most applicable for the study therefore the model was adapted and incorporated into this study.

3.4.1 Other factors which could influence women's perceptions of successful financial retirement planning.

In conjunction with the above discussion focusing on retirement models, the researcher acknowledges that the factors implemented into this study may not be the only factors which could influence women's perceptions of successful financial retirement planning.

Turner, Bailey, and Scott (1994) suggest factors such as perceived wealth, total income and number of children/dependants could also influence an individual's ability to successfully plan for financial retirement planning, with Joo, and Pauwels, (2002) adding that the income saved, personal debt and retirement confidence are also factors that could influence

successful retirement planning. Additionally, occupational industry, financial self-efficiency and the type of retirement plan invested in could also be factors which influence successful retirement planning (Dietz, Carrozza, and Ritchey, 2003).

Based on the above discussion it is evident that there are a substantial number of factors which could influence financial retirement planning. Thus, it would be impossible to consider every factor which could influence women's perceptions of successful financial retirement planning. The researcher acknowledges that the present study does not consider all possible factors which could influence women's perceptions of successful retirement planning, but instead focusses on a small subset of factors which are grounded in theory. Consequently, the results of this study should not be read in isolation. This will be addressed as a limitation of the study.

3.5 Dependent variable: perceived successful financial retirement planning.

The dependent variable for the purpose of this study is women's perception of successful financial retirement planning. According to Hershey *et al* (2007:27) "a successful financial retirement plan is one in which sufficient resources have been accumulated to achieve and maintain a desired standard of living". However, it is important to note that the perception of successful financial retirement planning will depend largely on the individual themselves as no two individuals have the same financial retirement goals.

According to 'Critical habits' (2012:23) women only get the perception of financial independence if they feel they have made the best use of their particular level of income through proper financial planning, while literature suggests that individuals only perceive their financial planning as successful when they receive some form of income, profit or growth from their investments (Budgar, 2011:22; O'Keefe and Burke, 2008:44). For the purpose of this study, perceived successful financial retirement planning is defined as the degree of satisfaction that women experience towards the growth, income, or profits of their retirement investment, that will enable them to be in control of their financial affairs during retirement and enable them to be financial independent during their retirement years (Doa, 2014:15).

3.6. Independent variables

As mentioned above, through an investigation of theory and with the use of the framework developed by Doa (2014), six independent variables were identified, namely: financial literacy, risk tolerance, time horizon, values, attitudes and working life-cycle. These factors have the potential to influence women's perceptions of successful financial retirement planning.

3.6.1 Financial literacy

As discussed in chapter 2, the shift from defined benefit to defined contribution retirement plans, has resulted in a great deal of responsibility being placed on individuals with respect to saving for retirement. Therefore, a degree of financial literacy is necessary to sufficiently plan for financial retirement. Financial literacy can be defined as "a set of knowledge, skills and attitudes of citizens necessary to financially secure themselves and to behave actively in the market of financial services and products" (Tomaskova, Mohelska & Nemcova, 2011:365).

Literature indicates that financial literacy is a key component to the success of retirement saving decisions (Klapper & Panos, 2011; Gallery, Gallery, Brown Furneaux & Palm, 2011). Despite this importance there is much literature suggesting that many individual's basic financial knowledge is minimal (Calcagno & Monticone, 2015:363). This is a major concern for many individuals, as individuals with lower levels of financial literacy are prone to under-diversification, the inability to accumulate sufficient retirement wealth, as well as poor portfolio management (Calcagno & Monticone, 2015; Klapper & Panos, 2011; Tomaskova, Mohelska & Nemcova, 2011).

According to Wagland and Taylor (2009:13) research suggests that gender has a significant impact on financial literacy with women being less confident than men when making financial decisions, resulting in women being less financially literate than men (Grace, Weaven & Ross, 2010; Wagland & Taylor, 2009). This puts many women at risk of being unable to accumulate sufficient retirement wealth (Fonseca, Mullen, Zamarro & Zissimpoulos, 2010:2).

"A basic level of financial literacy is required in order to ensure that individuals' retirement portfolios are adequately diversified. Diversification refers to a method of reducing the

systematic risk of a portfolio by investing in various asset classes” (Marx, 2010:10). Despite the importance of diversification, previous research indicates that women are less likely to diversify their portfolios when compared to men (Hira & Loibl, 2006:15). It is thus important that women take the time to gain basic financial knowledge such as understanding the various types of investment vehicles as well as their tax implications (discussed previously in chapter 2).

From the above discussion, it is evident that financial literacy can influence women’s perceptions of successful financial retirement planning. For the purpose of this study financial literacy will be defined as women having the basic knowledge and understanding of the different types of investment vehicles, having the knowledge about the different retirement options, having past investment experience, as well as knowing how/where to obtain financial assistance and guidance when making financial retirement decisions (Doa, 2014:16). Thus the following hypothesis was created:

H₀₁: There is no relationship between financial literacy and women’s perceptions of successful financial retirement planning.

H_{A1}: There is a relationship between financial literacy and women’s perceptions of successful financial retirement planning.

3.6.2 Risk tolerance

An individual’s risk tolerance plays a key role in their financial retirement decisions. This is one of the factors that may help determine the appropriate consumption of assets within a portfolio which will provide the individual with the optimal return relative to the individual’s financial needs (Hallahana, Faff & McKenziea, 2004:57). Risk tolerance can be defined as an individual’s degree of willingness to peruse an uncertain financial event (Roszkowski & Grable, 2010:270). According to Sung & Hanna (1996:11) characteristics such as an individual’s age, time horizon, liquidity needs, income, financial literacy as well as attitudes can all have an effect on an individual’s risk tolerance.

Younger individuals are said to be more risk tolerant than older individuals (Sung & Hanna, 1996). The reason for the above is largely due to the fact that younger individuals have a greater number of years to recover from any losses which may result from a risky investment (Hallahana, Faff & McKenziea, 2004:57). In addition wealthy individuals also tend to be

more risk tolerant as they are more likely to have sufficient capital to recover from any losses incurred through risky investments (Hallahana, Faff & McKenziea, 2004:58).

Gender also play's a significant role on an individual's risk tolerance (Rui & Sherman, 2005). Prior research suggests that women tend to be more financially risk averse compared to men (Gilliam, Goetz & Hampton, 2008; Grace, Weaven & Ross, 2010). But this aversion can have major consequences on their retirement earnings and could lower the portfolio return (Eckela & Grossman, 2002:282) and could significantly influence their ability to generate sufficient retirement wealth.

Based on the above discussion, it is evident that risk tolerance could influence women's perceptions of successful financial retirement planning. For the purpose of this study, risk tolerance is defined as women's awareness of risks and returns of their retirement investments, women's willingness to take on risk in their retirement investments and an understanding of the positively correlated relationship between investment risk and return (Doa, 2014:16). Thus, the following hypothesis was formed:

H02: There is no relationship between risk tolerance and women's perceptions of successful financial retirement planning.

HA2: There is a relationship between risk tolerance and women's perceptions of successful financial retirement planning.

3.6.3 Time horizon

Time horizon can be defined as the length in which assets are invested in investments such that a specific financial goal is achieved (Klos, Weber & Weber, 2005). According to Stewart, Piros and Heisler (2011) investment can be characterised into three time horizon classifications, namely short, medium and long term investments. Short term investments consist of investments which have the time horizon of 5 years or less (Stewart, Piros & Heisler, 2011). Medium term horizons tend to consist of investments which have the time horizon of 5-10 years. Lastly, long term investments consist of investments which have the time horizon of 10 or more years (Stewart, Piros & Heisler, 2011). The time horizon classification will vary depending on one's financial goal with retirement savings tending to consist of long term investments (Alles & Murray, 2009). An individual's retirement investment horizon can also be influence by a number of factors such as liquidity, risk

tolerance, time until retirement as well as specific financial goals (Klos, Weber & Weber, 2005).

It is argued that younger individual's should invest more heavily in stocks for long term investment goals such as retirement (Klos, Weber & Weber, 2005). The reason for the above is that the probability of loss declines with time horizon (Kritzman, 1994). While older individuals should select retirement investments which are less risky (Jaggia & Thosar, 2000:211).

It is also argued that time horizon plays a significant role on the optimal asset allocation of an individual's portfolio (Jaggia & Thosar, 2000). It is generally accepted that as individuals grow closer to retirement, individual investors alter their investments to include less risky investments (Alles & Murray, 2009:280).

A major concern is that many individuals do not start saving for retirement until it is too late (Grace, Weaven & Ross, 2010). Therefore, many individuals are left with a limited time horizon in order to accumulate sufficient retirement wealth. The above is a major concern for many women in particular because women tend to be more risk averse, tend to accumulate less income and tend to live longer when compared to men. In conjunction with these factors, failing to start retirement planning early enough can have major financial consequences for many women.

Based on the above, it is evident that time horizon can have a major influence on women's perceptions of successful financial retirement planning. For the purpose of this study, time horizon refers to the knowledge and preference women have of the time horizon (length) of their retirement investment, the understanding that the risk in one's retirement portfolio needs to be reduced the closer one gets to retirement and the knowledge that saving for retirement needs to commence as early in one's working life-cycle as possible. Thus, the following hypothesis was formed:

H₀₃: There is no relationship between time horizon and women's perceptions of successful financial retirement planning.

H_{A3}: There is a relationship between time horizon and women's perceptions of successful financial retirement planning.

3.6.4 Values

Individual's values can be described as the desirable goals that vary in importance and aim to guide people's lives (Giraldi & Ikeda, 2008:186). According to Wang & Shultz (2010:172) values play a key role in an individual's goal aspirations on how to live based on what is most important in the individual's life. Authors believe that an individual's values can be a good predictor of their attitudes and decisions (Giraldi & Ikeda, 2008; Gandal, Roccas, Sagiv & Wrzesniewski, 2005). Individual's values may vary and tend to be influenced by their family and upbringing (Jefremovas, 2000). However, it is important to note that values vary in importance across nations, social and cultural groups (Bobowik, Van Oudenhoven, Basabe, Telletxea & Páez, 2011).

Values can play an important role in determining an individual's behaviour and may thus influence their choices (Giraldi & Ikeda, 2008:173). Moreover, values influence individual's goals (Giraldi & Ikeda, 2008) and their financial retirement goals which ultimately affect their financial retirement planning process (Stawski, Hershey & Jacobs-Lawson, 2007). For example, some individuals may or may not value being financially independent during retirement which may result in them placing little or no emphasis on the importance of financial retirement planning.

Many women are still under the notion that financial retirement planning falls within the male domain (Jacobs-Lawson, Hershey & Neukam, 2004) and rely on receiving income from their spouses or family once they have reached retirement (Quick & Moen, 1998:44). This may be one of the reasons some women are unable and unwilling to plan for financial retirement adequately.

Based on the above, it is evident that an individual's values can influence women's perceptions of successful financial retirement planning. For the purpose of this study, values will refer to women's personal, family, religious, ethical as well as cultural values which guide and influence the manner in which they take part in the financial retirement planning process. Thus, the following hypothesis was formed:

H₀₄: There is no relationship between values and women's perceptions of successful financial retirement planning.

HA4: There is a relationship between values and women's perceptions of successful financial retirement planning.

3.6.5 Attitudes

Attitudes can be defined as an individual's "behaviour pattern, anticipatory set or tendency, predisposition to specific adjustment to designated social situations, or more simply, a conditioned response to social stimuli" (LaPiere, 1934: 230). Marcus (2011) suggests that attitudes formed are a direct result of experiences, and an individual's attitude can either comprise of negative or positive attitudes.

An individual's attitude towards financial retirement planning can affect the individual's tendency to plan. Positive attitudes towards financial retirement planning increase the tendency of an individual to partake in financial retirement planning (Schubert *et al*, 1999) but, according to Barnes-Farrell (2002:170) having a negative attitude towards financial retirement planning can result in individuals delaying the financial retirement planning process resulting in individuals having difficulty in accumulating sufficient retirement wealth.

Previous research suggests that women tend to adopt more negative attitudes towards financial retirement planning (Schubert *et al*, 1999; Noone, 2010). Women are therefore less likely to actively plan for financial retirement which ultimately affects women's financial confidence with regards to the financial retirement decision making process (Schubert *et al*, 1999). Women's lower levels of financial literacy, lower income and disrupted working life cycle may all contribute to the tendency of women to have negative attitudes towards financial retirement planning (Noone, 2010).

Literature also suggests that attitudes towards retirement can have a major impact on financial retirement planning (Noone, Alpass & Stephens, 2010) and can affect an individual's willingness to plan for financial retirement as well as the individual's financial retirement preparedness (Noone, Stephens & Alpass, 2009). Other researchers indicate that individuals with a positive attitude towards retirement are more likely to partake in successful financial retirement planning and thus will be more financial prepared for retirement (Noone, Stephens & Alpass, 2009; Noone, 2010).

Based on the above discussion, it is evident that attitudes can have a significant influence on women's perceptions of successful financial retirement planning. For the purpose of this study, attitudes will refer to women's confidence and tendency to partake in financial

retirement planning in a comfortable, positive and successful manner. Thus, the following hypothesis was formed.

H₀₅: There is no relationship between attitudes and women's perceptions of successful financial retirement planning.

H_{A5}: There is a relationship between attitudes and women's perceptions of successful financial retirement planning.

3.6.6 Working life-cycle

An individual's working-life cycle plays an important role in financial retirement planning with income having a direct effect on retirement savings as one needs to earn income before one can save for retirement (Jacobs-Lawson, Hershey & Neukam, 2004; Grace, Weaven & Ross, 2010:3). Individuals also need to save for retirement during their working life-cycle in order to finance the income shortcomings during retirement (Choi *et al*, 2002:3).

Despite the fact that there has been an increase in the number of women participating in the labour force, women's working life-cycle still remains a major concern, with women being unable to adequately save for retirement (Jacobs-Lawson, Hershey, & Neukam, 2004) due to a women's working life-cycle often being disjointed (Jacobs-Lawson, Hershey & Neukam, 2004) often because of family responsibilities (Watson & McNaughton, 2007:52). The same is not often encountered by men, who are not usually the child bearers. Consequently, many women are unable to continuously save for retirement. In conjunction with women's disjointed retirement saving patterns, the power of compounding may result in women being unable to accumulate sufficient retirement wealth (Egan, 1992).

According to Jacobs-Lawson, Hershey & Neukam (2004:57) income is said to be an important variable when it comes to successful financial retirement planning, as an individual's financial situation has a powerful impact on the individual's tendency to save. The lack of income due to a disjointed working life-cycle for women is therefore a major concern as this may negatively affect women's tendency to save for retirement.

An individual's personal financial needs may change as they move through the five phases in their life-cycle, consisting of family years, career years and pre-retirement years as well as retirement years (Cooper & Worsham, 2009). The above mentioned changes in personal financial needs are especially applicable to women (Adelman & Bankoff, 1990) who often

have disjointed working life-cycles due to personal situations such as child rearing responsibilities and maternity leave. Many women often experience unexpected personal situations such as getting divorced or becoming a widow (Caldwell, 2012) resulting in single women having longer working life-cycles than married women. Moreover, a single mother or widow may have less income which she can dedicate to saving for retirement. From the above, it can thus be deduced that an individual's life-cycle can influence an individual's working-life cycle and the individual's ability to save for retirement.

Based on the above discussion, it is evident that an individual's working life-cycle can influence women's perceptions of successful financial retirement planning. For the purpose of this study, working life-cycle will refer to the time spent actively working, as well as changes women experience in their working life-cycles due to changes in their personal life-cycles. Women need to monitor changes in their working life-cycles and adapt their retirement investments accordingly. Thus the following hypothesis was formed:

H₀₆: There is no relationship between attitudes and women's perceptions of successful financial retirement planning.

H_{A6}: There is a relationship between attitudes and women's perceptions of successful financial retirement planning.

3.7 Demographic variables

Over and above the factors discussed in section 3.6, women's financial retirement planning could be influenced by demographic factors. Thus, this study will also test the relationship between a number of selected demographic variables against the dependent and identified independent variables. Based on the literature presented below, demographic variables were selected and included in the study.

3.7.1 Age

According to Barns (2006) age plays a significant role in the financial retirement planning process. This is supported by financial retirement planning tools such as the Ballpark estimate, which indicates that the older the individual gets (the closer the individual gets to retirement) the more the individual should be contributing to his/her retirement savings due to inflation (Barns, 2006:26). Moreover, as mentioned in chapter 2, many individuals find financial planning to be complex and thus delay the process of financial planning for

retirement. The later the individual starts saving for retirement, the greater the contributions will need to be made in order to generate sufficient retirement wealth.

An individual's age also plays a major role in determining which category of the life-cycle the individual falls within, because an individual's personal financial priorities adapt and change as they move through different stages of the life-cycle (Overton, 2010:385). For example, when an individual is in the 30-40 year age group he/she falls within the family years life-cycle (Doa, 2014:74). Many individuals in this category focus their finances on their children's educations, mortgages and bonds. Hence, it can be said that for many individuals in this period of the life-cycle, little time and financial resources are focused on saving for retirement.

It is thus clear that age can significantly influence the amount of financial resource needed for retirement savings (Barns, 2006). But it is important for individuals to understand that financial retirement planning should be considered a continuous process, which should be continuously revised and adjusted (Tannahill, 2014). The above is particularly important for women, as women tend to have a longer life expectancy and thus need adequate retirement wealth to ensure the risk of longevity as addressed. As a result, the following hypotheses was formulated:

H_{0a}: There is no relationship between age and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

H_{Aa}: There is a relationship between age and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

3.7.2 Education

An individual's education can have a significant influence on financial retirement planning with Mandell and Klein (2009) opining that the more educated the individual is the more likely they are to plan for financial retirement. Selnow (2003:6) also states that educated people tend to be more aware of the need to save and thus familiarise themselves with investment options and attempt to gain more financial insight. Ultimately, education has a positive relationship to individual's participation in financial retirement planning (Yuh & DeVaney, 1996) with educated, financially literate individuals tending to be more inclined to seek financial advice to ensure their financial retirement planning is successful (Lusardi, 2003:9). It appears that women tend to be less educated and thus less inclined to gain more

financial knowledge and insight (Rooij, Lusardi & Alessie, 2011). This can be a major factor influencing women's ability to accumulate sufficient retirement wealth

From the discussion above, it is evident that education can influence women's perceptions with regards to planning for financial retirement. As a result of the above discussion, it appears as if there may be a relationship between the demographic variable education and the dependent and independent variable. The following hypotheses were thus formed:

H_{0b}: There is no relationship between education and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

H_{A_b}: There is a relationship between education and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

3.7.3 Ethnic group

According to Sung and Hanna (1996:18) a major economical gap still exists between black and white individuals. Moreover, Taylor, Kochhar, Fry, Velasco and Motel (2011:1) state that the average household wealth of white households tends to be much higher than that of black households. The tendency for black households to have a lower average household wealth could have a major impact on the individual's financial retirement savings capabilities, as income needs to be earned before it can be saved for retirement purposes.

Previous research suggests that women, and in particular black, Indian and coloured women have the lowest financial literacy rates (Lusardi, 2008; Struwig, Robers & Gordan, 2012). While according to Struwig, Robers and Gordan (2012) there is a wide difference in financial literacy across the different provinces within South Africa, with individuals residing in poorer provinces such as the Eastern Cape tending to have lower financial literacy rates (Struwig, Robers & Gordan, 2012). There could be a number of reasons for this, such as past inequalities in terms of education, as well as cultural beliefs. None the less, it is evident that one's ethnic group can have a significant impact on an individual's financial retirement planning and therefore play a significant role in determining one's perception of successful financial retirement planning.

Although it appears that there is a lack of retirement planning and financial literacy within the black community, the researcher acknowledges that historically the wealth of a black individual could be measured by other means such as livestock. In South African traditional societies cattle is seen as a store and a generator of wealth (Doran, Low & Kemp, 1979).

Subsequently, many black individuals may not invest for retirement in a formal retirement plan but may invest according to cultural wealth in items such as livestock.

Due to the lack of literature in the context of black wealth in South Africa the researcher was unable to find relevant published papers. This is therefore an area for future research.

From the above, it appears that a relationship may exist between ethnic group and the dependent and independent variable. Accordingly, the following hypotheses were formed:

H_{0c}: There is no relationship between ethnic group and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

H_{Ac}: There is a relationship between ethnic group and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

3.7.4 Marital status

Previous research (Scheresberg, Lusardi & Yakoboski, 2014; Theodos *et al*, 2014) suggests that marital status plays a significant role in women's financial literacy and their ability to financially plan. According to Theodos *et al* (2014:6) married women tend to have higher financial literacy than women who are divorced, single, separated or widowed. It was already established in chapter 3, that financial literacy can significantly influence an individual's ability to accumulate sufficient retirement wealth, therefore it may be more difficult for unmarried women to accumulate sufficient wealth for retirement.

From the above discussion it appears that a relationship may exist between the demographic variable marital status and the independent variables, as well as the dependent variable (women's perceptions of successful financial retirement planning). Accordingly, the following hypotheses were formulated:

H_{0d}: There is no relationship between marital status and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

H_{Ad}: There is a relationship between marital status and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

3.7.5 Investment experience

Individuals who engage in investing more frequently develop a higher level of financial sophistication (Lusardi & Mitchell, 2007). Consequently, those individuals with greater financial sophistication tend to have more financial knowledge about the investment options when financially planning for retirement. According to Ng, Tay, Tan & Lim (2011) individuals with more investment experience are more successful when financially planning for retirement as opposed to the individuals who have no previous investment experience. Individuals with more investment experience and financial knowledge also tend to be more risk tolerant (Grace, Weaven & Ross, 2010).

Women tend to be less confident in making investment decisions and thus often avoid making investment decisions (Graham, Stendardi & Myers, 2002:18) resulting in them being less experienced and therefore lacking financial sophistication. A lack of investment experience can have major implications on women's financial retirement planning process as well as their portfolio choice.

From the discussion above, it is evident that investment experience may influence an individual's financial knowledge, confidence as well as portfolio allocations when financially planning for retirement. Therefore there may exist a relationship between investment experience and the independent variable as well as the dependent variable. Thus, the following hypotheses were formed:

H_{0e}: There is no relationship between investment experience and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

H_{Ae}: There is a relationship between investment experience and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).

3.8 Conclusion

From the discussions above it is clear that women's ability to successfully save for retirement is a major concern. In general women tend to be less financially secure during retirement. This is largely due to the many factors which influence women's ability to plan successfully for financial retirement. The factors which may influence women's financial retirement planning were identified as well as demographic factors which may influence women's ability to financially plan for retirement.

Chapter 4: Research design and methodology

4.1 Introduction

The following chapter presents an in-depth discussion of the research design and methodology employed in this study. Firstly, two of the primary research paradigms will be addressed, thereafter, the sample of the study as well as the validity and reliability of the research instrument is discussed. Lastly, a discussion of the statistical tests used in this study is done.

