THE GENDER DIFFERENCES IN FINANCIAL LITERACY AND FAMILY FINANCIAL SOCIALISATION

By

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DECLARATION OF PLAGIARISM

We, Danica Goldman, s214102297 and Faith Phiri, s213439204, hereby declare that the treaties for the honours degree in Business Management to be awarded is our own work and that it has not been previously submitted for assessment or completion of any postgraduate qualification to another University or another qualification.

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TABLE OF CONTENTS

CHAPTER 2

A LITERATURE REVIEW ON THE GENDER GAP IN FINANCIAL LITERACY AND FAMILY FINANCIAL SOCIALISATION

CHAPTER 3

RESEARCH METHODOLOGY

CHAPTER 3 (cont.)

RESEARCH METHODOLOGY

CHAPTER 4

EMPIRICAL RESULTS

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

CHAPTER 5 (cont.)

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

Despite the importance of financial literacy for males and females, many studies revealed that males and females have different levels of financial literacy. Although much research has been conducted on financial literacy, reasons for the gender gap in financial literacy has been largely ignored. The gender gap refers to the differences between males and females with regards to their social, intellectual and economic achievements or attitudes. Therefore, this study investigated the gender gap in financial literacy and family financial socialisation in order to contribute to literature in a South African context.

The study included an in-depth overview of financial literacy, the components, importance and history thereof. Financial literacy has become increasingly important for every individual to make complex financial decisions. Financial knowledge, financial attitude and financial behaviour all form part of being financially literate. An in-depth overview of family financial socialisation, the agents and components thereof were also provided. Family financial socialisation includes three components, namely financial communication, parental teaching and parental financial behaviour. Individuals acquire financial literacy through family financial socialisation agents such as family, friends and media. Previous research has shown that a gender gap exists among individuals in terms of their levels of financial literacy and family financial socialisation.

This study adopted a quantitative research approach. A non-probability snowball sampling technique was used for this study in order to distribute the questionnaires. A total of 229 questionnaires were distributed to the respondents, 203 questionnaires were returned but only 199 were usable for statistical purposes. Statistical techniques which included descriptive statistics, EFA, Cronbach-Alpha, T-test and ANOVA were executed on the collected data.

The results of this study indicated that a gender gap does exist among individuals in terms of their levels of financial literacy, with female respondents having a lower level of financial literacy compared to males. However, no gender gap exists among individuals in terms of their levels of family financial socialisation. The reason for this could be that individuals who are financially dependent on their parents, are not being financially socialised and therefore lack financial literacy.

Therefore, it was recommended that parents, when providing financial education to their children, should emphasize investment concepts to their daughters. Parents also need to teach their children the importance of money and encourage them to save on a regular basis. It was also recommended that educational institutions, including high schools and tertiary educational institutions should include a compulsory financial literacy subject/module where individuals will gain a basic understanding of financial concepts. This will improve the levels of family financial socialisation, resulting in higher levels of financial literacy in both male and female respondents.

Future studies can use the questionnaire developed in this study to identify items that measure the components of financial literacy and the components of family financial socialisation. The measuring instrument developed in this study could be used as a baseline and as a source for further investigation in the field of financial literacy.

Keywords:
Financial literacy, family financial socialisation, gender gap, financial knowledge, financial attitude, financial behaviour, financial communication, parental teaching, parental financial behaviour.

CHAPTER 1

INRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

Financial literacy of individuals has been assessed in many countries, and the consensus is that individuals lack the financial knowledge to make informed financial decisions (Killins, 2017:144). These results, also confirmed by FinScope, indicated that a large portion of the African population lacked the awareness of basic financial products and financial concepts (Xu & Zia, 2012:8). A comprehensive study done by The Financial Services Board revealed that South Africans have low levels of financial literacy with only 54% of the population being financially literate (Roberts, Struwig, Gordon, Viljoen & Wentzel, 2012). Financial literacy is also affected by age. Many studies show that young individuals have the lowest levels of financial literacy. This is also the case with students (individuals between 18-25 years old), as they have the lowest levels of financial literacy (Australian Securities & Investments Commission [ASIC], 2003 IN Ergün, 2017:5).

Financial literacy is also affected by gender. There is a substantial gap in financial literacy levels between males and females. Globally, 35% of males are financially literate, compared to 30% of females (Klapper, Lusardi & van Oudheusden, 2015:12). The average gender gap in financial literacy in emerging economies is 5%, no different from the worldwide gap. Thus, female students have lower levels of financial literacy than males.