4.2 Research Design and methodology

Research design involves the art and science of planning procedures for the purpose of conducting studies which will provide the researcher with the most valid findings (Collis & Hussey, 2003:113). For the purpose of ensuring valid findings, comparisons and conclusions, the selection of an appropriate research design for the study is crucial (Kumar, 2005:23). Formulating an appropriate research design will provide the researcher with a detailed plan that will serve as a guide, and focus the research (Collis & Hussey, 2003:113). Research design ultimately serves as a plan or blueprint of how the researcher intends to conduct the research (Mouton & Babbie, 2001:74). Figure 4.1 provides a summary of the research design process.



Figure 4.1 Overview of Research Design.

Source: (Adapted from Collis & Hussey, 2003:114)

The research design of a study is significantly influenced by the paradigm of the research, with the research paradigm being described as the research system of interrelated practice and thinking, which define the overall investigation (Terre Blanche & Durrheim, 1999). The research paradigm selected has important implications for the choice of methodology and the methods used for collecting data (Collis & Hussey, 2003:113). Among other paradigms, there are two primary research paradigms namely positivism (quantitative) and phenomenological (qualitative) (Thomas, 2003). The characteristics of the two primary research paradigms mentioned above are illustrated in the table 4.1.

Table 4.1. Characteristics of the two primary paradigms

Features of the two primary paradigms	
Positivist (Quantitative) tends to:	Phenomenological(Qualitative) tends to:
<ul style="list-style-type: none"> • produce quantitative data • use larger samples • be concerned with hypotheses testing • have highly specific and precise data • have a location that is artificial • presents a high reliability • has a validity that is low • generalise from sample to population 	<ul style="list-style-type: none"> • produce qualitative data • use smaller samples • be concerned with generating theories • have data which is rich and subjective • have a location that is natural • have a validity which is high • generalise from one setting to another similar setting

Source: Collis & Hussey, 2009:62

4.2.1 Phenomenological paradigm

Phenomenology is based on the science of phenomena and a theoretical point of view, which is concerned with the understanding of human behaviour from the participants own situation (Collis & Hussey, 2003:53). Unlike positivism, phenomenology is highly subjective (Collis & Hussey, 2003). Qualitative research can be rooted in a phenomenological paradigm, which suggests that reality is socially constructed through individual or collective definitions of the situation (Taylor & Bogdan, 1984). Qualitative research is more concerned with understanding the social phenomenon from the actors' perspectives through

participation in the life of those actors (Taylor & Bogdan, 1984). Within qualitative research, the researcher is not independent of the study, thus research methods used in a phenomenological approach consist of various interpretive techniques, which focus on describing, translating and coming to terms with the meaning of naturally occurring phenomena within the social world (Collis & Hussey, 2003:53). Several methods exist for conducting qualitative research, which include, among others, case study, ethnography, grounded theory and content analyses (Williams, 2007:67).

4.2.2. Positivistic paradigm

In contrast to the phenomenological paradigm, the positivist research paradigm involves an inquiry into a social or a human problem, which is founded on testing theory, and made up of variables, measured with numbers and analysed with statistical procedures in an attempt to determine whether a predictive generalisation of the theory holds true (Cresswell, 1994:2). Positivism is based on the notion that reality is independent of us, and the main goal is the discovery of theories, based on empirical research (Collis & Hussey, 2009:56).

The main purpose of the positivistic paradigm is to prove or disprove stated hypotheses (Mack, 2010). Moreover, the positivistic paradigm allows the researcher to adopt the role of an observer of an independent and established reality, thus allowing the researcher to remain distant when conducting the research, preventing bias and values to distort the objective views (Collis & Hussey, 2003:52).

The positivistic paradigm also refers to a quantitative, objective, scientific, experimental or traditionalist paradigm (Collis & Hussey 2003:53). Quantitative research which is based on positivistic paradigm is undertaken in order to answer questions about the relationships between variables, with the aim of explaining, predicting and controlling phenomena (Leedy & Ormrod, 2005:94).

4.2.3 Research methodology adopted in the present study

In order to determine the variables that influence women's perceptions of successful financial retirement planning, a positivistic (quantitative) paradigm was employed in this study. One of the primary reasons for this choice is largely due to the data being obtained through the use of a survey, which is encompassed with the positivist paradigm (Kumar, 2005). Secondly, a positivist paradigm was implemented in order to test the measure of association between the variables in the study.

The above is in contrast with phenomenological paradigm (qualitative) which deals with and looks at the in depth qualities and understanding of phenomena, whereas in a qualitative study the researcher is investigating what interactions exist, how these interactions take place and why certain patterns that emerge exist (Henning, Van Rensburg and Smit , 2004). Based on the above discussion, this study conforms to a positivism (quantitative) paradigm.

4.2.4 Variables used in this study

Determining the type of variables used in a study is an important part of the research design process. Collis and Hussey (2003:151) suggest that a variable is an attribute of the entity which has been chosen as the unit of analysis within a study. In this study the aggregate of women's perceptions of successful financial retirement planning was the chosen entity. In addition, both qualitative and quantitative variables were used during the process of data analysis.

Qualitative (or categorical) variables were constructed to measure non-numerical data such as ethnicity, qualification, marital status and employment status. Quantitative (continuous) variables were constructed from ordinal scales that were used to measure a number of attitudes (e.g. the dependent variable 'women's perceptions of successful financial retirement planning'). Quantitative (continuous) variables such as the number of years of retirement investment experience and the age of the participants within this study are also present in the study.

4.3 Population and sample

A population is the study object and may comprise of individuals, groups, organisations, human products of events or the conditions to which they are exposed (Welman & Kruger, 2001:46). However, according to Thompson, Schwartz, Davis and Panacek (1996:75) it is not possible to study an entire population, as populations tend to be too large to practically or cost-effectively include within a study. Subsequently, a sample for the study may be chosen.

Kumar (2005:164) opines that "Sampling is the process of selecting a few (a sample) from a bigger group (the sample population) to become the basis of estimating or predicting the prevalence of an unknown piece of information, situation or outcome regarding the bigger group." The sample of the research therefore aims to represent the main interests of the

research (Collis & Hussey, 2003:56). Kumar (2005:164) is also of the opinion that sampling is advantageous in that it saves time as well as financial and human resources.

Sampling through the selection of members of the population, allows the researcher to draw generalizable conclusions regarding the entire population (Terre Blanche & Durrheim, 1999). There are two approaches one can adopt when selecting a sampling method, namely: probability sampling and non-probability sampling (Lombaard, Van Der Merwe, Kele. & Mouton, 2011:10). Probability sampling is based on the assumption that all elements within the population have an equal chance of being selected for the sample (Kelly, 2009:65). Whereas, non-probability occurs when the sample is selected in order to represent the populations under study, but from a statistical viewpoint, the sample cannot be said to represent the entire population (Quinlan, 2011:213). For the purpose of this study, non-probability sampling was used, as the women selected were chosen through convenience and snowballing sampling techniques, to be discussed below.

As far as the researcher could establish there is no available database that stores the details of women in South Africa who are saving for financial retirement planning. It is for this reason and due to the researcher residing in Grahamstown, studying as well as working at the local University, that the researcher made use of convenience sampling as well as snowball sampling techniques.

The convenience sampling technique is also referred to as opportunity sampling and involves the selection of participants based on their availability and willingness to participate in the study (Zikmund, 2003:380; Bickman & Rog, 2009:81). Zikmund (2003:380) further states that convenience sampling is a quick and cost effective method that can be used to obtain a large number of respondents.

According to Kumar (2005:179) "snowball sampling is the process of selecting a sample using networks." Snowball sampling involves the initial respondents providing information which can be used to acquire new respondents, and through referrals can be used to locate members who are rare to a population (Zikmund, 2003:384).

With the primary objective of the study being to investigate women's perceptions of successful financial retirement planning, the researcher targeted women older than 20 and actively participating in some form of financial retirement planning.

The process began with the researcher approaching female employees at organisations in Grahamstown which would typically offer some type of pension plan, this being in line with convenience sampling. Many of those approached were not willing to participate in this study. The employees were encouraged to fill in the survey and requested to assist with referral of other potential participants, this was relatively successful (thus the snowball sampling technique was used).

Besides the respondents identified above, friends and work colleagues were also requested to identify any suitable participants who could participate in the study. The researcher approached in excess of 300 women, requesting that they participate. However, due to a number of the 300 women approached being unwilling to participate in the study only 200 surveys were distributed. Of the 200 surveys distributed 107 were completed and returned, with 6 of the completed surveys missing information therefore deemed unusable by the researcher. This resulted in a usable sample size of 101.

As a result of the sampling design and the high rate of non-response, selection and non-response bias are likely to impact on the findings of this study. Nonresponse bias exists when not all individuals in the sample are willing or able to complete the survey (Couper, 2000:473). However, unless the survey is coercively administered to the target population, a 100 percent response rate is rarely achieved (Rogelberg & Stanton, 2007). A number of authors (Dillman, 1978, 2000; Mouton & Babbie, 2001; Rea & Parker, 1992; Roth & BeVier, 1998) suggest that a minimum response rate of 50% is sufficient, which has been achieved with 101 out of a possible 200 surveys being returned and useable.

Research provides the following reasons for individuals not responding: reluctance, being too busy, not seeing the relevance of the survey and over-surveying (Baruch, 1999; Fenton-O'Creevey, 1998; Weiner & Dalessio, 2006). The researcher found the last point particularly applicable to this study.

Subsequently, the researcher acknowledges that the sample design and sample size preclude the possibility of making generalizable conclusions. These key limitations notwithstanding, the research findings presented in the following chapter demonstrate a potentially useful way of investigating an under-researched area of inquiry in the field of Management Studies.

4.4 Ethical considerations

It is important that researchers have a clear understanding of what is considered right and wrong when conducting research (Remenyi & Williams, 1998:109). According to Zikmund *et al* (2010:94) it is vital that researchers practice good business ethics when conducting research. Moreover, it is important that data collection, data processing and the use of findings are all conducted in an ethical manner (Remenyi & Williams, 1998:109).

The current study followed the ethical guidelines outlined by Rhodes University, with ethical clearance having been given as per appendix E. The survey (appendix B) was distributed with a covering letter (appendix A) which provided potential participants with a brief explanation of the background and purpose of the study. The covering letter also highlighted that participating in this study was completely voluntary and that all data collected from the study would remain anonymous.

4.5 Research methods

Research methods refer “to the various means by which data can be collected and/or analysed” (Collis & Hussey, 2003:55). Therefore, based on the research objectives of the study and the positivistic paradigm, the most suitable research method would be to adopt a survey.

4.5.1 Surveys

A survey is a positivistic methodology, where a sample is taken from a population and studied in order to make inferences about the population (Collis & Hussey, 2003:66). It can be an efficient data collection method, if the researcher knows precisely what is required and how to measure the variables of importance within the study (Sekaran, 1992:200). A survey is a research instrument through which all respondents within the study answer the same set of questions in a predetermined order (Bamberger, Rugh & Mabry, 2012:258).

A survey provides a quantitative distribution by posing a set of questions to the participants within the sample (Sekaran, 1992:200). According to Sekaran (1992:202) there are three design principles which must be considered when developing a good survey. Firstly, the wording of the survey should be clear and understandable to the participants. Secondly, the variables must be categorised, coded and scaled in the correct manner. The third principle

relates to the overall design of the survey. Sekaran (1992:202) opines that the above principles are essential, as they can minimize biases within the research.

4.6 Research measuring instrument

This study used the survey developed by Doa (2014). The survey was adapted and employed in order to investigate women's perceptions of successful financial retirement planning. The reason the researcher made use of the instrument developed by Doa (2014) was due to the similarities that exist between the two studies. Both studies being based in the same geographical area as well as both having women's perceptions as the common dependent variable.

An initial analysis of the study suggested that the survey instrument was reliable and valid as this had already been ascertained in the study by Doa (2014). However, during the course of the study it became evident to the researcher that the research instrument developed by Doa (2014) was flawed. The data analysis conducted in Doa (2014) study (especially the principle component analysis) identified many items in the instrument as being incorrectly classified (grouped) therefore they were deemed unsuitable for this study. Due to the researcher being of the opinion that the design of the instrument that was adopted for this study is flawed, caution should be exercised in the interpretation of the results presented in chapter 5.

Despite the flawed research instrument, the researcher continued with the data analysis process, obtained relevant results and interpreted the available findings, as the above mentioned flaws were only identified at a very late stage of the research process (data analysis stage).

The survey used in the study was a self-administrated survey, made available via the internet using Google survey. Electronic surveys were made available to potential participants via email and paper surveys were also given to women whom the researcher identified as being actively involved in financial retirement planning. One of the benefits of a paper survey is that they are likely to reach a wider geographical region (Zikmund *et al*, 2010:223). However, surveys sent electronically are cost effective and tend to generate a quicker response.

The survey instrument used in the research was divided into several sections and was accompanied by a covering letter (Appendix A). The survey is attached as Appendix B. The survey consisted of the following sections:

- Section A composed of a set of questions based on the demographic variables identified in chapter 3. Information regarding age, marital status, education, ethnicity and retirement investment experience was obtained.
- Section B comprised of a set of questions based on investment experience.
- Section C comprised of a set of questions based on the independent variables identified and discussed in chapter 3. These variables include: values, attitudes, financial literacy, time horizon, risk tolerance and working life cycle.

The independent and dependent variables in this study consisted of a number of items/questions in the survey.

Respondents within this study were required to indicate the extent of agreement/disagreement with each question/item using the 7-point Likert-scale (ranging from strongly disagree to strongly agree) to measure the extent to which the respondents agreed or disagreed with each statement. The qualitative labels on the 7-point Likert scale interval scale ranged from 1 (strongly disagree) to 7 (strongly agree). As previously mentioned, the results of the items/questions were aggregated in order to perform data analysis on the variables.

Because the target sample for the study was women who were above the age of 20 and actively investing for financial retirement, the above criteria became the basis for the qualifying questions. The qualifying question was used to ensure the primary objective of the study was achieved, this being to determine women's perceptions of successful financial retirement planning. The primary objective could only be achieved if only women, over 20, who were actively planning for financial retirement planning participated in the study.

Section A of the survey asked the respondents to indicate their age and investment experience. Thus, the abovementioned qualifying questions allowed for minimal amount of response errors within the study.

4.7 Data capturing

Once the data was collected, the researcher numbered and captured each survey on a spreadsheet using Microsoft Excel. The capturing process ensured that if there were any difficulties when analysing the data, the researcher could look up the specific survey and then could rectify the irregularity. Once the data was captured in Microsoft Excel, the data was imported into SPSS for data analysis.

4.8 Data Analysis

Data analysis can be defined as “the application of reasoning to understand the data that have been gathered” (Zikmund *et al*, 2010:70). According to Collis & Hussey (2003:17)

The analysis and interpretation of research data plays a key role within a research project. The appropriate analysis technique used depends on the research paradigm and the nature of the information gathered (Collis & Hussey, 2003:17; Zikmund *et al*, 2010:70). Due to the quantitative nature of the study the following statistical analysis was performed.

4.8.1 Descriptive statistics

In order to summarise the sample data, descriptive statistics were calculated. Descriptive statistics enable the researcher to summarise and describe the data collected in the study in a simple and understandable manner (Zikmund *et al*, 2010:413). It is used to numerically describe sample units, phenomena and other variables through measures such as the mean, medium, mode and standard deviation of the variables collected (Sekaran, 1992).

According to Collis and Hussey (2003:212) the mean is the arithmetic average of a frequency distribution. The median is a “measure of tendency that is the midpoint, the value below which half the values in the distribution fall” (Zikmund *et al*, 2010:418). The mode refers to the most frequently occurring value within a frequency distribution (Collis & Hussey, 2003:215). Lastly, the standard deviation is a quantitative index of a distribution spread, and is the square root of the variance of the distribution (Zikmund *et al*, 2010:420).

The descriptive analysis of key variables enabled the researcher to gain an in-depth understanding of the selected demographic variables identified.

4.8.2 A comparison of principle component factor analysis and exploratory factor analysis.

Both principle component factor analysis and exploratory factor analysis are dimension reduction techniques which use the notion that a small number of underlying variables can replace the originally measured variables without losing information (Snook, & Gorsuch, 1989; Velicer & Jackson, 1990). In addition, Jolliffe (1973:124) suggests that the results of a principle component factor analysis and an exploratory factor analysis are often similar or the same.

Despite the similarities between the two techniques there are some fundamental differences between the two (Jolliffe, 1973). Table 4.2 summarises the differences between the two techniques.

Table 4.2: Differences between principal component analysis and exploratory factor analysis

Principle Component Factor Analysis	Exploratory Factor Analysis
Principal components account for a maximal amount of variance of observed variables	Factors account for common variance in the data
Analysis decomposes correlation matrix	Analysis decomposes adjusted correlation matrix
Ones occur on the diagonals of the correlation matrix	Diagonals of correlation matrix adjusted with unique factors
Minimizes sum of squared perpendicular distance to the component axis	Estimates factors which influence responses on observed variables
Component scores are a linear combination of the observed variables weighted by eigenvectors	Observed variables are linear combinations of the underlying and unique factors

Source: (Suhr, 2005:3)

It has been suggested by a number of authors that principle component factors analysis is the preferred and more widely used method for data reduction (Chatfield & Collins, 1980; Jolliffe, 2002; Jolliffe, 1973; Steiger & Schonemann, 1978). In addition, Steiger and

Schonemann (1978) suggest the following advantages of using principle component factor analysis as opposed to exploratory factor analysis:

- Availability of accurate methods of determining the number of components to retain and
- computation efficiency

Due to the notion that principle component factor analysis is the preferred and more widely used data reduction method it was used in this study. A detailed discussion on principle component factor analysis is presented in Section 4.7.4. This selection differs from the study by Doa (2014) where an exploratory factor analysis was employed.

4.8.3 Principle component factor analysis for determining construct validity

Despite the original instrument being deemed valid and reliable by Doa (2014) and due to Doa (2014) having performed a pilot study, the researcher did not conduct a further pilot study. The researcher acknowledges this as a limitation of the study. It became evident to the researcher that a number of items in the instrument were incorrectly categorized, therefore a principle component analysis was performed as a means of identifying the valid items in the survey and thereby determining the validity of the key underlying variables (constructs).

As mentioned above, construct validity is used to determine whether the measuring instrument (in this case the survey) measures what it is intended to measure. "Construct validity occurs when a measure reliably measures and truthfully represents a unique concept, it consists of several components including face validity, content validity, criterion validity, convergent validity, and discriminant validity" (Zilmund *et al*, 2010:308). In this study, construct validity was determined through the use of a principle component factor analysis.

The goal of a principle component factor analysis is to compress the data set by extracting only the reliable data, this allows for easier interpretation of the data set (Abdi & Williams, 2010:3). The principle component factor analysis therefore enabled the researcher to determine which extracted factors had a relevant, valid association with each of the dependent and independent variables. The principle component factor analysis was performed on each set of variables based on the items (questions) in which they were originally grouped in the measuring instrument (survey).

Following the principle component approach, valid factors were extracted based on their eigenvalues. An eigenvalue represents numbers and vectors associated with square matrices. Together they provide the eigen-decomposition of a matrix which analyses the structure of this matrix (Abdi, 2007:1). Factors are valid if the extracted factor has an eigenvalue of 1 and above (Fabrigar, Wegener, MacCallum, and Strahan, 1999), therefore factors with values below 1 were excluded from further analysis. Once the factors associated with each independent and dependent variable were extracted (based on their eigenvalues), the researcher was able to evaluate how each item associated with that specific variable loaded.

Factor loading is important for interpreting principle components factor analysis with Zikmund *et al* (2010:594) indicating that factor loading illustrates how strongly a measured variable is correlated with a factor within the study. In this study, a value of 0.5 was used as the cut-off point, which is an acceptable value according to Williams, Brown & Onsmann (2010:5). Items which did not load highly with the extracted factors were excluded from further analysis within this study. Items with loadings greater than 0.5 that loaded onto a factor were considered significant within this study. In addition, extracted factors which loaded with two or less items were eliminated from this study due to the notion that a factor with fewer than three items is considered statistically weak (Osborne & Costello, 2004).

4.8.4 Cronbach's alpha coefficient for measuring reliability

The measuring of the internal consistency or reliability of the extracted factors within this study was done by calculating Cronbach's alpha coefficients. Due to some items being deemed invalid through the use of principle component factor analysis only the remaining valid, relevant, loaded factors were tested for reliability using Cronbach alpha.

Reliability is one of the components which is concerned with the credibility of the research findings (Collis & Hussey, 2003:58). According to Sekaran (1992:173) "the reliability of a measure indicates the stability and consistency with which the instrument is measuring the concept and helps assess the 'goodness' of a measure". Reliability aims to ensure that should the research be repeated, the same findings should be obtained (Collis & Hussey, 2003:58).

Sekaran (1992:174) states that the Cronbach's alpha test is the most popular test for consistency and reliability. According to Zikmund *et al* (2010:306) coefficients between 0.80

and 0.95 are considered to have very good reliability, whereas coefficients between 0.70 and 0.80 are considered to have good reliability. Moreover, values between 0.50 and 0.60 are considered adequate levels of reliability, while scores below 0.50 are considered to have poor levels of internal reliability (Sekaran, 1992). In line with these researchers, a Cronbach Alpha of 0.7 will be deemed reliable for this study.

From this point, the factors which were identified as having reliable, relevant, valid association to women's perceptions of successful retirement planning are the new revised independent variables in this study. The revised variables make up the revised hypothesis model which becomes the basis for all statistical tests that follow.

4.8.5 Ordinal logistic regression analysis to determine relationships between independent and dependent variables

Two ordinal logistic regression analyses were used to determine the relationship between the revised key independent variables and the dependent variable in this study. The first ordinal logistic regression analysis evaluated the relationship between the independent variables and the dependent variable without taking into account and controlling for a selected group of demographic variables (age, ethnicity, marital status, employment status and education).

The second set of ordinal logistic regressions were based on an expanded model which also controlled for a number of socio-economic and demographic variables. This enabled the researcher to determine whether or not the selected demographic variables influenced the association between the key independent variables and the dependent variable.

A regression analysis refers to an "analysis of association in which the effects of two or more independent variables on a single, interval-scale dependent variable are investigated simultaneously" (Zikmund *et al*, 2010:584). A regression analysis is thus a method used to determine the influence that each independent variable has on the dependent variable in the study (Cooper & Schindler, 2007:575) and is therefore used to determine which variables within in a large set of variables exert most influence on other variables (Rubin, 2009:231). Ordinal logistic regression is an appropriate model to employ when ordinal outcome variables are used (Hosmer, Lemeshow, Sturdivant, 2013). The primary goal of the ordinal logistic regression is to find the most fitting, yet biological reasonable model to

describe the relationship between a dependent and a set of independent variables (Hosmer *et al.*, . 2013:1).