This gap between males and females is also present in financial attitudes and financial behaviours. According to Newcomb and Rabow (2006:852) male and female students' attitudes and behaviours regarding money differ sharply. For males, money was positively valued while females valued money negatively (Newcomb & Rabow, 2006:852). This gender gap may also exist in family financial socialisation. Females are more exposed to financial social learning opportunities compared to males. (Garrison & Gutter, 2010 IN Xiao, 2016:67). Tang, Baker and Peter (2015) IN Xiao (2016:67) also found that parental influence had a greater impact on young females' financial behaviour compared to young males' financial behaviour. Despite parental influence having a greater impact on females, they have lower financial literacy levels than males.

Therefore, parents have a different set of financial practices and anticipations for males and females (Newcomb & Rabow, 2006:852). Clarke, Heaton, Israelson and Egett (2005) IN Xiao (2016:67) found that children felt more prepared to perform financial responsibilities when their mothers modelled and taught financial tasks compared to their fathers.

1.2 PROBLEM STATEMENT

Despite the importance of financial literacy for males and females, many studies reveal that males and females have different levels of financial literacy. Similarly, in South Africa males and females are found to have different levels of financial literacy (Klapper *et al*., 2015:12). This is an issue because financial literacy is associated with many financial decisions made by individuals (Oseifuah, 2010:170). Although much research has been conducted on financial literacy, reasons for the gender gap in financial literacy has been largely ignored (Gudmunson & Danes, 2011:644). This study will also investigate the gender gap in family financial socialisation as little research has been done on the gender gap in financial literacy and family financial socialisation in South Africa.

1.2.1 PURPOSE OF THE STUDY

In light of the above, this study will investigate the gender gap in financial literacy and family financial socialisation in order to contribute to literature in a South African context.

1.2.2 RESEARCH QUESTIONS

The primary and secondary questions of this study are:

Is there a significant difference between males and females in terms of their financial literacy and family financial socialisation?

- Is there a gender gap among individuals in terms of their perceptions of financial literacy?
- If so, which group between males and females has the highest mean scores for financial literacy?
- Is there a gender gap among individuals in terms of their perceptions of family financial socialisation?
- If so, which group between males and females has the highest mean scores for family financial socialisation?

1.3 RESEARCH OBJECTIVES

In this section, primary and secondary objectives will be outlined. The secondary objectives give effect to the primary objective of the study.

1.3.1 PRIMARY OBJECTIVE

The primary objective of the study is to investigate the gender gap in financial literacy and family financial socialisation.

1.3.2 SECONDARY OBJECTIVES

To determine the gender gap among individuals in terms of financial literacy.

To determine the gender gap among individuals in terms of family financial socialisation.

To propose a theoretical framework showing the gender gap among individuals in terms of financial literacy and family financial socialisation.

1.3.3 METHODOLOGICAL OBJECTIVES

To determine the appropriate research design to investigate the gender gap among individuals in Port Elizabeth.

To obtain primary information from individuals in order to investigate the gender gap in terms of their financial literacy and family financial socialisation.

To analyse the primary data in order to test the hypotheses of the study, namely; a gender gap exists among individuals in terms of their financial literacy and family financial socialisation.

1.4 SIGNIFICANCE OF THE STUDY

This study will investigate the gender differences in financial literacy and family financial socialisation of young individuals. This will be done in order to contribute to the theory by indicating the different levels of financial literacy between males and females and the difference in family financial socialisation of males and females. Although much research has been conducted on financial literacy, reasons for the gender gap in financial literacy has been largely ignored (Gudmunson & Danes, 2011:644). Therefore, this study will add to the theory by providing empirical results on financial literacy and family financial socialisation in a South African context.

This study will be able to show the difference in financial literacy and family financial socialisation of young individuals in Port Elizabeth. In addition, this study will provide recommendations to parents, educators and financial planners. Furthermore, other future researchers will be able to use this study, the theoretical model and the results in their research. Consequently, results of the study can be used by parents to decrease the gender gap in financial literacy and family financial socialisation. The decrease in the gender gap will be a result of the provision of financial education from parents that is appropriate to males and females. Additionally, educators will be able to provide financial education relevant to males and females in terms of the gender gap that has been identified in this study.