Due to the ordinal nature of the key variables in the study an ordinal logistic regression model was employed. For ordinal regression to be performed the items loading with the key variables were aggregated such that the ordinality of the key variables was maintained. This aggregation was achieved by taking the mean of the sub-items in the study.

4.8.6 Pearson's product moment correlation coefficient

In addition to ordinal regression, the Pearson product moment correlation coefficient was used to identify the bi-variate associations between the variables of interest. "Pearson's product moment correlation coefficient (r) is a pragmatic technique which gives a measure of the strength of association between two variables" (Collis & Hussey, 2003:236) therefore determines the degree to which two variables are proportional, or linearly related to one another (StatSoft, 2007). Pearson's correlation coefficient is used to measure the direction, the strength, as well as the significance of the bivariate relationships between variables within a study (Parasuraman, Grewal & Krishnan, 2004:269).

The relationship between variables is determined by assessing the correlation coefficient, which is represented as a number between -1.0 and +1.0 (StatSoft, 2007). A positive coefficient indicates that the variables increase and decrease together (Jackson 2011:159) while a negative coefficient indicates that the variables move in opposite directions. The larger the positive magnitude the stronger the relationship between the two variables in question (Jackson 2011:159). According to Cooper and Schindler (2008:493) the magnitude can be defined as the degree to which two variables move in unison or in the opposite direction to one another. The relationship between the variables is usually strong if their association measure is larger than 0.8, moderate if the association measure is between 0.4 and 0.8, and weak if the association measure is below 0.4 (StatSoft, 2007).

In addition to calculating the correlation coefficient, it is also important to determine the coefficient of determination (r^2) which illustrates the proportion of the variation that the two variables have in common (Jackson, 2011:161).

4.9 Summary

This chapter outlined the research methodology adopted in the study. The chapter discussed the positivistic paradigm as well as the population and samples used for the study. Thereafter the research methods and research instruments were discussed. Finally, the data collection and analysis process was presented.

In order to obtain the participants in the study, convenience and snowballing techniques were determined to be most suitable. In addition, statistical tests namely: principle component factor analyses; Cronbach's alpha coefficient; ordinal logit regression analyses and Pearson's product moment correlation coefficient were then addressed. The results of the statistical tests identified and employed in the study are discussed in detail in chapter 5.

Chapter 5: Empirical Results

5.1 Introduction

Chapter four discussed the methods to be used for data collection. Once the data was collected from participants, a number of statistical analysis tools were identified and used to test the data so that results could be obtained. Chapter five thus focuses on the results of the various statistical tests conducted.

In this chapter a summary of the descriptive statistics and demographic information is provided. Thereafter, results of the validity and reliability tests (principle component analysis and Cronbach alpha coefficient) will be discussed. In order to extract factors for the variables within the study a principle component factor analysis was employed. Finally, two sets of ordinal logit regressions were estimated to determine the correlation and direction of the relationships between the independent variables and the dependent variable.

All of the above analysis was implemented in order to achieve the purpose of the study, which is to investigate the factors which influence women's perceptions of successful financial retirement planning.

5.2 Descriptive statistics based on the background of the participants

In an attempt to describe the sample data in the study, descriptive statistics were calculated (Table 5.1). The descriptive statistics entailed calculating the frequency and mean of the sample data. Data pertaining to participants' backgrounds was collected in section A and B of the survey. Section A comprised of several questions relating to the demographics of the individual. Section B on the other hand comprised of questions relating to the individual's level of engagement in financial retirement planning.

5.2.1 Demographic information pertaining to the participants

The majority of individuals who participated in the study were between the ages of 30 and 39 years (30.7%) with 26.7% of the respondents between the ages of 40 and 49 years. Thereafter, 25.7% of the respondents were between the ages of 20 and 29 years of age, with a small group of participants between the ages of 50 and 59 years (14.9%). Only 2% were older than 60 years with no participants being below the age of 20.

The majority of participants in the study were white (72.3%), followed by 17.8% of the participants being black, while a small group of participants were coloured (7.9%) and Indian (2%). Most participants were married (62.4%), followed by those that were single (22.8%), a small group were in a partnership (9.9%), divorced (4%) and widowed (1%). No separated individuals (0%) participated in the study.

With regards to highest qualification obtained, the largest portion of the participants had grade 12 certificates (30.7%). This modal group was closely followed by participants who had post graduate degrees (27.7%), bachelor's degrees (23.8%), those with diplomas (15.8%) and individuals who had other qualifications (2%).

Most of the participants were employed full time (89.1%) followed by a small group of participants who were homemakers (4%), unemployed (3%), worked part time (3%) and students (1%).

Table 5.1: Descriptive statistics of demographic information

Age of Participants		
	Frequency	Percent
>20 years	0	0
20-29 years	26	25.7
30-39 years	31	30.7
40-49 years	27	26.7
50-59 years	15	14.9
>60 years	2	2.0
Total	101	100.0
Ethnic background of Participants		
	Frequency	Percent
White	73	72.3
Black	18	17.8
Asian	0	0
Coloured	8	7.9
Indian	2	2.0
Other	0	0
Total	101	100.0
Marital status of Participants		
	Frequency	Percent
Single	23	22.8
Partnership	10	9.9
Married	63	62.4
Separated	0	0
Divorced	4	4.0
Widowed	1	1.0
Total	101	100.0

Highest qualification		
	Frequency	Percent
Grade 12	31	30.7
Diploma	16	15.8
Bachelor's Degree	24	23.8
Post Graduate Degree	28	27.7
Other	2	2.0
Total	101	100
Current employment status		
	Frequency	Percent
Full Time	90	89.1
Part Time	3	3.0
Homemaker	4	4.0
Unemployed	3	3.0
Student	1	1.0
Other	0	0
Total	101	100.0

5.2.2 Levels of personal involvement and experience in retirement planning pertaining to the participants

With regards to personal involvement in retirement planning, more than half the participants (54.5%) made use of a professional when taking part in retirement planning. Thereafter, approximately a quarter of the participants (24.8%) preferred to make retirement investment decisions by themselves. A lesser number of participants (18.8%) consulted with friends or partners when making retirement investment decisions and lastly, a minimal number of participants (2%) made use of an investment club. These findings can be seen in Table 5.2.

Table 5.2: Personal involvement in investment planning

Involvement in investment planning		
	Frequency	Percent
I make retirement decisions myself	25	24.8
I make retirement decisions through an investment club	2	2.0
I make retirement decisions with the help of a professional	55	54.5
I make retirement decisions with the help of my friend/partner	19	18.8
Total	101	100.0

Source: Researcher's own construction

As can be seen in Table 5.3, a significant number of participants had more than 10 year's retirement investment experience (35.6%), followed by participants with 1 to 5 years retirement investment experience (21.8%). A small group indicated that they had 6 to 10 years' experience (17.8%), and those with no experience amounted to 13.9%. Lastly, less than one year's experience was indicated by 10.9% of participants. Individuals who have only made use of a financial advisor may have no personal retirement investment experience.

Table 5.3: Retirement investment experience

Retirement investment experience		
	Frequency	Percent
No Experience	14	13.9
<1 year experience	11	10.9
1-5 years experience	22	21.8
6-10 years experience	18	17.8
> More than 10 years experience	36	35.6
Total	101	100.0

Source: Researcher's own construction

5.2.3 Participation in financial retirement planning

The following section provides a summary of the problems respondents encountered while engaging in financial retirement planning. In addition, a summary of the resources that participants used to make financial retirement investment decisions will be discussed. Lastly the time horizon of the participants' retirement investments will be analysed.

5.2.3.1 Problems experienced while investing for retirement.

The results in Table 5.4 indicate that the majority of the participants (67.3%) had difficulty planning for retirement due to limited financial resources. Thus, the majority of the participants struggled to invest for retirement as they had insufficient financial resources to do so. In addition, a large group of the participants (51.5%) had difficulty investing for retirement as they believed they had limited investment knowledge. Fear of making retirement decisions (46.5%) was another major contributing factor that individuals faced when planning to invest for retirement.

A small group of participants (13.9%) indicated that they had problems finding the answer and getting help when it came to investing for retirement. A few participants (5.9%) indicated that the volatility of financial markets and economic cycles was a problem they faced when investing for retirement. Lastly, several participants (1.98%) indicated that they have experienced no problems while planning for retirement.

Table 5.4: Problems faced while investing for retirement

Problem's faced while Planning for Financial Retirement Planning		
	Frequency	Percent
Limited financial resources	68	67.3
Limited investment knowledge	52	51.5
Finding the answer/getting information and help	14	13.9
Fear of making retirement decisions	47	46.5
Volatility of financial markets and economic cycles	6	5.9
Other (None)	2	1.98

Source: Researcher's own construction

5.2.3.2 Media source from which financial information was obtained.

Table 5.5 indicates that the majority of participants (86.1%) made use of an investment professional when making retirement investment decisions. In addition, a fairly large group

of participants (47.5%) received help from family, friends or partners when investing for retirement. Use was also made of internet websites (30.7%) when investing for retirement. While few participants indicated that they made use of television (5.9%) and seminars, with conferences and workshops only being used by 4.9% of participants. Lastly participants did not indicate (0%) any other media sources from which they had obtained retirement investment information.

Table 5.5: Media source from which financial information was obtained

Media source		
	Frequency	Percent
Television	6	5.9
Internet websites	31	30.7
Financial news/magazines	18	17.8
Seminars, conferences and workshops	5	4.9
From partner/friend/family	48	47.5
From an investment professional	87	86.1
Other	0	0

Source: Researcher's own construction

5.2.3.3 Time horizon

With regards to time horizon (Table 5.6), the majority of the participants (65.4%) had retirement investments which had a time horizon of more than 10 years. A small group of participants held retirement investments with the time horizon of 6 to 10 years (17.8%) and 1 to 5 years time horizon was indicated by 16.8% of the participants.

Table 5.6: Time horizon of investment

Time horizon		
	Frequency	Percent
1- 5 years	17	16.8
6-10 years	18	17.8
> 10 years	66	65.4
Total	101	100.0

Source: Researcher's own construction

5.3 Results of reliability and construct validity

The following section will discuss the results of the principle component factors analysis (used for determining construct validity) and the Cronbach alpha coefficient (used to measure reliability).

5.3.1 Principal component factor analysis for determining construct validity

The following section will explain how the results of the principle component analysis were used to construct the independent and dependent variables based on the extraction of factors from each group of items (based on Doa's (2014) instrument) in the survey. The construction of each variable is discussed separately.

Values:

The independent variable "values" consisted of six items (Table 5.7) in the survey. Of the six items for values, only two factors were identified and extracted as they had eigenvalues greater than 1 (this value was discussed in chapter 4). The eigenvalues can be seen in Table 5.7. The remaining four factors associated with values did not have eigenvalues greater than 1 and were thus excluded from further analysis in this study, and were excluded from Table 5.7. Figure 5.1 confirms this finding. As can be seen in Table 5.7 the underlying factors identified for the independent variable "values" cumulatively explain 62.706% of the variance in the data. However, the first extracted factor explains more of the variance (34.032%) than that of the second extracted factor (31.032%).

Based on the highlighted values in Table 5.7, it can be seen that the first factor has a high loading on the following items: religious, ethical and align with personal values. While factor two shows a high loading on: personal, family values and investment importance.

The Cronbach Alpha values for Factor 1 (0.910) and Factor 2 (0.932), indicate a high level of internal consistency. Recall from chapter 4 that the Cronbach's Alpha of a factor must exceed 0.7 to be deemed reliable.

Factor 1 will be referred to as cultural values and factor 2 will be referred to as personal values. A detailed definition of the extracted factors will be provided once factors are extracted for all of the key variables in the study.

Table 5.7: Summary of Principle Component Analysis of Values

Cumulative % of Variance: 62.706		Factor 1	Factor 2
		Eigenvalue: 2.367 % of Variance: 34.032 Cronbach's Alpha: 0.910	Eigenvalue: 1.537 % of Variance: 31.032 Cronbach's Alpha: 0.932
Number of Items	Items	Factor Loading	Factor loading
1	My personal values often guide me when investing for retirement	.335	.694
2	My family values often guide me when investing for retirement	.042	.833
3	My religious values often guide me when investment for retirement	.790	-.169
4	My ethical values often guide me when investing for retirement	.869	.097
5	I only make retirement investments that are aligned with my personal values	.735	.347
6	Making retirement investments is important	-.093	.727

Source: Researcher's own construction

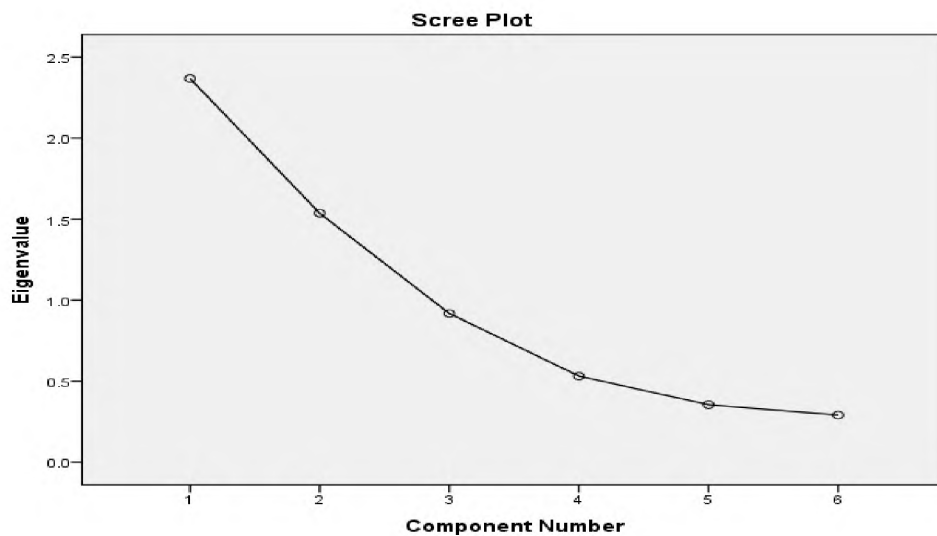


Figure 5.1: Scree Plot of Values

Attitudes

The independent variable “attitudes” comprised of eight items from the survey. As can be seen in Table 5.8, from the eight items used to measure “attitudes”, two factors were identified and extracted as they had eigenvalues greater than 1. Factor 1 had an eigenvalue of 3.792 and factor 2 had an eigenvalue of 1.225. The remaining six factors were excluded from the study due to their associated eigenvalues being less than 1. This can be confirmed in Figure 5.2.

From a review of Table 5.8 it can be seen that the two underlying factors which were extracted from the independent variable “attitudes”, explain 65.064% of the variance associated in the data. However, the first factor extracted from the independent variable “attitudes”, accounts for roughly twice the variance (43.198%) compared to that of the second factor which accounts for less variance (19.508%).

Most of the items used to measure attitudes load highly with factor 1. This is seen when reviewing the factor loadings in Table 5.8, where the strong positive associations have been highlighted. The items which did not load highly with the extracted factors were excluded from further analysis in the study.

The first extracted factor (factor 1) has high positive loadings with the following items: comfort, confidence, easy decisions, like investment, and risks. The second extracted factor (factor 2) has high loading with: returns on wealth and early investment. Despite the Cronbach Alpha of factor 2 (0.927) being reliable, factor 2 was excluded from further analysis due to the factor only loading with two items. Moreover, the large difference in eigenvalues between factors 1 and 2 suggests a single factor loading from these eight items (i.e. note the steep drop in the scree plot between factors in diagram 5.2). Lastly, the Cronbach Alpha for affective attitudes (0.932) in Table 5.8 suggests strong internal consistency.

Factor 1 will be referred to as affective attitudes.

Table 5.8: Summary of Principle Component Analysis of Attitudes

Cumulative % of Variance: 65.064		Factor 1	Factor 2
		Eigenvalue: 3.792	Eigenvalue: 1.225
		% of Variance: 43.198	% of Variance: 19.508
		Cronbach's Alpha: 0.932	Cronbach's Alpha: 0.927
Item	Question	Factor Loading	Factor loading
1	I am comfortable making retirement decisions	.825	.244
2	I am confident making retirement decisions	.880	.134
3	I can create retirement wealth through investing	.228	.686
4	I find it easy making retirement decisions	.820	.250
5	I like making retirement investments	.762	.296
6	Women make better investment decisions than men	.412	.342

7	I like to take risks when investing for retirement	.724	-.230
8	It is necessary to start investing for retirement as early as possible	-.018	.832

Source: Researcher's own construction

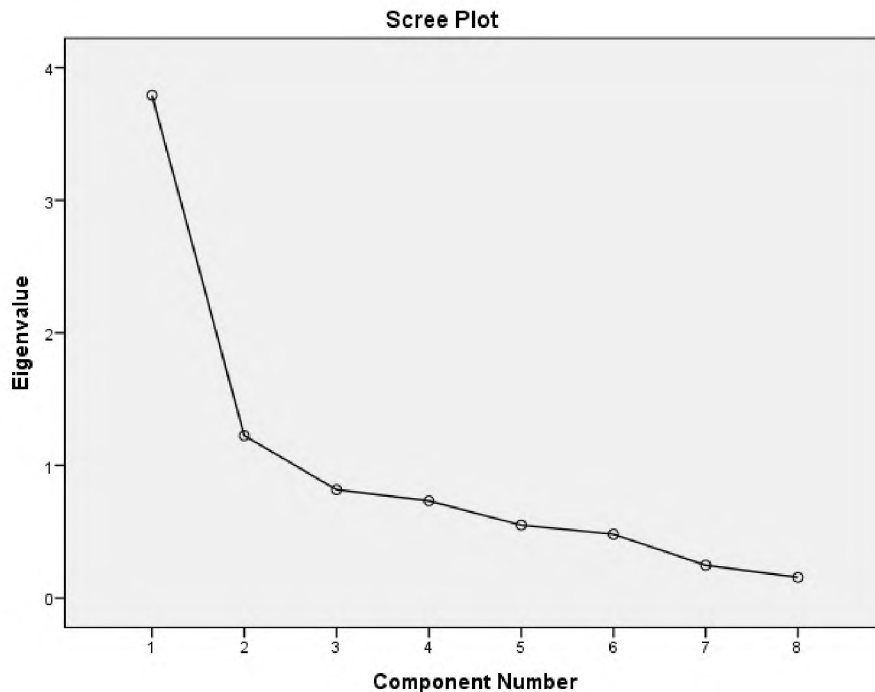


Figure 5.2: Scree Plot of Attitudes

Time horizon

The results of the principle component factor analysis (Table 5.9) show that from the eight items that were intended to measure the independent variable “time horizon”, three factors loaded with eigenvalues larger than 1, and were therefore retained. Consequently, the remaining five factors found for the independent variable “time horizon” were excluded from further analysis in this study as their eigenvalues were less than 1. This can be confirmed by reviewing Scree plot 3 (Figure 5.3).

The three factors which were extracted form “time horizon” cumulatively explain 68.532% of the variance associated with the data. However, the first extracted factor marginally explains more (25.102%) of the variance compared to factor 2 (22.024%) and factor 3

(21.406%). The fact that three factors were identified for the independent variable “time horizon” can be confirmed by diagram 5.3.

The first extracted factor (factor 1) has high positive loading on the following items: retirement investments greater than 10 years, the retirement investment vehicle chosen, and the influence of retirement goals on time horizon. The Cronbach alpha of the first factor indicates that the factor was reliable (0.923).

The second extracted factor (factor 2) has high positive loadings on the following items: financial retirement investments which are less than 5 years, financial retirement investments which are less than 10 years and the ease of which retirement investments can be converted into cash. The Cronbach alpha of the second factor indicates that the factor was reliable (0.936).

The third extracted factor (factor 3) has a high positive loading on the following items: knowing the time horizon of one’s financial retirement investment and reducing the risk of retirement investments the closer one gets to retirement. Even though the factor was deemed reliable (with a Cronbach’s alpha of 0.908), factor 3 was excluded from further analysis as it loaded with only two items and, as demonstrated in the scree plot, a two factor solution seems more appropriate.

Factor 1 will be referred to time horizon knowledge and factor 2 will be referred to as time horizon consideration.

Table 5.9: Summary of Principle Component Analysis of Time Horizon

Cumulative % of Variance: 68.532		Factor 1	Factor 2	Factor 3
		Eigenvalue: 2.416 % of Variance: 25.102 Cronbach's Alpha: 0.923	Eigenvalue: 2.043 % of Variance: 22.024 Cronbach's Alpha: 0.936	Eigenvalue: 1.023 % of Variance: 21.406 Cronbach's Alpha: 0.908
Item	Question	Factor Loading	Factor Loading	Factor Loading
1	I prefer to make retirement investments with the time horizon (Length) of less than 5 years	-.156	.823	-.154
2	I prefer to make retirement investments with the time horizon (length) less than 10 years	-.221	.751	.234
3	I prefer to make retirement investments with the time horizon (length) of more than 10 years	.714	-.345	.290
4	I consider the time horizon (length) of investment vehicles when investing for retirement	.844	.037	.152
5	I consider my retirement goals when choosing the time horizon (length) ‘	.814	-.044	-.068
6	I consider the ease with which I can covert my retirement investment into cash when choosing the time horizon (length) of my retirement investment	.162	.603	.267
7	I know the time horizon (length) of each of my retirement investments	.155	.036	.856
8	The closer I get to retirement the less risky my investment will be	.038	.184	.847

Source: Researcher’s own construction

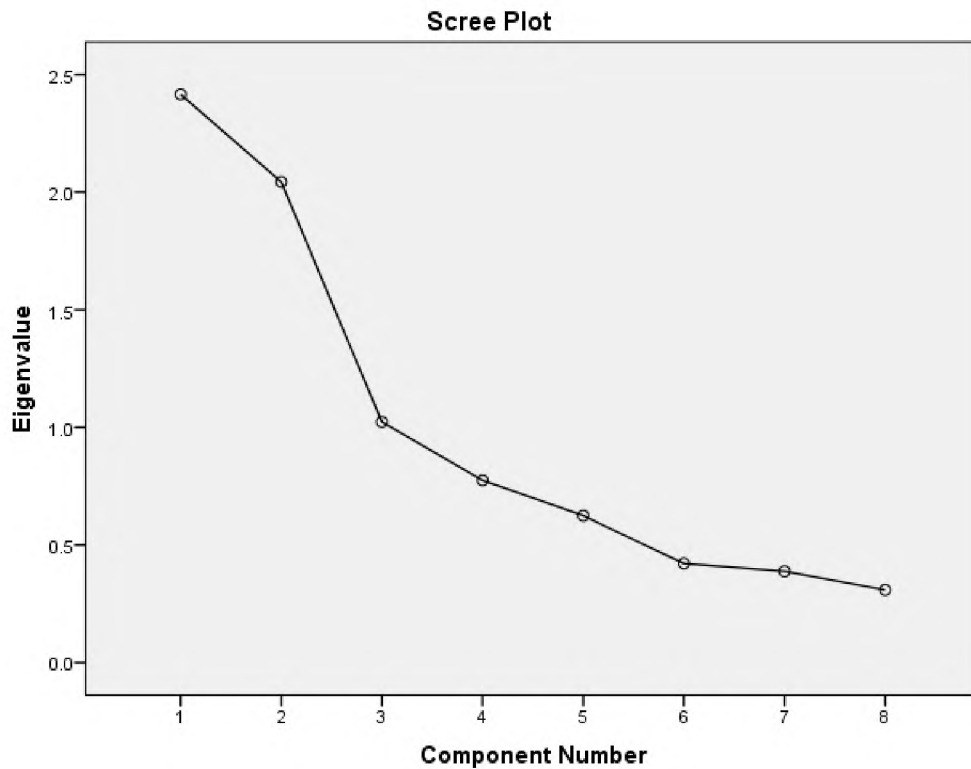


Figure 5.3: Scree Plot of Time Horizon

Working life cycle

As can be seen in Table 5.10 the independent variable “working life-cycle” comprised of five items with two factors being identified and extracted. Factor 1 had an eigenvalue of 1.971 and factor 2 had an eigenvalue of 1.192. The remaining factors which had eigenvalues below 1 were excluded from the further analysis in this study. This can be confirmed by reviewing Figure 5.4.

Based on Table 5.10, it can be seen that factor 1 and 2 explain 63.252% of the variance associated with the data, with factor 1 explaining a slightly higher variance associated with the data (32.375%) compared to factor 2 (30.876%).

Factor 1 has a high loading on the following items: retirement goals changing as one moves through different life-cycles, the influence of age on retirement goals, and women’s tendency to have disjointed working life-cycles due to family responsibilities.

Factor 2 has a high loading on the following items: income influencing how one invests for retirement and the influence of income on how much one can save for retirement.

The results of the Cronbach alpha in table 5.10 reveals that both working life cycle 1 (0.908) and working life cycle 2 (0.917) were reliable. Despite both factors being reliable, both factors were excluded from further analysis as the factors did not load highly. That is, they did not load with 3 or more items. This outcome is not surprising to the researcher considering the items were originally constructed for the independent variable “working life cycle”. This is, moreover, an example of how the design of the survey instrument and the small sample size have impacted on the research results.

Table 5.10: Summary of Principle Component Analysis of Working Life-Cycle

Cumulative % of Variance:		Factor 1	Factor 2
63.252		Eigenvalue: 1.971 % of Variance: 32.375 Cronbach’s Alpha: 0.908	Eigenvalue: 1.192 % of Variance: 30.876 Cronbach’s Alpha: 0.917
Item	Question	Factor Loading	Factor loading
1	My retirement needs change as I move through the different stages of my life	.811	.282
2	Different age groups have different retirement goals	.866	-.134
3	My income influences how I invest for retirement	.236	.761
4	My income influences how much I can investment for retirement	-.008	.894
5	Women tend to have disjointed working careers due to family responsibilities	.394	.260

Source: Researcher’s own construction

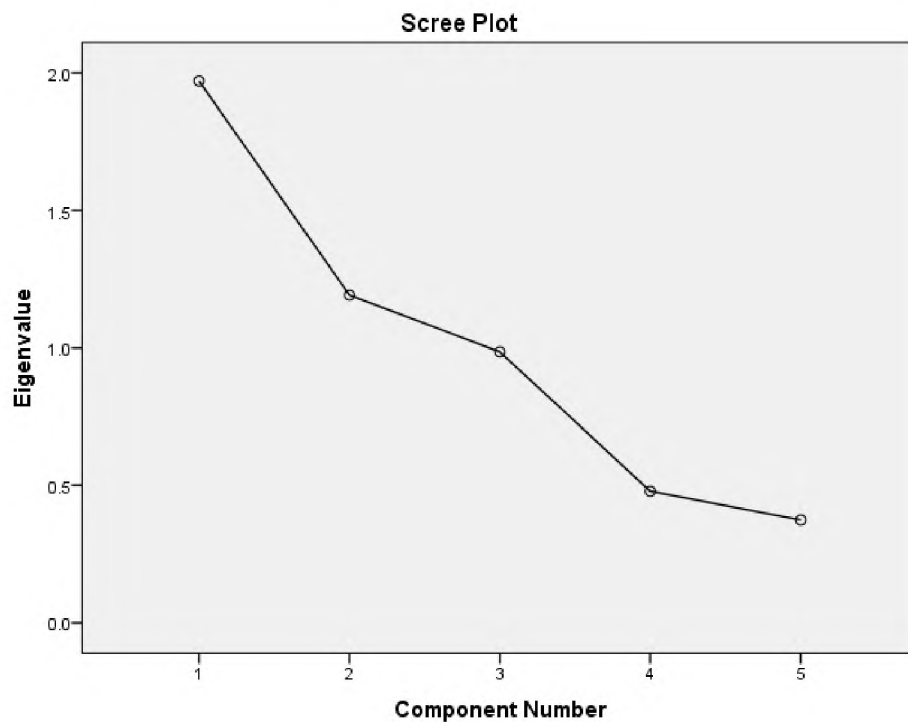


Figure 5.4: Scree Plot of Working Life Cycle

Risk Tolerance

As can be seen in Table 5.11 the independent variable “risk tolerance” comprised of six items. One factor, with an eigenvalue of 3.754, was identified and extracted (see Table 5.11). Figure 5.5 confirms the finding that a set of questions attempting to measure risk tolerance yielded a single factor loading.

As can be seen in Table 5.11 the underlying factor extracted from the independent variable “risk tolerance” explains 62.572% of the variance associated with the data. It can also be seen that the factor extracted from the independent variable “risk tolerance” loads highly with all the items associated with risk tolerance. Thus, factor 1 has a high loading with the following items: being aware of the different types of financial risks associated with retirement, being aware that risk and return are positively correlated, being aware of one’s retirement investment risks, being aware that one needs to take more retirement investment risks in order to gain a higher return, considering the financial risks when choosing the time horizon of investments and considering the return when choosing the time horizon of one’s retirement investments.

Due to all items loading highly with the factor extracted from the risk tolerance no items were excluded further analysis. Since there was only one factor extracted from the independent

variable risk tolerance and all items loading highly with the extracted factor, the name for the extracted factor will remain unchanged. Thus the factor extracted will be referred to as risk tolerance.

Lastly, in conjunction with the results of the Cronbach alpha in Table 5.11 (0.922), the measuring instrument for the risk tolerance was deemed reliable.

Table 5.11: Summary of Principle Component Analysis of Risk Tolerance

Cumulative % of Variance: 62.572		Factor 1
		Eigenvalue: 3.754 % of Variance: 62.572 Cronbach's Alpha: .922
Item	Question	Factor Loading
1	I am aware of the different types of financial risks associated with retirement investments (ie. Market risks)	.771
2	I am aware that risk and return are positively correlated. In other words, the higher the risk the higher the return	.897
3	I am aware of my retirement investment risk (risk related to each of my retirement investment vehicles)	.926
4	I am aware that I need to take more retirement investment risks if I want a higher return	.799
5	I consider the financial risks when choosing the time horizon (length) of my investments	.762
6	I consider the returns when choosing the time horizon (length) of my retirement investments	.529

Source: Researcher's own Construction

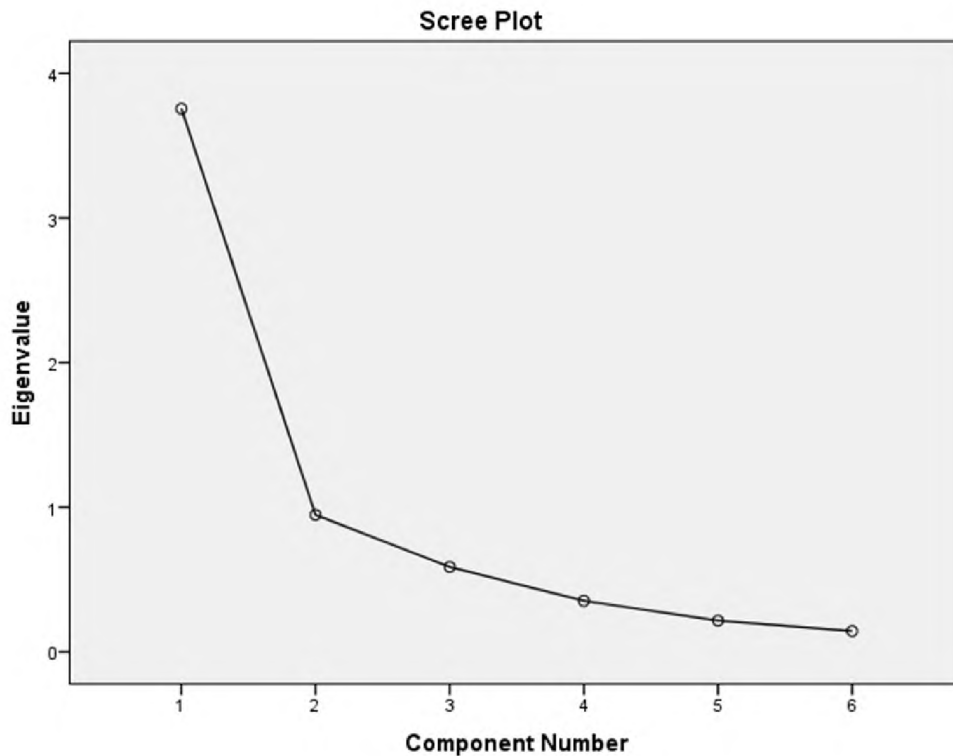


Figure 5.5: Scree Plot of Risk Tolerance

Financial literacy

As can be seen from Table 5.12 the independent variable “financial literacy” comprised of seven items. Of these seven items measuring financial literacy, one factor was identified and extracted. This factor (factor 1) had an eigenvalue greater of 4.331 and can be confirmed by reviewing Figure 5.6.

The extracted factor explains (61.875%) of the variance associated with the data (Table 5.12). As can be seen in Table 5.12, the factor extracted from the construct “financial literacy” loads highly with all the items associated with the construct “financial literacy”.

Table 5.12, also shows factor 1 as loading highly with the following items: having knowledge about different retirement investments, knowledge about time horizon of different retirement investments, knowing who to get assistance from, knowing the cost implications of retirement investments, gathering retirement vehicle information, basing retirement decisions on retirement knowledge and basing retirement decisions on past experience.

Due to factor 1 loading highly with all the items associated with the independent variable financial literacy, all items were included in further analysis of this study. Furthermore, the factor name remained unchanged.

Lastly, the results of the Cronbach Alpha for financial literacy in Table 5.12 revealed that the factor was reliable (0.932).

Table 5.12: Summary of Principle Component Analysis of Financial literacy

Cumulative % of Variance: 61.875		Factor 1
		Eigenvalue: 4.331 % of Variance: 61.875 Cronbach's Alpha: .932
Item	Question	Factor Loading
1	I have knowledge about different retirement investment opportunities	.876
2	I have knowledge about the time horizon (length) of different retirement investment vehicles	.856
3	I know who will be able to assist me when making retirement decisions	.544
4	I know the cost implications (ie tax or fee payable) of different retirement investment vehicles/opportunities	.798
5	I gather information regarding retirement investment vehicles/opportunities	.760
6	My retirement investment decisions are based on retirement knowledge	.864
7	My financial retirement decisions are based on past investment experiences	.757

Source: Researcher's own construction

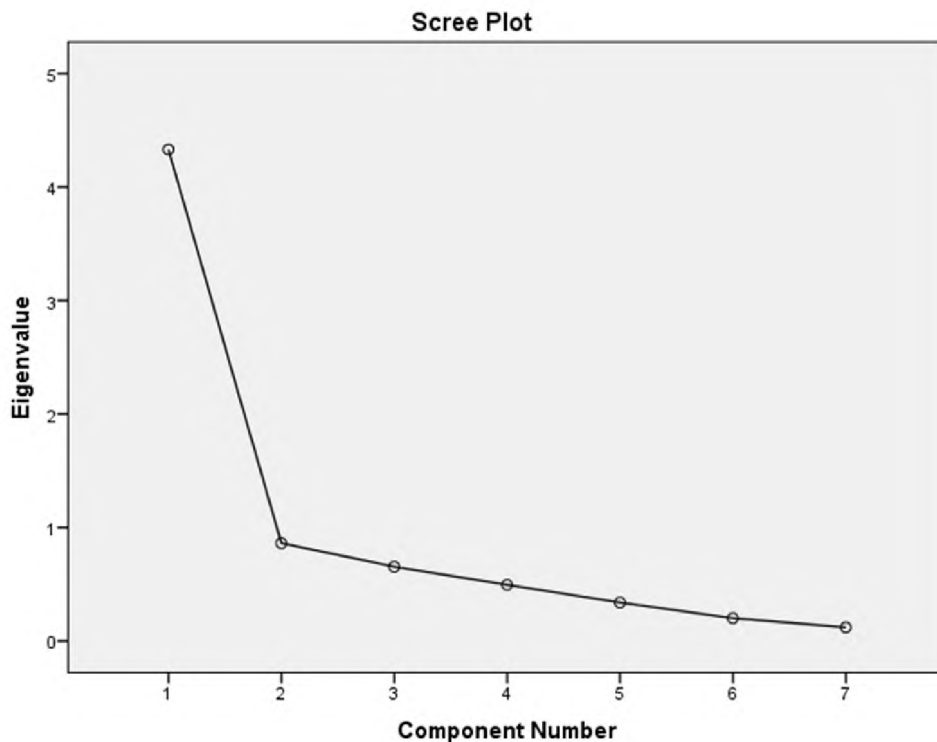


Figure 5.6: Scree Plot of Financial Literacy

Women’s perception of successful financial retirement planning

Table 5.13 shows that the set of items measuring “women’s perceptions of successful financial retirement planning” is comprised of seven questions. From these seven items, one factor was identified and extracted (Table 5.13) as the eigenvalue associated with the extracted factor is greater than 1.

Factor 1 had an eigenvalue of 5.190 while the remaining 6 factors had eigenvalues of below 1 and were thus excluded from further analysis in this study. This can be confirmed by reviewing figure 5.7.

The factor (factor 1) extracted from the dependent variable “women’s perceptions of successful financial retirement planning” explains 74.150% of the variances associated with the data (Table 5.13). Thus, sufficient evidence of validity was found.

As a result of one factor being extracted and all items loading highly with the extracted factor, the factor name will remain unchanged.

Lastly, in conjunction with the results of the Cronbach alpha for women’s perceptions of successful financial retirement planning (0.930) in Table 5.13, the measuring instrument for women’s perceptions of successful financial retirement planning was deemed reliable.

Table 5.13: Summary of Principle Component Analysis of Women’s Perceptions of Successful Financial Literacy

Cumulative % of Variance: 74.150		Factor 1
		Eigenvalue: 5.190 % of Variance: 74.150 Cronbach’s Alpha: .930
Item	Question	Factor Loading
1	I am satisfied with the growth of my retirement investments	.850
2	I am satisfied with the income I will receive from my retirement investments	.876
3	The growth of my retirement investment will exceed inflation (the general increase in the price of goods)	.815
4	The returns/income from my retirement investments will give me financial independence	.898
5	I am in control of my retirement matters because I have invested for retirement	.898
6	I am able to plan for my future retirement needs though engaging in investment planning	.872
7	I am able to achieve my retirement goals by investing	.804

Source: Researcher’s own construction

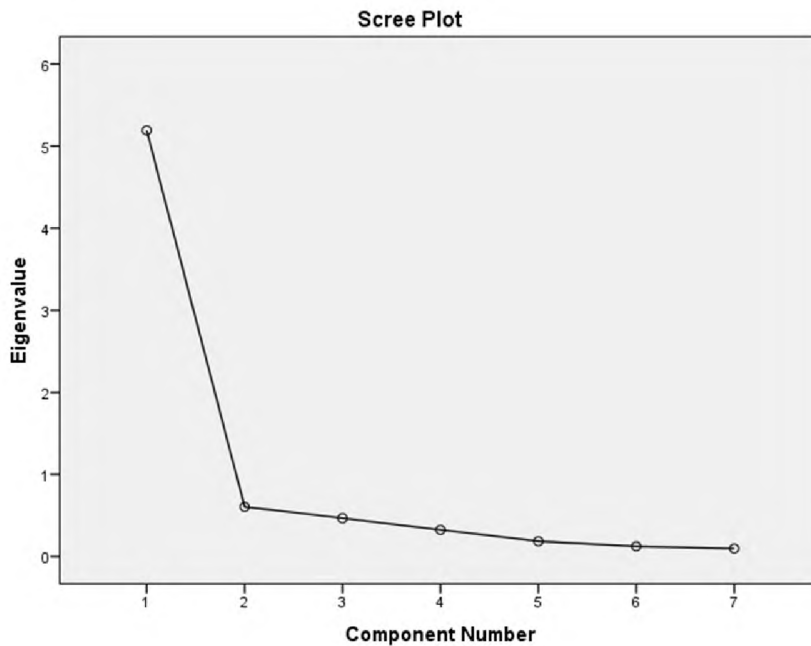


Figure 5.7: Scree Plot of Women's Perceptions of Successful Financial Retirement Planning

5.4 Revised definitions, Hypothesis Model and Hypothesis

From this point on the factors found to have an association with the dependent variable (women's perceptions of successful financial retirement planning) will be referred to as independent variables. As a result of the principle component factor analysis the definitions of the variables in this study were reformulated. The reformulated variables will be defined in line with the items with which they loaded (Table 5.14).

Table 5.14: Reformulated definitions of independent and dependent variables

Variables	Revised Definition
Affective attitudes	For the purpose of this study, affective attitudes is referred to as women's confidence and tendency to partake in financial retirement planning in a comfortable, positive and successful manner as well as a women's confidence with taking investment risks.
Cultural values	For the purpose of this study, cultural values is referred to as women's religious, ethical and personal values which guide and influence the manner in which they take part in the financial retirement planning process.

Personal values	For the purpose of this study, personal values is referred to as women's personal, family and investment values which guide and influence the manner in which they take part in the financial retirement planning process.
Time horizon knowledge	For the purpose of this study, time horizon knowledge is referred to as the knowledge and preference women have of the time horizon (length) of their retirement investment, the understanding of the time horizon of retirement vehicles and the understanding of how time horizon can influence retirement goals.
Time horizon Consideration	For the purpose of this study, time horizon consideration is referred to as the knowledge and preference women have for the time horizon of their retirement investments and the ease with which they can convert their retirement investment into cash.
Risk tolerance	For the purpose of this study, risk tolerance is referred to as women's awareness of risks and returns on their retirement investments, women's willingness to take on risk in their retirement investments and an understanding of the positively correlated relationship between investment risk and return.
Financial literacy	For the purpose of this study, financial literacy is referred to as women having the basic knowledge and understanding of the different types of investment vehicles, having the knowledge about the different retirement options, past investment experience, as well as knowing how or where to obtain financial assistance and guidance when making financial retirement decisions.
Women's Perceptions of Successful Financial Retirement Planning	For the purpose of this study, perceived successful financial retirement planning is defined as the degree of satisfaction which women experience with the growth, income, or profits of their retirement investment, which will enable them to be in control of their financial affairs during retirement and enable the individual to be financially independent during their retirement years.

The hypothesised model was also revised and the hypotheses reformulated. The revised hypotheses and hypothesis model was subject to further statistical analysis within this study.

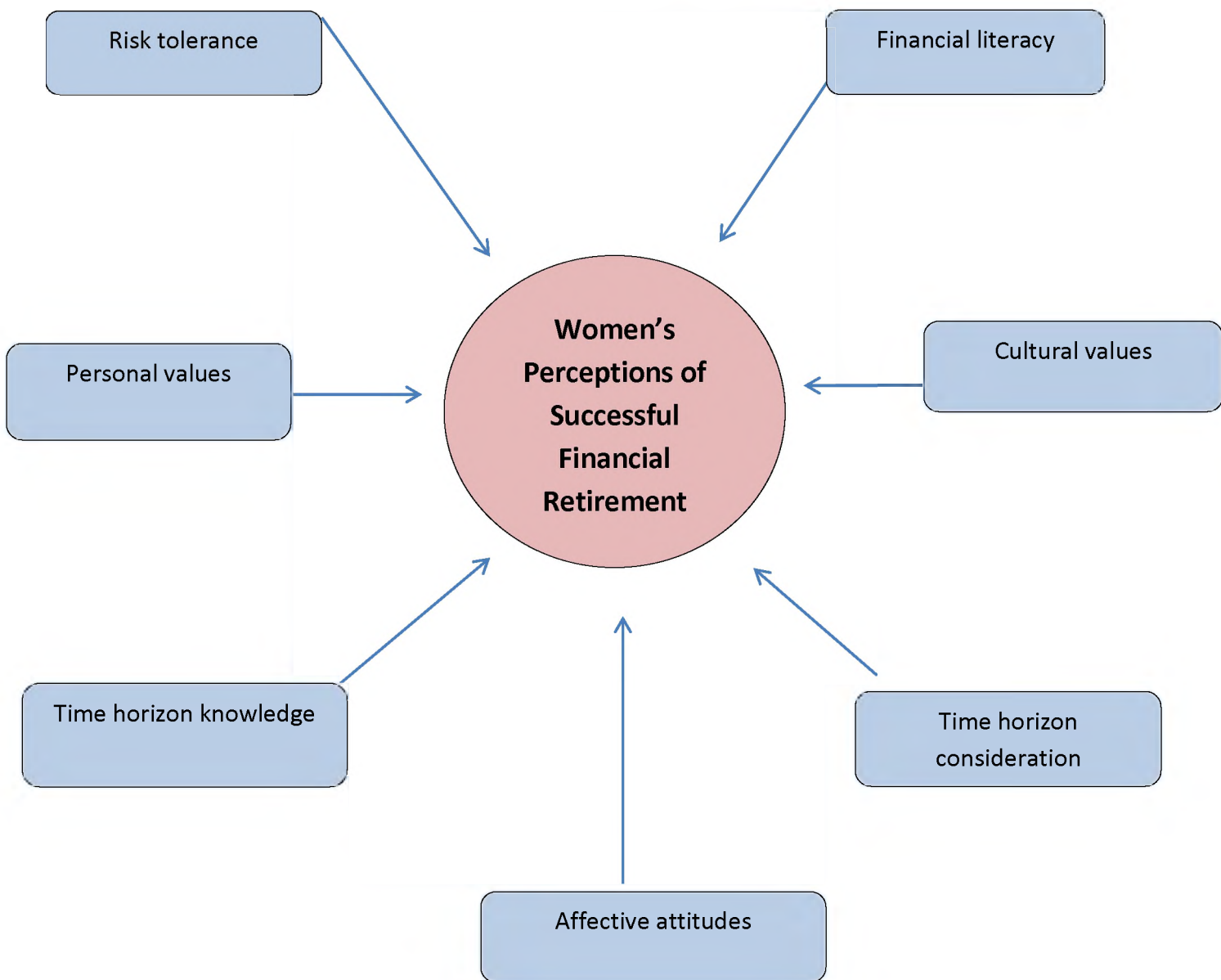


Figure 5.8: Revised Hypothesised Model

The reformulated hypotheses are as follows:

- HA1: There is a relationship between financial literacy and women's perceptions of successful financial retirement planning.
- HA2: There is a relationship between risk tolerance and women's perceptions of successful financial retirement planning.
- HA3: There is a relationship between time horizon knowledge and women's perceptions of successful financial retirement planning.
- HA4: There is a relationship between time horizon consideration and women's perceptions of successful financial retirement planning.
- HA5: There is a relationship between personal values and women's perceptions of successful financial retirement planning.
- HA6: There is a relationship between cultural values and women's perceptions of successful financial retirement planning.
- HA7: There is a relationship between affective attitudes and women's perceptions of successful financial retirement planning.

The revised definitions, hypothesis model and hypotheses will be used for the remaining data analysis – that is the ordinal logit regression analysis for determining relationships between the independent and dependent variables.

5.5 Multiple Regression Model

To determine the association between the independent variables (personal values, cultural values, time horizon knowledge, time horizon consideration, financial literacy, affective attitudes and risk tolerance) and the dependent variable (women's perceptions of successful financial retirement planning) an ordinal logit regression analysis was estimated.

Two ordinal logit regression analyses were employed in this study. The first was estimated without controlling for or taking into account the selected set of demographic variables in this study, while the second controlled for and took into account the selected demographic variables in this study. The purpose of this was to determine whether or not the demographic variables in this study influenced the relationship between the independent variables and the dependent variable. Table 5.15 shows the results of both ordinal logit regression analyses.

The next section will first discuss the ordinal logit regression analysis employed without taking into account demographics. Thereafter a discussion of the results of the second ordinal logit regression analysis taking into account demographics will be done followed by a comparison of the two sets of results.

5.5.1 Ordinal logit regression not controlling for demographic variables

Table 5.15 shows that the R Square is 0.516 indicating that the independent variables (personal values, cultural values, affective attitudes, time horizon knowledge, time horizon consideration, risk tolerance and financial literacy) within the model explain 51.16% of the variance of women’s perceptions of successful financial retirement planning without taking into account the selected set of demographics.

According to the table personal values, affective attitudes and time horizon knowledge are the only factors to have a significant positive linear relationship with the factor extracted from the dependent variable (women’s perceptions of successful financial retirement planning). The positive linear relationship can be seen by evaluating the betta and p-values. The results of the betta and the p-values of the significant positive factors are provided below:

Personal Values: (Beta= 0.230; p=0.009)

Affective Attitudes 1: (Beta=0.437; p=0.000)

Time Horizon Knowledge: (Beta=0.343; p=0.000)

However, risk tolerance has a significant negative linear relationship with women’s perceptions of successful financial retirement planning.

Risk tolerance: (Beta= -0.276; p=0.024)

It can also be determined from table 5.15 that no significant linear relationship exists between the remaining independent variables namely: cultural values, time horizon considerations and financial literacy. Subsequently, these independent variables were excluded from further analysis in this study.

Table 5.15: Ordinal Logit Regression Analysis

Ordinal Logit Regression Not Controlling For Demographic Variables	
Dependent variable:	R- Squared: 0.516

Women's perceptions of successful financial retirement planning				
Variable	Beta	Std. Error	t-value	Sig (p-value)
Personal Values	0.230	0.086	2.664	0.009
Cultural Values	0.021	0.083	0.254	0.800
Affective Attitude	0.437	0.082	5.308	0.000
Time Horizon Knowledge	0.343	0.087	3.936	0.000
Time Horizon Preference	-0.016	0.079	-0.205	0.838
Financial Literacy	0.167	0.136	1.232	0.221
Risk Tolerance	-0.276	0.120	-0.2292	0.024
Ordinal Logit Regression After Controlling For Demographic Variables				
Dependent variable: Women's perceptions of successful financial retirement planning			R- Squared: 0.601	
Variable	Beta	Std. Error	t-value	Sig (p-value)
Personal Values	0.271	0.901	2.977	0.004
Affective Attitudes	0.509	0.088	5.748	0.000
Time Horizon Knowledge	0.297	0.089	3.355	0.001
Risk Tolerance	-0.088	0.097	-0.903	0.369

Source: Researcher's own construction

5.5.2 Ordinal logit regression after controlling for demographic variables

In order to control for a selected group of demographics a second ordinal logit regression was run. Women's perception of successful financial retirement was the dependent variable. The independent variables consisted of personal values, affective attitude and time horizon knowledge. The selected sets of demographic variables (age, marital status, highest qualification and employment status) were also accounted for in the ordinal logit regression. For details on the full specification of this model, see Appendix D.

Table 5.15 shows R Square has a value of 0.601 indicating that the significant extracted factors and the selected demographic variables within the model explain 60.1% of the variance of women's perceptions of successful financial retirement planning. What is noteworthy is that the R squared increased from 0.516 to 0.601 after controlling for the selected set of demographics in this study. Subsequently, the variables explained more of the variance of women's perceptions of successful financial retirement planning after controlling for demographics.

After controlling for demographics, personal values, affective attitudes and time horizon knowledge were still found to have a significant linear relationship with women's perceptions of successful financial retirement planning. However, after controlling for a selected set of demographics, risk tolerance no longer had a significant negative linear relationship with women's perceptions of successful financial retirement planning. Thus, risk tolerance was excluded from further analyses in this study.

The results of the beta and the p-values of the significant positive factors are provided below:

Personal Values: (Beta=0.271; p=0.004)

Affective Attitudes 1: (Beta= 0.509; p=0.000)

Time Horizon Knowledge: (Beta=0.297; p=0.001)

5.5.3 Pearson's correlation coefficient

In order to measure the relationship between the independent variables (personal values, affective attitudes, time horizon knowledge and women's perceptions of successful financial retirement) under investigation within the study, the Pearson product moment correlation coefficient was examined.

Table 5.16 shows the results of the Pearson's product moment correlation coefficient, with results showing a high number of moderate positive correlations between the variables that were identified.

The highest positive correlation exists between women's perceptions of successfully financial retirement planning and affective attitudes ($r=0.578$) and women's perceptions of successful financial reinternment planning and time horizon knowledge 1 ($r=0.559$) with the lowest correlation being between affective attitudes and personal values ($r=0.241$).

Table 5.16: Results of Pearson's product moment correlation coefficient

Variables	Personal values	Affective attitude	Time Horizon knowledge	Women's perception of successful financial retirement planning
Personal Values				
Correlation	1	.241	.475	.475
Significates		P=.015	P=.000	P=.000
Affective Attitude				
Correlation	.241	1	.326	.578
Significates	p=.015		p=.001	p=.000
Time Horizon Knowledge				
Correlation	.475	.326	1	.559
Significates	p=.000	P=.001		P=.000
Women's Perception of Successful Financial Retirement Planning				
Correlation	.471	.578	.559	
Significates	p=.000	p=.000	p=.000	1

Source: Researcher's own construction

5.6 Summary

Chapter 5 has dealt with the analysis of the data in the study. A number of statistical tests were conducted in order to gain further insight into the study data. With the sample only consisting of 101 willing participants the researcher acknowledges that this small sample size and the sample design are likely to have influenced the results which were obtained. In order to gain an understanding of the participants, descriptive statistics were conducted on the background of the participants.

The data analysis consisted of determining the reliability and validity of the measuring instrument through principal component analysis and Cronbach's alpha coefficient. The results of the ordinal logit regression model as well as Pearsons product moment correlation coefficients revealed that attitudes, time horizon knowledge and personal values had significant positive relationships with women's perceptions of successful financial retirement planning.

Chapter 6 Discussion

6.1 Introduction

Within the previous chapter the results of the study were presented. The results for chapter 5 revealed that three key independent variables had a significant positive linear relationship with women's perceptions of successful financial retirement planning. These being affective attitude, personal values and time horizon knowledge. The remaining extracted factors had no significant influence on women's perceptions of successful financial retirement planning in the study at hand. After reviewing the results presented in chapter 5, this chapter focusses on the discussion of the results in conjunction with the literature in chapter 2 and chapter 3. In addition, recommendations based on the findings will be made.

6.2 Interpretation of empirical results and recommendations

The following section provides an interpretation of the results discussed in chapter 5, in conjunction with the literature previously discussed in chapter 2 and chapter 3. Based on the interpretations, relevant recommendation will be made that will serve to assist women when making financial retirement decisions.

6.2.1 Affective attitudes

The results of the study reveal that a significant positive linear relationship exists between affective attitudes and women's perceptions of successful financial retirement planning. Affective attitudes can be defined as the feelings, moods, emotions and sympathetic nervous system activity that individuals experience in relation to an attitude object (Van Herreveld, F, Nohlen, H.U, and Schneider I.K, 2015). For example, how positive or negative an individual's thoughts are in relation to financial retirement planning.

In line with the above definition of affective attitudes, and in conjunction with the questions which loaded highly with affective attitude (the key extracted independent variable), it appears that women who are comfortable making financial retirement decisions, who are confident making retirement decisions, who find it easy making financial retirement decisions, who like making financial retirement decisions, and who like taking risks when investing for retirement tend to be satisfied with the growth and income they receive from their retirement investments

As discussed in chapter 3, an individual's attitudes towards financial retirement planning can influence their tendency to plan for retirement. Individuals with a negative attitude towards financial retirement planning tend to delay the financial retirement planning process (Barnes-Farrell, 2002:170). Literature also indicates that individuals who have positive attitudes towards financial retirement planning are more likely to partake in successful financial retirement planning, are thus better prepared for retirement (Noone, Stephens & Alpass, 2009; Noone, 2010).

Previous research suggests that women tend to adopt more negative attitudes towards financial retirement planning (Noone, 2010; Schubert *et al*, 1999). Consequently, women's tendency to adopt a negative attitude towards financial retirement planning can adversely affect their tendency to successfully plan for financial retirement, which also tends to affect women's confidence when planning for retirement (Schubert *et al*, 1999). Based on the in-depth analysis of literature, it is clear that women's attitudes can influence their financial retirement planning. This is in agreement with the results of this study, where it is evident that affective attitude's was a factor which influenced women's perceptions of successful financial retirement planning. It is thus important that women adopt a positive attitude towards financial retirement planning to ensure they are comfortable and confident when making financial retirement decisions. In an attempt to help women adopt positive attitudes towards financial retirement planning, the following recommendations are made:

1. Become more comfortable when making retirement decisions. This can be achieved through continuously engaging in financial retirement planning.
2. Consult with professionals, friends and family who have financial knowledge to ensure sufficient information before investing for retirement. This will bring a degree of safety to the investment.
3. Explore different retirement investment options in order to determine which retirement option best suits future financial needs.
4. Ensure saving for retirement is started as early as possible.
5. Learn about the different retirement investment options as well as their tax implications.
6. Avoid withdrawing retirement investments before maturity date.
7. Ensure that retirement investments are continuously revised and adjusted.

8. Participate in retirement investment workshops and seminars to gain more financial knowledge and understanding.
9. Accurately forecast financial needs during retirement to ensure sufficient money is saved for retirement and to avoid running out of funds once retired.
10. Attempt to save at least 10% of the salary each month.
11. Stay in the working environment for as long as possible as ultimately money needs to be earned in order to save.
12. Create financial goals to ensure the financial retirement plan is achievable.
13. Gain an understanding of the costs and benefits associated with each retirement option.
14. Take inflation into consideration when planning for retirement.
15. Ensure the portfolio is diversified when investing for retirement to reduce the risk of financial loss.

6.2.2 Personal Values

Personal values are the social principles, goals and standards that members of a culture believe to have intrinsic worth (Hatch & Cunliffe, 2006). Subsequently, individual's personal values serve as a guiding principle to individual's lives (Schwartz, 1994).

The results of the ordinal logit regression analysis and Pearson's product moment correlation coefficient, reveal a significant relationship between personal values (the extracted key variable) and women's perceptions of successful financial retirement planning. Thus, in line with the above definition of personal values, and in conjunction with the questions which loaded highly with personal values, women whose personal values guide them when planning for financial retirement, who's families guide them when investing for retirement and women who feel making retirement decisions are important, tend to be more satisfied from the growth and income they receive from their retirement investments.

Previous research suggests that values may influence an individual's financial goals (Giraldi & Ikeda, 2008). Consequently, an individual's values can influence financial retirement goals which will ultimately affect their financial retirement planning process (Stawski, Hershey & Jacobs-Lawson, 2007). In addition, many women are still under the impression that financial retirement planning falls under the male domain (Stawski, Hershey & Jacobs-Lawson, 2007) resulting in many women being of the belief that they do not need to actively partake in financial retirement planning decisions.

From the analysis of the data in this study personal values appears to be a factor that has a positive influence on women's perceptions of successful financial retirement planning. It is thus important that women consider personal values when planning for financial retirement planning, so as to increase the likelihood of being satisfied with the growth achieved from retirement investments. In an attempt to assist women to bare their personal values in mind when planning for financial retirement, the following recommendations have been made:

1. Take into account personal values when planning for financial retirement planning. Subsequently, women should take into account their personal goals when planning for financial retirement planning to increase the likelihood of women being satisfied with their financial retirement growth.
2. Women should take into account their family values when planning for retirement. For example, if a woman is a part of a culture whose children tend to financial care for their parents once they have retired, then those individuals do not need to save as much as those individuals who will be financially independent during retirement.
3. Women should ensure they are making financial retirement decisions which are in line with what is personally important to them. Eg. having a big house to retire in or having sufficient money to travel once retired.
4. Women need to understand the importance and necessity of financial retirement planning to help ensure financial independence during retirement.
5. Make sure that financial retirement saving is in line with personal values.
6. Gain an understanding of different retirement investment options to ensure that the financial retirement options chosen best suit personal values and future personal goals.
7. Consult with family, friends and financial advisors when making financial retirement decisions. This will assist with a broader financial retirement knowledge and understanding.
8. Constantly alter financial retirement investments to suit changing personal financial goals, personal values and personal needs.

6.2.3 Time horizon Knowledge

The results from the ordinal logit regression analysis and the Pearson's product moment correlation coefficient reveal that a significant relationship between time horizon knowledge and women's perceptions of successful financial retirement planning exists.

Previous research (Jaggia & Thosar, 2000) suggests that time horizon plays a significant role in the financial retirement planning process. The common understanding surrounding time horizon and financial retirement planning is that individuals need to start saving for retirement as early as possible (Grace, Weaven & Ross, 2010). The earlier an individual starts saving for retirement the greater their growth and income will be.

In addition, women tend to be more risk averse, tend to accumulate less income and tend to live for longer compared to men (Rosenman & Scott, 2009: 287). In conjunction with the above mentioned facts, failing to start retirement planning early enough can have major financial consequences for many women.

Based on the data analysis in chapter 5, it was evident that time horizon knowledge is an independent variable which influences women's perceptions of successful financial retirement planning. It is thus important that women take into consideration their time horizon when planning for financial retirement planning so as to increase the likelihood of being satisfied with the growth received from the retirement investment. In an attempt to assist women such that time horizon knowledge is taken into consideration when planning for financial retirement planning, the following recommendations are made.

1. Women should ensure that they start saving for retirement as early in their working life-cycle as possible to ensure they accumulate sufficient retirement savings.
2. Women should consult a financial advisor to ensure they save adequately.
3. Women should ensure that the method in which they save for retirement corresponds with their time horizon.
4. Women should take inflation into consideration when planning for the time horizon of their financial retirement planning .
5. Women should take the impact of compound interest into consideration when planning the time horizon of their retirement investment
6. Women should attempt to accurately determine the amount to save each month for their given financial retirement investment time horizon and retirement goals.

7. Women should ensure their investment vehicles are aligned with their time horizon.

6.2.4 Financial literacy

The results from the ordinal logit regression analysis and the Pearson's product moment correlation coefficient reveal no significant relationship between financial literacy and women's perception of successful financial retirement planning. However previous research (Calcagno & Monticone, 2015; Grace, Weaven & Ross, 2010; Klapper & Panos, 2011; Lusardi, 2006; Tomaskova, Mohelska & Nemcova, 2011) has suggested that financial literacy does significantly influence an individual's ability to accumulate sufficient retirement wealth. A common understanding for the above literature is that women should make a concerted effort to ensure that they have adequate financial knowledge to ensure they make affective retirement investment decisions (Calcagno & Monticone, 2015; Grace, Weaven & Ross, 2010; Klapper & Panos, 2011; Lusardi, 2006; Tomaskova, Mohelska & Nemcova, 2011).

A possible justification as to why financial literacy does not significantly influence women's perception of successful financial retirement planning in this study could be due to a large number of women participating in the study relying on professional help when planning for retirement. According to literature, if individuals are unable or unwilling to take on the complexities associated with financial retirement planning, they can seek the help of a professional financial advisor (Hayhoe, 2001). Thus, having inefficient financial literacy is acceptable as a professional who has the required financial literacy will be making financial retirement decisions on a client's behalf. In addition, the majority of the research conducted on financial literacy and financial retirement planning focused on both males and females (Grace, Weaven & Ross, 2010; Lusardi, 2006 and Klapper & Panos, 2011) while the current study was concerned with women.

The above mentioned factors could explain why financial literacy had no significant influence on women's perceptions of successful financial retirement planning. Therefore, even though there is no significant relationship between financial literacy and women's perceptions of successful financial retirement planning according to this study, it may still be important to take financial literacy into account when making financial retirement decisions.

6.2.5 Risk tolerance

The results from the ordinal logit regression analysis and the Pearson's product moment correlation coefficient reveal no significant relationship between risk tolerance and women's perceptions of successful financial retirement planning. However, previous literature (Grace, Weaven & Ross, 2010; Gilliam, Goetz & Hampton, 2008; Eckela & Grossman, 2002) suggests that there is a significant relationship between risk tolerance and women's financial retirement planning. A common understanding taken from this literature is that women tend to be more risk adverse and thus earn lower returns on their retirement investments compared to those of men.

A possible justification as to why risk tolerance does not significantly influence women's perceptions of successful financial retirement planning in this study may be due to some authors believing that passive investment earns greater returns over the long term as they are subjected to less risk (Solnik & Mcleavey, 2009). In addition, many participants make use of financial advisors who would ensure that when investing for retirement, a diversified portfolio is developed to meet the individual's future financial needs. Moreover, the majority of the studies involving risk tolerance and financial retirement planning were not conducted in South Africa (Grace, Weaven & Ross, 2010).

The above reasons may explain why risk tolerance had no significant influence on women's perceptions of successful financial retirement planning in this study. Even though there appears to be no significant relationship between risk tolerance and financial literacy in the study, women should still consider risk tolerance when financially planning for retirement.

6.2.6 Working life-cycle

The results from the ordinal logit regression analysis reveal no significant relationship between working life-cycle and women's perceptions of successful financial retirement planning. However, previous research (Choi, Laibson, Madrian & Metrick, 2002; Jacobs-Lawson, Hershey, & Neukam, 2004) suggests that a women's working life-cycle does have a significant influence on financial retirement planning. From this it is apparent that money needs to be earned in order to be saved for retirement. But women tend to have disjointed working-life cycles due to child bearing and family responsibilities. This results in women earning less than men and having shorter working life-cycles than men (Jacobs-Lawson,

Hershey, & Neukam, 2004). These factors could thus influence women's ability to accumulate sufficient retirement wealth.

A justification as to why working life-cycles do not have a significant relationship in this study may be due to the South African context of this study (Jacobs-Lawson, Hershey, & Neukam, 2004). In addition, previous research focused on men and women while the current study focuses on women only. Despite working life-cycle not having a significant relationship on women's perceptions of successful financial retirement planning, women should still take working life-cycle into account when financially planning for retirement.

6.2.7 Selected demographic variables

Previous research (Barns, 2006; Tannahill, 2014) suggests that age does have a significant influence on making financial retirement decisions. But the results of the study are contrary to this, revealing that all the demographic variables (age, marital status, education, ethnic group and investment experience) have no significant influence on women's perceptions of successful financial retirement planning and on the independent variables.

A possible reason as to why age does not significantly influence women's perceptions of successful financial retirement planning could be due to the majority of participants in the study being older than 30 years of age. In addition, prior studies included both male and female participants (Barns, 2006).

Previous research (Sung & Hanna, 1996; Taylor, Kochhar, Fry, Velasco & Motel, 2011) suggests that ethnic background plays a significant role in financial retirement planning with white individuals tending to have more financial resources compared those of black individuals (Taylor, Kochhar, Fry, Velasco & Motel, 2011). In addition, previous research suggests that black, indian and coloured women have the lowest financial literacy rates (Lusardi, 2008; Struwig, Robers & Gordan, 2012). In the current study, descriptive statistics revealed that the majority of participants (72.3%) were white. The imbalance among the ethnic groups in the study resulted in not all ethnic groups being equally represented. The researcher is of the belief that this could be the reason why the statistical tests reveal that ethnic group has no influence on the independent variables as well as women's perceptions of successful financial retirement planning within the study.

According to literature marital status significantly influences women's perceptions of successful financial retirement planning (Scheresberg, Lusardi & Yakoboski, 2014; Theodos

et al, 2014). Therefore, married women tend to be more financially literate compared to single, widowed and divorced women. The descriptive statistics from the current study reveals that the majority of participants were married (62.4%) therefore not all marital status groups were adequately represented. This imbalance could be the reason why marital status has no significant influence on the independent variables as well as women's perceptions of successful financial retirement planning.

Education is a further factor that literature identifies as having a significant influence on successful financial retirement planning (Mandell and Klein, 2009; Rooij, Lusardi & Alessie, 2011; Selnow, 2003), suggesting that women who are more educated are more likely to financially plan for retirement than uneducated women. The current study does not find that education is significant, but this could be due to the majority of prior studies not being conducted in South Africa (Mandell and Klein, 2009; Rooij, Lusardi & Alessie, 2011; Selnow, 2003).

Lastly, according to literature, investment experience is said to have a significant relationship with successful financial retirement planning (Grace, Weaven & Ross, 2010; Graham, Stendardi & Myers, 2002; Lusardi & Mitchell, 2007). This indicates that women who have more investment experience are more confident and comfortable with making retirement decisions. The majority of the participants (54.5%) in the current study made use of a financial professional when planning for retirement therefore the individual's investment experience would not play a significant role in planning for financial retirement, as it would possibly be a professional with the necessary investment experience that would be making financial retirement decisions on the participant's behalf.

6.3 A brief summary of the result found in the study of Doa (2014)

The present study was undertaken and based on recommendations for future research that were provided in the study by Doa (2014). Despite the two studies focusing on different financial investment areas, the researcher found it necessary to provide a brief summary of the results found in Doa (2014).

The intention of the Doa (2014) study was to investigate the factors that influence women's perceptions of successful investment planning. The hypothesized model used by Doa (2014) comprised of six independent variables, namely: values, time horizon, personal life-

cycle, risk and returns, investment knowledge and attitudes. After employing a principle component factor analysis, Doa (2014) presented a revised hypothesis model which comprised of three key independent factors (investment knowledge, personal life cycle and values). These key independent variables were said to have a significant influence on women's perceptions of successful investment planning.

After all the necessary statistical tests were conducted, the only factor found to have a significant influence on women's perceptions of successful financial retirement planning was investment knowledge. Lastly, much like the current study, the selected demographic variables were found to have no significant influence on women's perceptions of successful investment planning.

6.4 Summary

Based on the discussion above it was found that affective attitudes, time horizon knowledge and personal values are the only variables that influence women's perceptions of successful financial retirement planning. It is thus vital that women adopt a positive attitude toward financial retirement planning to help ensure they achieve their desired financial retirement goals. Despite finding that the other independent variables (working life-cycle, risk tolerance and financial literacy) are not significant, it is still important that women take these variables into account when making financial retirement decisions.

Chapter 7: Summary of the study, limitations of the study, recommendations from future studies and concluding remarks

7.1 Introduction

Chapter 6 provides a discussion on the results of the study, while chapter 7 provides a summary of the study as a whole. Firstly, a summary of the literature is provided, thereafter, a summary of the results and hypotheses tested is addressed. In addition, a summary of the objectives achieved in the study is presented. This is followed with a discussion on the limitations that were present in the study. Lastly, recommendations for future research and concluding remarks are presented.

7.2 Summary of the literature

Due to the major shift from defined benefit to defined contribution retirement plans, financial retirement planning has become a complex endeavour (Neelakantan & Chang, 2010). Individuals are also now faced with greater financial retirement planning responsibility (Grace, Weaven & Ross, 2010). As a result, many individuals are unable to save sufficiently for retirement (Jacobs-Lawson, Hershey & Neukam, 2004) and become reliant on family and friends for financial support during their retirement years.

Financial retirement planning is important for ensuring sufficient retirement wealth is created (Grace, Weaven & Ross, 2010:3), with even greater emphasis being placed on the importance of financial retirement planning as the social security system is only for those individuals in desperate financial need (O'Donovan, 2002).

According to literature (Grace, Weaven & Ross, 2010; Jacobs-Lawson, Hershey & Neukam, 2004) many women are unable to sufficiently plan for retirement due to women having disjointed working life-cycle, lower financial literacy, lower income, and women's tending to be more risk adverse (Bucher-Koenen & Lusardi, 2011; Grace, Weaven & Ross, 2010; Jacobs-Lawson, Hershey & Neukam, 2004; Noone, Alpass and Stephens, 2010; Rosenman & Scott, 2009). Despite the importance of financial retirement planning, the majority of research conducted on financial retirement planning has focused specifically on males (Dahl, Nilsen & Vaage, 2003:296; Sarath & Beal, 2002). Thus, due to the lack of research specifically focusing on women's perceptions of successful financial retirement planning,

and specifically in the Eastern Cape region of South Africa, the primary objective of the study was to investigate the independent variables which influence women's perceptions of successful financial retirement planning in Grahamstown. In an attempt to help achieve the primary objective the following secondary objectives were developed:

- To understand the nature and importance of retirement planning.
- To embark on a detailed theoretical investigation into the factors which influence women's perceptions of successful financial retirement planning.
- To create a hypothesised model to test the relationships between the independent variables (working life cycle, risk tolerance, financial literacy, time horizon, values and attitude) and the dependent variable (women's perceptions of successful retirement).
- To generate hypotheses to test the relationship between a set of selected demographic variables (age, marital status, ethnic background and investment experience) on the independent variables as well as the dependent variable.
- To determine the methodology to be used in the study.
- To make conclusions as well as recommendations based on the findings of the investigation that would contribute to women's retirement planning processes.
- To determine the suitability of the measuring instrument developed by Doa (2014).

Table 7.1: Study objectives in the relevant chapters

Objectives	Where objective was addressed
<u>Secondary objective 1</u> <ul style="list-style-type: none"> To understand the nature and importance of financial retirement planning. 	Chapter 2 and Chapter 3
<u>Secondary objective 2</u> <ul style="list-style-type: none"> To embark on a detailed theoretical investigation into the factors which influence women's perceptions of successful financial retirement planning. 	Chapter 2 and Chapter 3
<u>Secondary objective 3</u> <ul style="list-style-type: none"> To create a hypothesised model in order to test the relationships between the independent variables (working life cycle, risk tolerance, financial literacy, time horizon, values and attitude) and the dependent variable (women's perceptions of successful retirement). 	Chapter 3
<u>Secondary objective 4</u> <ul style="list-style-type: none"> To generate hypotheses to test the relationship between a set of selected demographic variables (age, marital status, ethnic background and investment experience) on the independent variables as well as the dependent variable. 	Chapter 3
<u>Secondary objective 5</u> <ul style="list-style-type: none"> To generate hypotheses to test the relationship between a set of selected demographic variables (Age, marital status, ethnic background and investment experience) on the independent variables as well as the dependent variable. 	Chapter 3
<u>Secondary objective 6</u> <ul style="list-style-type: none"> To determine the methodology to be used in the study 	Chapter 4
<u>Secondary objective 7</u> <ul style="list-style-type: none"> To make conclusions as well as recommendations based on the findings of the investigation, in order to contribute to women's retirement planning process. 	Chapter 5 and Chapter 6

7.3 Summary of the study

In order to gain insight into the women's perceptions of successful financial retirement planning a comprehensive literature review was conducted. This involved doing in-depth research into the literature surrounding women's perceptions of successful financial retirement planning. The literature review was divided into two chapters, namely chapter 2 and chapter 3.

Chapter 2 introduced the broad concept of financial planning and thereafter introduced financial retirement planning as a component of financial planning. A discussion involving the shift from defined benefit to defined contribution retirement plans was incorporated into chapter 2. In addition, the roles of financial advisors as well the disadvantages and advantages of financial advisors were addressed. Lastly, the types of retirement planning options and their tax implications was discussed.

Chapter 3 highlights the issues surrounding women and financial retirement planning. Three relevant retirement planning models were identified and discussed. In addition, Chapter 3 identified and explored the independent variables which influence women's perceptions of successful financial retirement planning. An in-depth analysis of literature in chapter 2 and chapter 3 revealed six independent variables which could possibly influence women's perceptions of successful retirement planning. Based on the in-depth analysis it was evident that the independent variables identified by Doa (2014) correlated with literature.

Chapter 4 addressed the research methodology and design which was used in the study. In addition, two of the primary paradigms, namely phenomenological and positivistic paradigms were discussed. However, for the purpose of this study a positivistic paradigm was employed. The relevant data collection and analysis processes were addressed. Chapter 5 followed with a presentation of the results obtained from the statistical tests conducted in the study. Results revealed that the only factors having a significant relationship with women's perceptions of successful retirement planning are affective attitudes, personal values and time horizon knowledge.

7.4 Summary of results

Once the data had been collected, statistical analyses was performed such that the various stated hypotheses could be tested. The results and a discussion of the number of statistical tests performed on the data was presented in chapter 5.

A number of variance analyses tests were employed to determine relationships between selected demographic variables and the independent variables as well as the dependent variable. The results indicate that no significant relationship exists between the demographic variables (age, marital status, education, ethnic background and investment experience) and the independent (value, attitudes, time horizon, working life-cycle, risk tolerance and financial literacy) variables as well as the dependent variable (women's perception of successful financial retirement planning). Descriptive statistics were also used to gain insight into the background of the participants.

In order to extract the significant factors from the variables in the study a principle component factor analysis was used. The significant factors associated with the dependent variables then became the reformulated key independent variables in the study. These key variables were used for all analysis that followed. A logit regression model and a Pearson's product moment correlation coefficient were then used. The results of these tests revealed that affective attitudes, time horizon knowledge and personal values were the only independent variables found to have a significant positive relationship with women's perceptions of successful financial retirement planning.

Based on the definition of affective attitudes, time horizon knowledge and personal values provided in the previous chapters, it can be concluded that women who take more risks when investing for retirement, start planning for retirement early, have an understanding of the time horizon of investments, start saving for retirement early in their working life cycle and who are more confident and comfortable with making financial retirement decisions which are in line with their personal values, tend to be satisfied with the growth and income they receive from their retirement investments.

7.5 Summary of hypotheses in the study

Based on the statistical analysis completed in chapter 5, a summary of the hypotheses tested in the study is provided in tables 7.2 and 7.3. Based on the ordinal logit regression

analysis, affective attitudes, time horizon knowledge and personal values are the only variables to have a statistically significant relationship with women's perceptions of successful financial retirement planning.

Table 7.2 Summary of acceptance and rejected hypotheses

Independent variables	Hypotheses tested	Acceptance / rejection of hypotheses
Financial literacy	<p>H01: There is no relationship between financial literacy and women's perceptions of successful financial retirement planning.</p> <p>HA1: There is a relationship between financial literacy and women's perceptions of successful financial retirement planning.</p>	<p>From a review of the results there is no statistically significant relationship between financial literacy and women's perceptions of successful financial retirement planning. Thus, H01 is <u>accepted</u>.</p>
Risk tolerance	<p>H02: There is no relationship between risk tolerance and women's perceptions of successful financial retirement planning.</p> <p>HA2: There is a relationship between risk tolerance and women's perceptions of successful financial retirement planning.</p>	<p>From a review of the results there is no statistically significant relationship between risk tolerance and women's perceptions of successful financial retirement planning. Thus, H02 is <u>accepted</u>.</p>
Time horizon knowledge	<p>H03: There is no relationship between time horizon and women's perceptions of successful financial retirement planning.</p> <p>HA3: There is a relationship between time horizon and women's perceptions of successful financial retirement planning</p>	<p>From a review of the results there is a statistically significant relationship between time horizon knowledge and women's perceptions of successful financial retirement planning. Thus, H05 is <u>rejected</u>.</p>
Personal Values	<p>H04: There is no relationship between values and women's perceptions of successful financial retirement planning.</p>	<p>From a review of the results there is a statistically significant relationship between personal values and women's perceptions of</p>

	HA4: There is a relationship between values and women's perceptions of successful financial retirement planning	successful financial retirement planning. Thus, H05 is <u>rejected</u> .
Affective Attitudes	H05: There is no relationship between attitudes and women's perceptions of successful financial retirement planning. HA5: There is a relationship between attitudes and women's perceptions of successful financial retirement planning	From a review of the results there is a statistically significant relationship between attitudes and women's perceptions of successful financial retirement planning. Thus, H05 is <u>rejected</u> .
Working life-cycle	H06: There is no relationship between working life-cycle and women's perceptions of successful financial retirement planning. HA6: There is a relationship between working life-cycle and women's perceptions of successful financial retirement planning	From a review of the results there is no statistically significant relationship between working life-cycle and women's perceptions of successful financial retirement planning. Thus, H06 is <u>accepted</u> .

7.6 Summary of the relationship between selected demographic variables on the independent and the dependent variable

Demographic variable	Hypotheses	Acceptance/ rejection of hypotheses
Age	<p>H0a: There is no relationship between age and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p> <p>H0a: There is a relationship between age and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p>	<p>Statistical analysis revealed there is no significant relationship between age and the independent variables as well as the dependent variable. Thus, H0a is <u>accepted</u>.</p>
Education	<p>H0b: There is no relationship between education and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p> <p>H0b: There is a relationship between education and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p>	<p>Statistical analysis revealed there is no significant relationship between education and the independent variables as well as the dependent variable. Thus, H0b is <u>accepted</u>.</p>
Ethnic group	<p>H0c: There is no relationship between ethnic group and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p> <p>H0c: There is a relationship between ethnic group and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p>	<p>Statistical analyses revealed there is no significant relationship between ethnic group and the independent variables as well as the dependent variable. Thus, H0c is <u>accepted</u>.</p>
Marital status	<p>H0d: There is no relationship between marital status and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).</p>	<p>Statistical analysis revealed there is no significant relationship between marital status and the independent variables as well as the</p>

	HAd: There is a relationship between marital status and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).	dependent variable. Thus, H0d is <u>accepted</u> .
Investment experience	H0e: There is no relationship between investment experience and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning). HAe: There is a relationship between investment experience and the independent variables as well as the dependent variable (women's perceptions of successful financial retirement planning).	Statistical analysis revealed there is no significant relationship between investment experience and the independent variables as well as the dependent variable. Thus, H0e is <u>accepted</u> .

7.7 Limitations to the study

Several limitations were present within the study. These limitations should be considered when looking at the study.

In order to successfully complete an exploratory factor analysis for a forty item scale, a sample of approximately 200 to 400 participants is necessary (De Vellis, 1991). With the use of convenience and snowballing techniques a sample size greater than 200 seemed attainable but due to a number of individuals being unwilling to participate, a sample size of 101 was achieved. This limitation may impact on the reliability of the instrument. Non-participation bias may also exist in the results of the study due to the participation rate being 101.

Based on an in-depth literature study six independent variables were identified and included in the study. These being working life-cycle, risk tolerance, financial literacy, values, attitudes and time horizon. It is important to note that there may be other variables which were not included in the study but may influence women's perceptions of successful financial retirement planning.

Much like the study by Doa (2014), the majority of the participants were white (72.3%) with only a small group of participants being from other ethnic backgrounds. There was thus an

imbalance in the groups falling within the ethnic background category. Consequently, the results within the study may be homogeneous in nature.

This study focussed on women and their individual retirement investments and did not take cognisance of the possibility that the participants would make use of joint retirement planning with their spouses.

A further limitation is that the degree of satisfaction did not take into account whether the participant was satisfied with the contribution being made to their retirement investments. The data collected is thus limited due to each participant's income (income earned) not being ascertained.

The survey used in this study was based on the survey designed by Doa (2014), the researcher acknowledges that there may exist flaws in the accuracy of this instrument and is of the opinion that this might affect the results obtained.

Despite the above limitations, the researcher is of the opinion that the study still provides insightful knowledge into women and financial retirement planning.

7.8 Recommendations for future research

Due to the small sample size, a similar study could be conducted with a larger sample size in order to determine whether the outcomes are the same.

Valuable knowledge may be gained if this study is extended to different geographical locations in South Africa. It would be extremely insightful to evaluate if results differ across various geographical locations in South Africa.

Furthermore, as mentioned in chapter 2, financial planning consists of a number of components. It would be insightful to extend the study to other areas of financial planning such as estate planning and investment planning.

Research focusing on males and financial retirement planning has been extensively covered, however very little attention has focused on females or couples planning for financial retirement planning (Hurd, 1990:231). Since women and financial retirement planning has been covered in the study, it would be beneficial for future financial retirement planning studies if focus was placed on couples financial retirement planning.

Due to the lack of research based on the context of black wealth and investing in livestock in South Africa, there exists potential for further investigation in this area.

Due to the flawed research instrument (model) implemented into this study, a recommendation for future research would be to implement the same study using a valid, reliable and tested research instrument.

Lastly, future research should investigate the types of retirement options such as alternatives, annuities, provident funds and pension funds. Due to the model which was used in the study the above pension plans were not included.

7.9 Contribution of the study

Financial retirement planning is a vital component to ensure sufficient retirement wealth is created. Many individuals and women in particular are failing to adequately plan and save for retirement. In addition, the majority of previous research focussing on financial retirement planning has not focused on women specifically and has not been conducted in South Africa. Thus, the focus of this study was women and their financial retirement planning. By investigating women's perceptions of successful financial retirement planning, this study

has added to the gap in the body of knowledge focusing on financial retirement planning. Due to the lack of research focusing on women and financial retirement planning, specifically in South Africa and the Eastern Cape, this study provides valuable knowledge and insight. The recommendations provided can also assist women when making financial retirement decisions.

7.10 Concluding remarks

Financial retirement planning is an important process for ensuring sufficient wealth being created for retirement. With the major shift being from defined benefit plans to defined contributions plans, greater responsibility has been placed on the individual to effectively plan for retirement on the individual. As a result of the above mentioned shift many individuals, and women in particular, fail to adequately plan and save for retirement. It is thus important that women actively engage in financial retirement planning.

The results of the study have provided some interesting findings. According to the statistical tests conducted, attitudes were the only independent variable that has a significant positive linear relationship with women's perceptions of financial retirement planning. It is thus vital that women actively partake in financial retirement decisions in order to gain confidence when making financial retirement decisions. Despite the other independent variables not being significant, according to literature it is still vital that women take these variables or factors into consideration when making financial retirement decisions.

Reference list

- Abdi, H. and Williams, L.J., 2010. Principal component analysis. *Wiley interdisciplinary reviews: computational statistics*, 2(4), pp.433-459.
- Abdi, H., 2007. Eigen-decomposition: eigenvalues and eigenvectors. *Encyclopedia of measurement and statistics*, pp.304-308.
- Act shifts focus from self-regulatory to regulated 2004, Finance Week, p. 39.
- Adelman, M.B. and Bankoff. E.A., 1990. *Life-span concerns: implications for mid-life adult singles*. Manchester: Manchester University press.
- Agresti, A. and Kateri, M., 2011. *Categorical data analysis* (pp. 206-208). Springer Berlin, Heidelberg, Vancouver
- Agresti, A., 2002. *Categorical data analysis*. 2nd ed Wiley and Sons :Florida
- Alderson, S., 2012. Women and men are different: financially speaking. *Personal finance*, 10 January, 8.
- Alles, L. and Murray, L., 2009. Investment performance and holding periods: An investigation of the major UK asset classes. *Journal of Asset Management*, 10(5), pp. 280-292
- Anderson, T., 2006, Popular ETFs still rare in retirement plans. *Employee Benefit News*, 20, 3, pp. 48.
- Aron, J. and Muellbauer, J., 2000b. Personal and Corporate Saving in South Africa. *World Bank Economic Review*. 14,3: 509 -544.
- Asher, M., 2009. Pension plans, provident fund schemes and retirement policies: India's social security reform imperative. *ASCI Journal of Management*, 39(1), pp.1-18.
- Bae, S.C. and Sandager, J. P., 1997. What consumers look for in financial planners? *Financial Counseling and Planning*, 8(2), pp. 9-16.
- Bajtelmit, V.L. and Bernasek, A., 1996. Why do women invest differently than men? *Financial Counseling and Planning*.7, pp1-10.

- Baker, W.L., 2014. Retirement Account Invalidated after Self-Directed Individual Retirement Account-Owned Limited Liability Company Pays Compensation to Individual Retirement Account Owner. *Journal of Financial Service Professionals*, 68(1), pp. 33-35.
- Bamberger, M., Rugh, J. and Mabry, L. 2012. *Real world evaluation: Working under budget, time, data, and political constraints*. 2ed. London: Sage.
- Barns, A., 2006. *A financial planning model for retirement, taking into account the impact of pre-retirement funding income, age and taxation*. Masters, Rhodes University.
- Barnes-Farrell, J.L., 2002. Beyond health and wealth: Attitudinal and other influences on retirement decision-making. In: Adams, A.G. and Beehr, T.A., 2003. *Retirement Reasons, processes, and results*. New York: Springer Publishing.
- Barrientos, A., 2005. *Non-contributory pensions and poverty reduction in Brazil and South Africa*. IDPM. University of Manchester.
- Basu, A.K. and Drew, M.E., 2009. Portfolio size effect in retirement accounts: what does it imply for lifecycle asset allocation funds?. *Journal of Portfolio Management*, 35(3), pp1-24.
- Benartzi, S. and Thaler, H., 2007. Heuristics and biases in retirement saving behavior. *The Journal of Economic Perspective*, 21(3), pp.81-104.
- Bickman, L. and Rog, D.J. Eds. 2009. *The SAGE handbook of applied social research methods*. California: Sage.
- Blanche, M.T., Durrheim, K. and Painter, D., 2006. *Research in practice: Applied methods for the social sciences*. Cape Town: Juta and Company Ltd.
- Bobowik, M., Van Oudenhoven, J.P., Basabe, N., Telletxea, S., and Páez, D., 2011. What is the better predictor of students' personal values: Parents' values or students' personality? *International Journal of Intercultural Relations*, 35(4), pp. 488-498.
- Bodie, Z., 2003. Thoughts on the future: Life-cycle investing in theory and practice. *Financial Analysts Journal*, 59(1), pp. 24-29.

- Bodie, Z., 2002. An analysis of investment advice to retirement plan participants. The pension challenge: *Risk transfers and retirement income security*, pp.19-32.
- Bodie, Z., 2001. Retirement investing: a new approach. *Boston University School of Management Working Paper*, (2001-03), pp.1-10.
- Boone, L E. and Kurtz, D.L., 2005. *Planning your financial future*. Fort Worth: The Dryden press.
- Botha, M., Rossini, L., Geach, W., Goodall, B., Du Preez, L. D. and Rabenwitz., 2010. *The South African Financial handbook*. Durban: Lexis Nexis.
- Broadbent, J., Palumbo, M. and Woodman, E., 2006. The shift from defined benefit to defined contribution pension plans—implications for asset allocation and risk management. *Reserve Bank of Australia, Board of Governors of the Federal Reserve System and Bank of Canada*.
- Brown, J., 2002. Differential mortality and the value of individual account retirement annuities. In *The distributional aspects of social security and social security reform* (pp. 401-446). University of Chicago Press.
- Bryman, A., 1995. *Research methods and organisational studies*. London: Routledge
- Bucher-Koenen, T. and Lusardi, A., 2011. Financial literacy and retirement planning in Germany. *Journal of Pension Economics and Finance*, 10(04), pp.565-584.
- Budgar, L., 2011. Inflation's shadow: Investment offsets and their risks. *Journal of financial planning*, 24 (6), pp.22-28.
- Burtless, G., 2004. Social norms, rules of thumb, and retirement: Evidence for rationality in retirement planning. *Center on Social and Economic Dynamics Working Paper*, (37), pp1-35.
- Calcagno, R. and Monicone, C., 2015. Financial literacy and the demand for financial advice. *Journal of banking and finance*, 50, pp.363-380.
- Caldwell, M., 2012. Six major financial steps of your life. *Financial mail*, 3 May, 20.

- Capone, RG, French, TB, and Skinner, D., 2013. Alternatives in DC Plans. *Pensions and Investments*, 41(16), pp.12-17.
- Chatterjee, S. and Zahirovic-Herbert, V., 2010. Retirement planning of younger baby-boomers: Who wants financial advice. *Financial Decisions*, 22(2), pp.1-12.
- Choi, J.J., Laibson, D., Madrian, B.C. and Metrick, A., 2002. Defined contribution pensions: Plan rules, participant choices, and the path of least resistance. *Tax Policy and the Economy*, 16, pp. 67-114.
- Cooper, D.R. and Schindler, P.S. 2008. *Business research methods*. 2nd European Edition. Singapore: McGraw-Hill.
- Cooper, D.R. & Schindler, P.S. 2007. *Business research methods*. 9ed. New York: McGraw-Hill.
- Cooper, R. W. and Worsham, C. B., 2009. *Foundations of financial planning: An overview*. New York:Thomson.
- Coronado, J. and Hewitt, G., 2005. Is there a future for defined benefit pensions in the United States? *Benefits Quarterly*, 21(4), p.41.
- Couper, M. P. (2000). Web surveys: A review of issues and approaches. *Public Opin. Q.* 64: 464–494.
- Collins, K., and Shemko, J., 2009. *Exploring businesses*. Pennsylvania: Flat World knowledge.
- Craine, R.E., 1975. Individual Retirement Accounts. *Tulsa LJ*, 11, pp1-26.
- Creswell, J.W., 1994. *Research design: Qualitative, Quantitative and Mixed Methods Approaches*. Thousand Oaks: Sage Publications.
- Critical habits single women need to develop financial independence., 2012. *Tomorrows Money*, 5 March, 23.

Cumming, D.J. and MacIntosh, J.G., 2007. Mutual funds that invest in private equity? An analysis of labour-sponsored investment funds. *Cambridge Journal of Economics*, 31(3), pp.445-487.

Cut-off date approaching., 2006, *Finweek*, p. 7,

Dahl, S. Å., Nilsen, Ø. A., & Vaage, K., 2003. Gender differences in early retirement behaviour. *European Sociological Review*, 19(2), 179-198.

De Beer, J., 2015. Helping South Africans achieve a better income in retirement: A critical evaluation of the impact of treasury proposals. *Journal of Economic and Financial Sciences*, 8(1), pp. 185-202.

De Leeuw, E., and Heer, W. (2002). Trends in household survey nonresponse: A longitudinal and international comparison. In: Groves, R. M., Dillman, D. A., Eltinge, J. L., and Little, R. J. A. (eds.), *Survey Nonresponse*, John Wiley & Sons, New York, pp.41–54

Denzin, N.K. and Lincoln, Y.S., 1994. *Handbook of Qualitative Research*. California :Sage.

Dietz, B.E., Carrozza, M. and Ritchey, P.N., 2003. Does financial self-efficacy explain gender differences in retirement saving strategies?. *Journal of Women & Aging*, 15(4), pp.83-96.

Doa, T.A.T., 2014. *Women's perceptions regarding financial planning with specific reference to investment*. Masters. Nelson Mandela Metropolitan University.

Available at:

<http://contentpro.seals.ac.za/iii/cpro/DigitalItemPdfViewerPage.external?id=8578693631662876&itemId=1021185&lang=eng&file=%2Fiii%2Fcpro%2Fapp%3Fid%3D8578693631662876%26itemId%3D1021185%26lang%3Deng%26nopassword%3Dtrue%26service%3Dblob%26suite%3Ddef#locale=eng&gridView=true>

Doing deals differently, 2007, *Finweek*, p. 59.

- Doran, M.H., Low, A.R.C. and Kemp, R.L., 1979. Cattle as a store of wealth in Swaziland: implications for livestock development and overgrazing in Eastern and Southern Africa. *American Journal of Agricultural Economics*, 61(1),pp.41-47.
- Eckel, C.C. and Grossman, P.J., 2002. Sex differences and statistical stereotyping in attitudes toward financial risk. *Evolution and human behavior*,23(4), pp.281-295.
- Egan, J., 1992. How you can afford to retire, *U.S. News & World Report*, 112 (20), pp. 66.
- Elder, G.H., Jr., 1995. The life course paradigm: Social change and individual development. In P. Moen, G.H. Elder, Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 101–140). Washington, DC: American Psychological Association.
- Embrey, L. L. and Fox, J. J., 1997. Gender differences in the investment decision making process. *Financial counselling and planning*, 8(2), pp.33-40.
- Ergunor, O. E., 2012. Exchange-traded funds. *Economic Commentary*, (5), pp.1-4.
- Evans, D. A., 2009. *The predisposition of women to use the services of a financial planner for saving and investing*, Doctoral dissertation, The Ohio State University.
- Fabrigar, L.R., Wegener, D.T., MacCallum, R.C. and Strahan, E.J., 1999. Evaluating the use of exploratory factor analysis in psychological research. *Psychological methods*, 4(3), p.272-299
- Fouquereau, E., Fernandez, A., Fonseca, A. M., Paul, M. C., & Uotinen, V., 2005. Perceptions of and satisfaction with retirement: A comparison of six European Union countries. *Psychology and Aging*, 20(3),pp. 524- 528.
- Financial Mail, 2010. Socially responsible investments.
- Financial advisory and intermediary services act 37 of 2002 determination of fit and proper requirements for financial services providers, 2008.

- Finke, M.S. and Cummings, B.F., 2014. Models of Financial Advice for Retirement Plans: Considerations for Plan Sponsors. *Society of Actuaries*, pp1-69.
- Finke, M.S, Huston, S.J. and Winchester, D.D., 2011. Financial Advise: Who pays. *Financial Counselling and Planning Education*, 22(1), pp.18-26.
- Fisher, P.J., 2010. Gender differences in personal saving behaviors. *Financial Counseling and Planning*, 21(1), pp.14-24.
- Fonseca, R., Mullen, K.J., Zamarro, G. and Zissimopoulos, J., 2010. What Explains the Gender Gap in Financial Literacy? *Working paper*, 762, pp.1-14.
- Froud, J. and Williams, K., 2007. Private equity and the culture of value extraction. *New Political Economy*, 12(3), pp.405-420.
- Financial Service Board, 2008. *Annual report*. South Africa: Financial Service Board.
- Financial Service Board, 2008. *Annual report*. South Africa: Financial Service Board.
- Gandal, N., Roccas, S., Sagiv, L. and Wrzesniewski, A., 2005. Personal value priorities of economists. *Human Relations*, 58(10), pp.1227-1252.
- Gallery, N., Gallery, G., Brown, K., Furneaux, C. and Palm, C., 2011. Financial literacy and pension investment decisions. *Financial Accountability & Management*, 27(3), pp.286-307.
- Garman, E. T., and Fogue, R., 2011. *Personal finance*. 11th ed. United States of America: Cengage Learning.
- Georgiev, G., Gupta, B. and Kunkel, T., 2003. Benefits of real estate investment. *The journal of portfolio management*, 29(5), pp.1-16.
- Gerdes, V., 1971. African provident funds. *Industrial and Labor Relations Review*, pp.572-587.
- Gilliam, J., Goetz, J.W. and Hampton, V., 2008. Spousal differences in financial risk tolerance. *Journal of Financial Counseling and Planning*, 19(1). pp.3-11.
- Giraldi, J. D. M. E., and Ikeda, A. A., 2008. Personal Values Dimensions: A Study on Brazilian Executives. *Latin American Business Review*, 9(2), 169-187.

- Gitman, L., Joehnk, M. and Billingsley, R., 2013. *Personal financial planning*. Boston:Cengage Learning.
- Godden, K., 2010. Pension funds, provident funds and retirement annuities: defining them and their tax implications. *TAXtalk*, (22), pp.24-25.
- Goldblatt, B., 2009. The right to social security-addressing women's poverty and disadvantage. *South African Journal on Human Rights*, 25(3), pp.442-466.
- Gradidge, C., 2014. What retirement crisis. *Finweek*, p. 53.
- Grace, D., Weaven, D.G.S. and Ross, M., 2010. Consumer retirement planning: an exploratory study of gender differences. *An international Journal*, 13(2), pp.1-24.
- Graham, J. F., Stendardi Jr, E. J., Myers, J. K., and Graham, M. J., 2002. Gender differences in investment strategies: an information processing perspective. *International journal of bank marketing*, 20(1), 17-26.
- Guo, P., 2010. Private real estate investment analysis within a one-shot decision framework. *International Real Estate Review*, 13(3),pp. 238-260.
- Hallahan, T.A., Faff, R.W. and McKenzie, M.D., 2004. An empirical investigation of personal financial risk tolerance. *Financial services review-greenwich-*, 13(1), pp.57-78.
- Hallman, G. V. and Rosenbloom, J. S., 2003. *Personal financial planning*. 7th ed. New York: McGraw-Hill.
- Harris, S., 2004. Have you got a licence? *Finance Week*, pp. 16-17.
- Haslem, J. A., 2003. Exchange-Traded Funds: Nature, Developments, and Implications. *Institutional investor*, 36, pp.116-126.
- Hatch, M. J., & Cunliffe, A. L. (2006). *Organizational theory: Modern, symbolic, and post-modern perspectives*. New York, NY: Oxford University Press
- Hayhoe, C., 2001. Personal financial planning. *The Journal of Consumer Affairs*, 35(1), pp.203-215.
- Henning, E., Van Rensburg, W. and Smit, B. 2004. *Finding your way in qualitative research*. Pretoria:Van Schaik
- Hershey, D. A., 2004. Psychological influences on the retirement investor. *CSA: Certified Senior Advisor*, 22, pp.31–39.

- Hershey, D. A., and Mowen, J. C., 2000. Psychological determinants of financial preparedness for retirement. *The Gerontologist*, 40(6), 687-697.
- Hershey, D.A., Jacobs-Lawson, J.M., McArdle, J.J. and Hamagami, F., 2007. Psychological foundations of financial planning for retirement. *Journal of Adult Development*, 14(1-2), pp.26-36.
- Hira, T.K. and Loibl, C., 2008. *Gender differences in investment behaviour*. New York: Springer.
- Hirsch, B., 2005. *Brian Hirsch's guide to personal finance*. Claremont: Spearhead.
- Hosmer Jr, D.W., Lemeshow, S. and Sturdivant, R.X., 2013. *Applied logistic regression* 398, John Wiley & Sons.
- Huberman, G., Iyengar, S. S. and Jiang, W., 2007. Defined Contribution Pension Plans: Determinants of Participation and Contributions Rates. *Financial Service Research*, 31(1), pp.1–32.
- Hurd, M.D., 1990. The joint retirement decision of husbands and wives. *Issues in the Economics of Aging* (pp. 231-258). University of Chicago Press, 1990.
- Inderst, G., 2009. Pension Fund Investments in Infrastructure. *Working Papers on Finance, Insurance and Private Pensions*, 32, pp.1-45.
- Jackson, S.L. 2011. *Research methods and statistics: a critical thinking approach*. Cape Town:Cengage Learning.
- Jacobs-Lawson, J.M., Hershey, D.A. and Neukam, K. A., 2004. Gender difference in factors that influence time spent planning for retirement. *Journal of Women and Aging*, 16 (3/4), pp.55-69.
- Jaggia, S. and Thosar, S., 2000. Risk aversion and the investment horizon: A new perspective on the time diversification debate. *The Journal of Psychology and Financial Markets*, 1(3-4), pp.211-215.
- Jefferson, T. and Preston, A., 2005. Australia's "other" gender wage gap: Baby boomers and compulsory superannuation accounts. *Feminist Economics*, 11(2), pp.79-101.
- Jefremovas, V., 2000. Women are good with money: the impact of cash cropping on class relations and gender ideology in Northern Luzon, Philippines. *Financial Journal*, 1(1), pp.131-150.

- Jolliffe, I.T., 1973. Discarding variables in a principal component analysis. II: Real data. *Applied statistics*, pp.21-31.
- Joo, S, and Pauwels, V., 2002. Factors affecting workers' retirement confidence: A gender perspective. *Journal of Financial Counseling and Planning*, 13(2), pp. 1-10.
- Karris, S.T. 2003. *Mathematics for business, science, and technology*. 2ed
California: Orchard Publications.
- Kaniki, S and Ntuli, M., 2011. Determinants of participation in occupational pension funds by private sector workers in South Africa. *The African finance journal*, 54 (13), pp.54-79.
- Kelly, D., 2009. *Methods of evaluating interactive information retrieval systems with users*. Hanova, MA: Publishers Inc.
- Kim, J., Kwon, J., and Anderson, E. A., 2005. Factors related to retirement confidence: Retirement preparation and workplace financial education. *Financial Counselling and Planning*, 16(2), pp.77-89.
- Klapper, L. and Panos, G. A., 2011. Financial literacy and retirement: Russia. *Journal of pension economics and finance*, 10(2), pp. 600-618.
- Klinger, G, Ryan, D, and Gray, A., 2013. Group retirement annuities bolstered by retirement reform. *Finweek*, p. 5.
- Klos, A., Weber, E.U. and Weber, M., 2005. Investment decisions and time horizon: Risk perception and risk behavior in repeated gambles. *Management Science*, 51(12), pp.1777-1790.
- Kosev, M. and Williams, T., 2011. Exchange-traded funds. *RBA Bulletin, March*, pp.51-59.
- Kramer, M. M., 2012. Financial advice and individual investor portfolio performance. *Financial Management* 41(2), pp.1-34.
- Kretschmann, R. and Wrobel, D., 2015. *Attitudes and perceptions towards physical education: A study in secondary school students*. Hamburg: Anchor academic publishing.
- Kritzman, M., 1994. What Practitioners Need to Know. About Time Diversification (corrected). *Financial Analysts Journal*, 50(1), pp.14-18.

- Kumar, S., 2005. *Research methodology*. New York: Springer.
- Lailey, R., 2015. Retirement annuities: One of the most powerful ways to save. *Finweek*, p. 35.
- LaPiere, R.T., 1934. Attitudes vs. actions. *Social forces*, 13(2), pp.230-237.
- Letkiewicz, J.C., Domian, D. L., Robinson, C. and Uborceva, N., 2014. Self-Efficacy, Financial Stress, and the Decision to Seek Professional Financial Planning Help. *Financial services*, pp.1-30.
- Lockem, A., 2010. Which retirement vehicle? What are your options, and what are the tax implications. *Moneywebs personal finance*. Pp.7.
- Lombaard, C., Van Der Merwe, L., Kele, T. & Mouton, S. 2011. *Elementary statistics for business and economics*. Cape Town: Heinemann.
- Lundberg, S.J. and Ward-Batts, J., 2000. Saving for retirement: Household bargaining and household net worth. *Claremont McKenna College Robert Day School of Economics and Finance Research Paper*, (2004-03).
- Lusardi, A., 2003. Planning and saving for retirement. *Working paper*. pp1-46.
- Lusardi, A., 2006. Planning and financial literacy: how do women fare? *Working paper*, 136, pp.1-22.
- Lusardi, A., 2008. *Household saving behavior: The role of financial literacy, information, and financial education programs*. *Working paper 13824*. National Bureau of Economic Research.
- Lusardi, A. and Mitchell, O., 2007. Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business economics*, 42(1), pp. 35-44.
- Lusardi, A., 2011. Financial literacy and retirement planning in the United States. *Working paper*, 17108, pp. 1-27.

- Leedy, P.D. and Ormrod, J.E., 2005. *Practical Research: Planning and Design*. New Jersey: Pearson Prentice Hall.
- Mack, L., 2010. The philosophical underpinnings of educational research. *Polyglossia*, 19, 5-11.
- Mandell, L. and Klein, L.S., 2009. The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, 20(1), pp. 15-24.
- Marcus, J., 2011. You can't tell me anything. *Times higher education*, 2(22).
- Martin, T.K. and Finke, M.F., 2014. A comparison of retirement strategies and financial planner value. *Journal of Financial Planning*, 27(11), pp.46-53.
- Marx, J., 2010. *Investment management*. 3rd ed. Pretoria: Van Schaik.
- McCarthy, D., 2003. A life-cycle analysis of defined benefit pension plans. *Journal of Pension Economics and Finance*, 2(02), pp.99-126.
- McHorney, C.A., Haley, S.M. and Ware, J.E., 1997. Evaluation of the MOS SF-36 physical functioning scale (PF-40): II. Comparison of relative precision using Likert and Rasch scoring methods. *Journal of clinical epidemiology*, 50(4), pp.451-461.
- McNeil, B.J., 2012. Hedge funds and private equity funds as investment vehicles. *The Journal of Pension Planning & Compliance*, 38(1), pp.38-63.
- Malroutu, Y. L. and Xiao, J. J., 1995. Perceived adequacy of retirement income. *Financial counselling and planning*, 6, pp.17-24.
- Melville, S and Goddard, W., 1996. *Research Methodology: An introduction for science and engineering students*. Cape Town: Juta & Co Ltd.
- Mouton, J. and Babbie, E., 2001. *The practice of social research*. Cape Town: Wadsworth Publishing Company.
- Mina, M., and Wise, S., 2003. Planning for retirement: how to get the most from executive benefit plans. *Journal of Deferred Compensation*, 9(1), pp.1-8.

- Mitchell, O., 1999. New trends in pension benefit and retirement provisions. Working paper 7381, *National Bureau of Economic Research*, pp.1-36.
- Mkhize, M. and Bekwa, V., 2009. An investigation into the role of listed property shares in a retirement fund portfolio in South Africa: asset allocation. *South African Journal of Economic and Management Sciences*, 12(4), pp.392-400.
- Money tips for single women. 2012. *Inspiring women*, 8 May, 1.
- Morrin, M., Broniarczyk, S. and Inman, J., 2011. Fund assortments, gender, and retirement plan participation. *International Journal of Bank Marketing*, 29(5), pp.433-450.
- Most, W, and Wadia, Z., 2015. Longevity Plans: An Answer to the Decline of the Defined Benefit Plan. *Benefits Law Journal*, 28 (1), pp. 23-28.
- Mullainathan, S. and Wrobel, M., 2008. Why don't people insure late life consumption? A framing explanation of the under annuitized puzzle. *American economic review papers and proceedings*, 98 (2), pp. 1-18.
- Munro, A. R., and Snyman, A. M., 1995. The life insurance industry in South Africa. *Geneva Papers on Risk and Insurance. Issues and Practice*, 20(75), pp. 127-140.
- Neelakantan, U. and Chang, Y., 2010. Gender differences in wealth at retirement. *American Economic Review: Papers and Proceedings*, 100(2), pp.362-367.
- Nevondwe, L., 2010. South African Social Security and Retirement Reform: A long journey towards the redrafting of the new Pension Funds Act. *An International Journal*, 15(4), pp. 287-296.
- Ng, T. H., Tay, W. Y., Tan, N. L., and Lim, Y. S., 2011. Influence of investment experience and demographic factors on retirement planning intention. *International Journal of Business and Management*, 6(2), pp.196-203.
- Nicholas, J. G., 2010. *Investing in hedge funds*. New York: Bloomberg Press.
- Nkoutchou, H. and Eiselen, R., 2012. Retirement saving behaviour of young adults in the financial services sector. *Journal of Economic and Financial Sciences*, 5(1), pp.31-48.

- Nobile, J., 2015. Alternatives an attractive avenue for many. *Crain's Cleveland Business*, 36(21), p. 17.
- Noone, J. H., 2010. *Psychological and socioeconomic factors influencing men and women's planning for retirement*. Doctorate. Massey University
- Noone, J, Alpass, F, and Stephens, C., 2010. Do Men and Women Differ in Their Retirement Planning? Testing a Theoretical Model of Gendered Pathways to Retirement Preparation. *Research on Aging*, 32(6), pp. 715-738.
- Noone, J., Alpass, F. and Stephens, C., 2010. Retirement planning. Testing a theoretical model of gender pathways to retirement preparation. *Research on aging*, 32(6), pp.715-738.
- Noone, J. H., Stephens. C. and Alpass, F.M., 2009. Preretirement Planning and Well-Being in Later Life A Prospective Study. *Research on Aging*, 31(3), pp.295-317.
- O'Donovan, D., 2002. South Africa digs deep. *Employee Benefits*, p. 13.
- O'Keefe, B. and Burke, D., 2008. Hot commodities. *Fortune International*, 157 (12), pp42-45.
- Olaifa, A., 2012. *The impact of pension fund investment on economic development on South Africa*. Masters. Nelson Mandela Metropolitan University
- Olsen, K, and Williamson, C., 2013. Keeping a watchful eye on the horizon. *Pensions & Investments*, 41(8) p.14.
- Osborne, J.W. & Costello, A.B. 2004. Sample size and subject to item ratio in principal components analysis. *Practical Assessment, Research & Evaluation*, 9(11):7-15.
- Overton, R. H., 2006. 9 key retirement-income questions. *Best review*, 107 (7), pp52-55.
- Parasuraman, A., Grewal, D., and Krishnan, R. 2004. *Marketing Research*. Boston: Houghton Mifflin Company.
- Pension Fund Act NO. 24 of 1956.

- Pett, M.A., Lackey, N.R. and Sullivan, J.J. 2003. *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*. Thousand Oaks: Sage publications
- Pickens, J., 2005. Attitudes and perceptions. *Organizational Behavior in Health Care*. Sudbury, MA: Jones and Bartlett Publishers, pp.43-75.
- Polyak, I., 2007. The waiting game, *Financial Planning*, 37 (9), p.14.
- Poterba, J.M. and Wise, D.A., 1998. Individual financial decisions in retirement saving plans and the provision of resources for retirement. In *Privatizing social security* (pp. 363-401). University of Chicago Press.
- Prinsloo, J.W., 2000. *The saving behaviour of the South African economy*. South African Reserve Bank.
- Quick, H.E. and Moen, P., 1998. Gender, employment and retirement quality: A life course approach to the differential experiences of men and women. *Journal of occupational health psychology*, 3(1), pp. 44-64.
- Quinlan, C. 2011. *Business research methods*. Hampshire: South-Western.
- Rafaloff, R., 2014. Why Income Should Be the Outcome of a Defined Contribution Plan. *Benefits Quarterly*, 30 (4), pp.21-25.
- Ramchander, M., 2011. *The impact of the financial advisory and intermediary services act of 2002 on consumer awareness and financial service providers in South Africa*. Doctoral dissertation, University of Zululand.
- Robb, C.A., 2014. The Personal Financial Knowledge Conundrum. *Journal of Financial Service Professionals*, 68(4), pp. 69-72.
- Robinson, C., 2000. Conceptual frameworks for personal finance. *Working paper*, pp.607-643.
- Rosenman, L. and Scott, W., 2009. Financing old age: Why is there still gender inequality?. *Australian Social Work*, 62(2), pp.287-298.
- Roszkowski, M.J. and Grable, J.E., 2010. Gender differences in personal income and financial risk tolerance: How much of a connection? *The Career Development Quarterly*, 58(3), pp.270-275.

- Rubin, A. 2009. *Statistics for evidence-based practice and evaluation*. 2ed, Canada: Cengage Learning.
- Rui, Y. and Sherman, H. D. the effect of marital status and gender on financial risk tolerance. 2005. *Journal of personal finance*, 4(1), pp.66-85.
- Remenyi, D. and Williams, B., 1998. *Doing research in business and management: an introduction to process and method*. Thousand Oaks: Sage.
- Salamon, L.M., 2014. *New Frontiers of Philanthropy: A Guide to the New Tools and New Actors That Are Reshaping Global Philanthropy and Social Investing*. New York: Oxford University Press.
- Salter, J, Harness, N, and Chatterjee, S., 2011. The value of financial advisors to retirees. *Journal of Financial Service Professionals*, 65(3), pp. 60-68.
- Sammer, J., 2013. Steady Retirement Income Streams. *HR Magazine*, 58(9), p. 41.
- Saunders, M., Lewis, P. and Thornhill, A., 2007. *Research methods for business students*. 4th ed. Tokyo: Prentice Hall.
- Sarath, D and Beal, D., 2002. Factors influencing planning for retirement. *A journal of applied economics and policy*, 21(3), pp.1-13
- Sax, L.J., Gilmartin, S.K. and Bryant, A.N., 2003. Assessing response rates and nonresponse bias in web and paper surveys. *Research in higher education*, 44(4), pp.409-432.
- Scheresberg, C. B., Lusardi, A. and Jakoboski, P.J., 2014. Working women's financial capability: An analysis across family status and career stages. *Private research study, TIAA-CREF institute*, pp.1-33.
- Schubert, R., Brown, M., Gysler, M. and Brachinger, H.W., 1999. Financial decision-making: are women really more risk-averse? *The American economic review*, 89(2), pp.381-385.
- Schuman, H., 2002. Sense and nonsense about surveys. *Contexts* 1: 40–47
- Schwartz, S. H. (1994). Are there universal aspects in the content and structure of values? *Journal of Social Issues*, 50, 19-45.

- Sekaran, U., 1992. *Research methods for businesses*. 2nd ed. Canada: John Wiley & Sons.
- Selnow, G. M., 2003. Motivating retirement planning: Problems and solutions. *Pension Research Council WP2003-7*, pp.1-15.
- Savage, D. C., 2008. Rumpelstiltskin and financial planning. *Journal of financial planning*, 21(3), pp. 30-33.
- Solnik, B and Mcleavey, D., 2009. *Global investments (6e)* Boston: Pearson
- Söderblom, A., 2011. *Private equity investing, Investment strategies, entry order and performance*. Dissertation for the Degree of Doctor of Philosophy, Ph.D. Stockholm School of Economics
- Shadab, H. B., 2009. The law and economics of hedge funds: Financial innovation and investor protection. *Berkeley Business Law Journal*, 6(2), pp. 240-297.
- Singh, L., 2007, Advisor in Full. *Advisor Today*, 102(8), pp. 29-32.
- Snook, Steven C., and Richard L. Gorsuch. "Component analysis versus common factor analysis: A Monte Carlo study." *Psychological Bulletin* 106, no. 1 (1989): 148.
- Son, J., 2012. *Factors Related to Choosing between the Internet and a Financial Planner*. Doctorate. The Ohio State University).
- Statsoft., 2007. *StatSoft Electronic Textbook*. [On-line]. Available: <http://www.statsoft.com/textbook/stathome.html> [accessed12/08/2015]
- Stawski, R.S., Hershey, D.A. and Jacobs-Lawson, J.M., 2007. Goal clarity and financial planning activities as determinants of retirement savings contributions. *The International Journal of Aging and Human Development*, 64(1), pp.13-32.
- Steiger, J.H. and SchÖnemann, P.H., 1978. On the validity of indeterminate factor scores. *Bulletin of the Psychonomic Society*, 12(4), pp.287-290.
- Stewart, S.D., Piros, C.D. and Heisler, J., 2011. *Running money: professional portfolio management*. New York: McGraw-Hill Irwin.

- Struwig, J., Roberts, B., and Gordon, S., 2012. *Financial Literacy in South Africa. Results of a 2012 National survey update*. South Africa: Financial service Board.
- Sung, J. and Hanna, S., 1996. Factors Related To Risk Tolerance. Association for *Financial Counseling and Planning Education*.7, pp.11-19.
- Talaga, J.A. and Beehr, T.A., 1991. Are there gender differences in predicting retirement decisions? *Journal of Applied Psychology*, 80(1), pp.16-28.
- Tannahill, B., 2014. Retirement planning reviews. *Journal of Financial Service Professionals*, 68(2), pp.37-39.
- Taylor, P., Kochhar, R., Fry, R., Velasco, G., and Motel, S., 2011. Wealth gaps rise to record highs between whites, blacks, and Hispanics. *Pew Research Center*, 26, pp1-37.
- Finweek, Taxing time for retirement annuities., 2010. *Finweek*, p. 56.
- Taxing pocket guide, 2015. SARS.
- Theodos, B., Kalish, E., McKeran, S. and Ratcliffe, C. 2014. (in Press) Do financial knowledge, Behaviours and well-being differ by gender? *Urban Institute*.
- Tomaskova, H., Mohelska, H. and Nemcova, Z., 2011. Issues of financial literacy education. *Social and behavioural science*. 28, pp.365-395.
- Trewin, J. and Curatola, A., 2010. Retirement Planning in Light of Life Expectancy and Gender Issues. *Journal of Financial Service Professionals*, 64(5), pp.70-80.
- Thomas, R.M. 2003. *Blending Qualitative and Quantitative research methods in Theses and Dissertations*. California: Corwin Press Inc..
- Thompson, C.B., Schwartz, R., Davis, E. and Panacek, E.A., 1996. Basics of research (part 6): Quantitative data analysis. *Air medical journal*, 15(2), pp.73-84.
- Trochim, W.M.K. and Donnelly, J.P., 2001 *Research methods knowledge base*. Cincinnati, Ohio: Atomic Dog Publishing.
- Tuckman, B. W., 1999. *Conducting Educational Research*. 5th ed: Wadsworth World.

- Turner, M.J., Bailey, W.C. and Scott, J.P., 1994. Factors influencing attitude toward retirement and retirement planning among midlife university employees. *Journal of Applied Gerontology*, 13(2), pp.143-156.
- Van Harreveld, F., Nohlen, H.U. and Schneider, I.K., 2015. Chapter Five-The ABC of Ambivalence: Affective, Behavioral, and Cognitive Consequences of Attitudinal Conflict. *Advances in experimental social psychology*, 52, pp.285-324.
- Van Rooij, M., Lusardi, A. and Alessie, R., 2009. Financial literacy and retirement planning in the Netherlands. *DNB Working Paper*, 231, pp. 1-38.
- Van Zyl, E., 2003. Old age pensions in South Africa. *International Social Security Review*, 56(3-4/2003), pp101-120.
- Van Rooij, M. C., Lusardi, A., and Alessie, R. J., 2011. Financial literacy and retirement planning in the Netherlands. *Journal of Economic Psychology*, 32(4), 593-608.
- Velicer, W.F. and Jackson, D.N., 1990. Component analysis versus common factor analysis: Some issues in selecting an appropriate procedure. *Multivariate behavioral research*, 25(1), pp.1-28.
- Vidler, S., 2003. *Pension reform: an analysis of the economic foundations of private pensions*. PHd. University of Sydney.
- Waggle, D. and Englis, B., 2006. Asset allocation decisions in retirement accounts: an all or nothing proposition? *Financial service review*, 9, pp.79-92.
- Wagland, S.P. and Taylor, S., 2009. When it comes to financial literacy, is gender really an issue? *Australasian Accounting, Business and Finance Journal*, 3(1), p.3.
- Wagner, M.S., 2014. A Road Less Travelled: Including Alternative Investments in a 401(k) Plan. *401K Advisor*, 21 (11), pp. 3-9.
- Wang, M. and Shultz, K.S., 2010. Employee retirement: A review and recommendations for future investigation. *Journal of Management*, 36(1), pp.172-206.

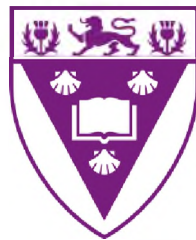
- Wallick, H., 2011. Do you need a financial planner? *Business and Finance*, 16, pp. 7.
- Watson, M. and McNaughton, M., 2007. Gender differences in risk aversion expected retirement benefits. *Financial Analysts Journal*, 63(4), pp.52-62.
- Welman, J.C. and Kruger, S.J., 2001. *Research Methodology for Business and Administrative Sciences*. 2ed. New York: Oxford University Press.
- Welman, C., Kruger, F. and Mitchell, B., 2005. *Research Methodology*. 3rd ed. Cape Town: Oxford University Press.
- Williams, B., 2007. *Systems concepts in evaluation: an expert*. Canada: Edge Press.
- Williams, B., Brown, T. and Onsmann, A., 2010. Exploratory factor analysis. A five step guide for novices. *Australasian journal of paramedicine*, 8(3), pp. 1-28.
- Wilson, J., 2010. *Essentials of Business research: A Guide to doing your Research Project*. Los Angeles: Sage.
- Winger, B. J and Frasca, R.R., 2006. *Personal financial planning: An integrated planning approach*. 7th ed. New Jersey: Prentice Hall.
- WORLD BANK, 2011. South Africa Economic Update: Focus on Savings, Investment, and Inclusive Growth. The World Bank Group: Africa Region Poverty Reduction & Economic Management. Issue 1: 1 –46
- Yao, R, Ying, J, and Micheas, L., 2013. Determinants of Defined Contribution Plan Deferral. *Family & Consumer Sciences Research Journal*, 42(1), pp. 55-76
- Yuh, Y., and DeVaney, S. A., 1996. Determinants of couples' defined contribution retirement funds. *Financial Counseling and Planning*, 7(1), pp. 31-38.
- Zelinsky, E. A., 2004. The defined contribution paradigm. *The Yale law journal*, 114(3), pp.451-534.
- Zikmunds, W. G., 2003. *Business research methods*. 7th ed. Mason: South Western Thomson.

Zikmund, W.G., Babin, B.J., Carr, J.C. and Griffin, M., 2010. *Business research methods*. 8th ed. Canada:South_Western.

Appendices

Appendix A: Cover letter.

Women's perceptions of successful retirement planning



RHODES UNIVERSITY
Where leaders learn

Dear participants, you are invited to participate in a research study for a Master's Degree entitled "Women's perceptions of successful financial retirement planning."

Previous evidence has indicated that women tend to be less financial prepared for retirement due to a number of factors influencing women's retirement planning process. Moreover, there is limited research focusing on women's perceptions of successful retirement planning in South Africa.

The purpose of this study will be to explore the factors which influence women's perceptions of successful financial retirement planning in Grahamstown. The study will enable conclusions as well as recommendations regarding women and financial retirement planning to be made. Thus, assisting women with their financial retirement planning.

Provided you are willing to participate, please complete the attached survey. The first set of questions relates to demographic factors which are said to influence financial retirement planning. The next set of questions relate to six variables which have been identified to

influence financial retirement planning. The main focus of this study is perceptions, it is thus important to note that there is not right of wrong answer.

The survey should take approximately 15 – 20 minutes to complete.

It is important to highlight that even though no confidential information will be required, the responses will remain confidential and completely anonymous. In addition, your participation in this study is completely voluntary.

Thank you for your willingness to participate.

Kind regards

Meghan Durrheim

(Researcher)

C. Grobler

(Supervisor)

T. Ndoro

(Supervisor)

Appendix B: Survey

Section A: Demographic information

Please indicate your response by marking the appropriate numbered block for the following questions.

1. Please indicate your current age:

< 20 years	1
20-29 years	2
30-39 years	3
40-50 years	4
50-59 years	5
>60 years	6

2. Please indicate your ethnic background:

White	1
Black	2
Asian	3
Coloured	4
Indian	5
Other (please specify)	6

3. Please indicate your current marital status:

Single	1
Partnership	2
Married	3
Separated	4
Divorced	5
Widowed	6

4. Please indicate your highest qualification obtained:

Grade 12	1
Diploma	2
Bachelor Degree	3
Postgraduate Degree	4
Other (please specify)	5

5. Please indicate your current employment status:

Full time	1
Part time	2
Homemaker	3
Unemployed	4
Student	5
Other (Please specify)	6

6. Please indicate your retirement investment experience:

No experience	1
< 1 year	2
1-5 years	3
6-10 years	4
>10 years	5

7. Please indicate your involvement retirement planning:

I make retirement decisions myself	1
I make retirement decisions through an investment club	2
I make retirement decisions with the help of a professional	3
I make retirement decisions with the help of my partner/friend/family	4

Section B: Engagement in investment planning

1. Please indicate the problems faced that you faced in doing retirement planning (you may indicate more than one option):

Limited financial recourse	1
Limited investment knowledge	2
Finding the answer/getting the information and help	3
Lack of time to invest for retirement	4
Fear of making retirement decisions	5
Volatility of financial markets and economic cycles	6
Procrastination	7
Other (Please specify)	8

2. Please indicate from which media source you obtained information on your current retirement investment:

Television	
Internet website	
Financial news/magazines	
Seminars, conferences ad workshops	
From partner/friend/family	
From investment professional	
Other (Please specify)	

3. Please indicate your retirement investment horizon (length of your current retirement investment):

1-5 years	1
6-10 years	2
>10 years	3

Section C: Women's perceptions of successful financial retirement planning

Statements which influence women's perceptions of successful financial retirement planning	Extent of agreement						
	Strongly disagree	disagree	Somewhat disagree	Neutral of no	Somewhat agree	Agree	Strongly agree

1	I am satisfied with the growth of my retirement investments	1	2	3	4	5	6	7
2	I am satisfied with the income I will receive from my retirement investments	1	2	3	4	5	6	7
3	The growth of my retirement investment will exceed inflation (the general increase in the price of goods)	1	2	3	4	5	6	7
4	The returns/income from my retirement investments will give me financial independence	1	2	3	4	5	6	7
5	I am in control of my retirement matters because I am investing for retirement	1	2	3	4	5	6	7
6	I am able to plan for my future retirement needs though engaging in investment planning	1	2	3	4	5	6	7

7	I am able to achieve my retirement goals by investing	1	2	3	4	5	6	7
8	My personal values often guide me when investing for retirement	1	2	3	4	5	6	7
9	My family values often guide me when investing for retirement	1	2	3	4	5	6	7
10	My religious values often guide me when investing for retirement	1	2	3	4	5	6	7
11	My ethical values often guide me when investing for retirement	1	2	3	4	5	6	7
12	I only make retirement investments that are aligned with my personal values	1	2	3	4	5	6	7
13	Making retirement investments is important	1	2	3	4	5	6	7
14	I am comfortable making retirement decisions	1	2	3	4	5	6	7
15	I am confident making retirement decisions	1	2	3	4	5	6	7
16	I can create retirement wealth through investing	1	2	3	4	5	6	7
17	I find it easy making retirement decisions	1	2	3	4	5	6	7
18	I like making retirement investments	1	2	3	4	5	6	7
19	Women make better investment decisions than men	1	2	3	4	5	6	7

20	I like to take risks when investing for retirement	1	2	3	4	5	6	7
21	It is necessary to start investing for retirement as early as possible	1	2	3	4	5	6	7
22	I prefer to make retirement investments with the time horizon (Length) of less than 5 years	1	2	3	4	5	6	7
23	I prefer to make retirement investments with the time horizon (length) of less than 10 years	1	2	3	4	5	6	7
24	I prefer to make retirement investments with the time horizon (length) of more than 10 years	1	2	3	4	5	6	7
25	I consider my retirement goals when choosing the time horizon (length) of my investment	1	2	3	4	5	6	7
26	I consider the ease with which I can covert my retirement investment into cash when choosing the time horizon (length) of my retirement investment	1	2	3	4	5	6	7
27	The closer I get to retirement the less risky my investment will be	1	2	3	4	5	6	7
28	My retirement needs change as I move through the different working stages of my life	1	2	3	4	5	6	7

29	Different age groups have different retirement goals	1	2	3	4	5	6	7
30	I know who will be able to assist me in making retirement decisions	1	2	3	4	5	6	7
31	My income influences how I invest for retirement	1	2	3	4	5	6	7
32	My income influences how much I can invest for retirement	1	2	3	4	5	6	7
33	Women tend to have disjointed working careers due to family responsibilities	1	2	3	4	5	6	7
34	I am aware of the different types of financial risks associated with retirement investments (ie. market risks, business risks, investment risks, inflation risks and liquidity risks)	1	2	3	4	5	6	7
35	I am aware that risk and return is positively correlated. In other words, the higher the risk the higher the return	1	2	3	4	5	6	7
36	I am aware of my retirement investment risk (risk related to each of my retirement investment vehicles)	1	2	3	4	5	6	7

Appendix C Breakdown of the questions within the survey.

Women's perceptions of successful retirement planning (section B, Question 1- 7)

1. I am satisfied the growth of my retirement investments
2. I am satisfied with the income I will receive from my retirement investments
3. The growth of my retirement investment will exceed inflation (the general increase in the price of goods)
4. The returns/income from my retirement investments will give me financial independence
5. I am in control of my retirement matters because I am investment for retirement
6. I am able to plain for my future retirement need though engaging in investment planning
7. I am able to achieve my retirement goals by investing

Values (Section B, question 8-13)

1. My personal values often guide me when investing for retirement
2. My family values often guide me when investing for retirement
3. My religious values often guide me when investment for retirement
4. My ethical values often guide me when investing for retirement
5. I only make retirement investments that are aligned with my personal values
6. Making retirement investments is important

Attitudes (Section B, question 14-21)

1. I am comfortable making retirement decisions
2. I am confident making retirement decisions
3. I can create retirement wealth through investing
4. I find it easy making retirement decisions
5. I like making retirement investments
6. Women make better investment decisions than men
7. I like to take risks when investing for retirement
8. It is necessary to start investing for retirement as early as possible

Time horizon (section B, question 22-29)

1. I prefer to make retirement investments with the time horizon (Length) of less than 5 years
2. I prefer to make retirement investments with the time horizon (length) less than 10 years
3. I prefer to make retirement investments with the time horizon (length) of more than 10 years
4. I consider the time horizon (length) of investment vehicles when investing for retirement
5. I consider my retirement goals when choosing the time horizon (length) ‘
6. I consider the ease with which I can covert my retirement investment into cash when choosing the time horizon (length) of my retirement investment
7. I know the time horizon (length) of each of my retirement investments
8. The closer I get to retirement the less risky my investment will be.

Working life-cycle (Section B, question 30-35)

1. My retirement needs change as I move through the different stages of my life
2. Different age groups have different retirement goals
3. My income influences how I invest for retirement
4. My income influences how much I can investment for retirement
5. Women tend to have disjointed working careers due to family responsibilities

Risk tolerance (Section B, question 36-41)

1. I am aware of the different types of financial risks associated with retirement investments (ie. Market risks, business risk, investment risk, inflation risk and liquidity risk)
2. I am aware that risk and return is positively correlated. In other words, the higher the risk the higher the return
3. I am aware of my retirement investment risk (risk related to each of my retirement investment vehicles)
4. I am aware that I need to take more retirement investment risks if I want a higher return

5. I consider the financial risks when choosing the time horizon (length) of my investments
6. I consider the returns when choosing the time horizon (length) of my retirement investments

Financial literacy (Section B, question 42-48)

1. I have knowledge about different retirement investment opportunities
2. I have knowledge about the time horizon (length) of different retirement investment vehicles
3. I know who will be able to assist me when making retirement decisions
4. I know the cost implications (ie tax or fee payable) of different retirement investment vehicles/opportunities
5. I gather information regarding retirement investment vehicles/opportunities
6. My retirement investment decisions are based on retirement knowledge
7. My financial retirement decisions are based on past investment experiences

Appendix D: Reference for Ordinal Logit regression analysis controlling for demographics.

Parameter Estimates

Dependent Variable: perception

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.335	1.488	.225	.823	-2.628	3.298
[Age=2]	.452	.634	.713	.478	-.811	1.715
[Age=3]	.162	.606	.267	.790	-1.044	1.367
[Age=4]	.138	.593	.234	.816	-1.042	1.319
[Age=5]	-.108	.610	-.177	.860	-1.323	1.107
[Age=6]	0 ^a	.	.	.	.	.
[ethnic=1]	-.393	.728	-.539	.591	-1.842	1.057
[ethnic=2]	-.735	.757	-.971	.335	-2.243	.773
[ethnic=4]	-.465	.775	-.601	.550	-2.007	1.077
[ethnic=5]	0 ^a	.	.	.	.	.
[marital=1]	-.236	1.193	-.198	.844	-2.612	2.140
[marital=2]	-.395	1.163	-.340	.735	-2.710	1.920
[marital=3]	-.475	1.170	-.406	.686	-2.805	1.855
[marital=5]	-1.111	1.222	-.909	.366	-3.545	1.322
[marital=6]	0 ^a	.	.	.	.	.
[qualif=1]	.539	.754	.715	.477	-.963	2.041
[qualif=2]	.549	.746	.736	.464	-.937	2.035
[qualif=3]	.317	.764	.415	.679	-1.204	1.839
[qualif=4]	.093	.753	.124	.902	-1.407	1.593
[qualif=5]	0 ^a	.	.	.	.	.
[employstatus=1]	-.026	.758	-.035	.972	-1.535	1.482
[employstatus=2]	.509	.849	.600	.551	-1.182	2.200
[employstatus=3]	.240	.871	.275	.784	-1.494	1.973
[employstatus=4]	.099	.896	.110	.913	-1.686	1.884
[employstatus=5]	0 ^a	.	.	.	.	.
values2	.271	.091	2.977	.004	.090	.451
attitudes1	.509	.088	5.748	.000	.332	.685
timeh1	.297	.089	3.355	.001	.121	.474
riskT	-.088	.097	-.903	.369	-.281	.105

a. This parameter is set to zero because it is redundant.

Appendix E: Ethics Clearance



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20 January 2017

98 Chelsea Drive
Durban North
4051

Dear Meghan

We are pleased to inform you that your ethics approval application, entitled “Women’s perceptions of retirement planning” has been approved by the Department of Management’s Research Ethics Committee.

Sincerely

A handwritten signature in blue ink, appearing to read 'T. L. Amos'.

Mr T L Amos
Chair

Department of Management Research Ethics Committee

A handwritten signature in blue ink, appearing to read 'M J Louw'.

Mr M J Louw
Member

Department of Management Research Ethics Committee