Financial planners will also be able to use the results of this study to identify the gender gap when providing financial advice to clients. This will ensure that the advice that financial planners provide is suitable to the specific client, be it a male or female. Therefore, the results of this study may help parents identify how financial communication, financial teaching and parental financial behaviour may increase the financial literacy of their children. Educators can also learn from the results of this study in terms of what must be included in the curriculum in order to reduce the gap in financial literacy among males and females.

1.5 DEFINITION OF CONCEPTS

This section will provide the definition of financial literacy and family financial socialisation. This will include the components of financial literacy and family financial socialisation.

1.5.1 FINANCIAL LITERACY

Financial literacy is defined as the ability to utilise financial knowledge and financial skills in order to manage financial resources to achieve financial well-being (Hung, Parker & Yoong, 2009:3). In this study, financial literacy refers to the financial knowledge, financial attitude and financial behaviour necessary to make sound financial decisions.

1.5.2 COMPONENTS OF FINANCIAL LITERACY

This section will provide a brief description of each component of financial literacy, namely financial knowledge, financial attitude and financial behaviour.

Financial knowledge refers to an individual's understanding of financial concepts such as investments, budgeting and saving (Chowa, Despard & Osei Akoto, 2012:12). In this study, financial knowledge will refer to an individual's knowledge about how to track their investments, how to invest their money and how much they know about investments compared to most people, including their friends.

Financial attitude refers to an individual's personal outlook towards financial matters (Ibrahim & Alqaydi, 2013:129). In this study financial attitude will refer to whether individuals use money to influence other people to do things for them, whether individuals behave as if money were the ultimate symbol of success and if they purchase things because they know they will impress others. In addition, financial attitude will refer to individuals who sometimes boast about how much money they make and whether others tell them that they place too much emphasis on money as a sign of success.

Financial behaviour refers to an individual's behaviour relevant to money management, which includes earning, saving, borrowing and spending (Xiao, 2016:6). In this study, financial behaviour refers to money practices such as contributing to a savings account on a regular basis, setting money aside for emergencies and saving for a long-term goal such as buying a car or a house etc. Furthermore, financial behaviour refers to whether individuals regularly set money aside for savings and if they regularly set money aside for possible unexpected expenses.

1.5.3 FAMILY FINANCIAL SOCIALISATION

Family financial socialisation is a process that contributes to an individual's financial viability and well-being, by them acquiring and developing values, attitudes, standards, norms, knowledge and behaviours from family members (Danes, 1994 IN Gudmunson & Danes, 2011:645). Family financial socialisation is commonly viewed as a process that extends from childhood into early adulthood in which individuals develop consumer financial roles with the help of parents, teachers, friends, work experiences, and the media (Xiao, 2016). In this study, family financial socialisation will refer to financial communication, parental teaching and parental financial behaviour which influences how an individual is financially socialised.

1.5.4 COMPONENTS OF FAMILY FINANCIAL SOCIALISATION

This section will provide a brief explanation of the components of family financial socialisation namely, financial communication, parental teaching and parental financial behaviour.

Financial communication refers to parents and children's ability to discuss financial topics such as financial management or spending behaviours (Romo & Vangelisti 2014:197). In this study, financial communication will refer to whether parents discussed with their children the importance of saving, how to finance their college education and how to establish a good credit rating. Financial communication will also refer to whether individuals talked about their financial decisions with their family members and if their parents explained their financial decisions to them.

Parental teaching refers to the explicit channel parents use to instruct their children about financial concepts that enable children to manage money more effectively and have positive financial attitudes (Drever, Odders-White, Kalish, Else-Quest, Hoagland & Nelms, 2015:22-23). In this study, parental teaching will refer to whether individuals were taught by their parents about donations, how to be a smart shopper and how to budget. Parental teaching will also refer to whether parents spoke about the importance of saving and gave individuals an allowance to teach them how to manage money.

Parental financial behaviour is how parents act within the household. It includes the financial practices such as saving or paying bills on time that children can observe, model and apply in the financial world (Drever *et al.*, 2015:23). In this study, parental financial behaviour will refer to whether parents track their monthly expenses, pay their bills on time and save money. Parental financial behaviour also refers to whether individuals make their financial decisions based on what their parent(s) have done in similar situations and whether their parent(s) are role models about how to manage financial matters.

1.6 THEORETICAL FRAMEWORK OF THE STUDY

Figure 1.1 presents the relationship between gender and financial literacy and the relationship between gender and family financial socialisation.

FIGURE 1.1: THE GENDER GAP ON FINANCIAL LITEARCY AND FAMILY FINANCIAL SOCIALISATION

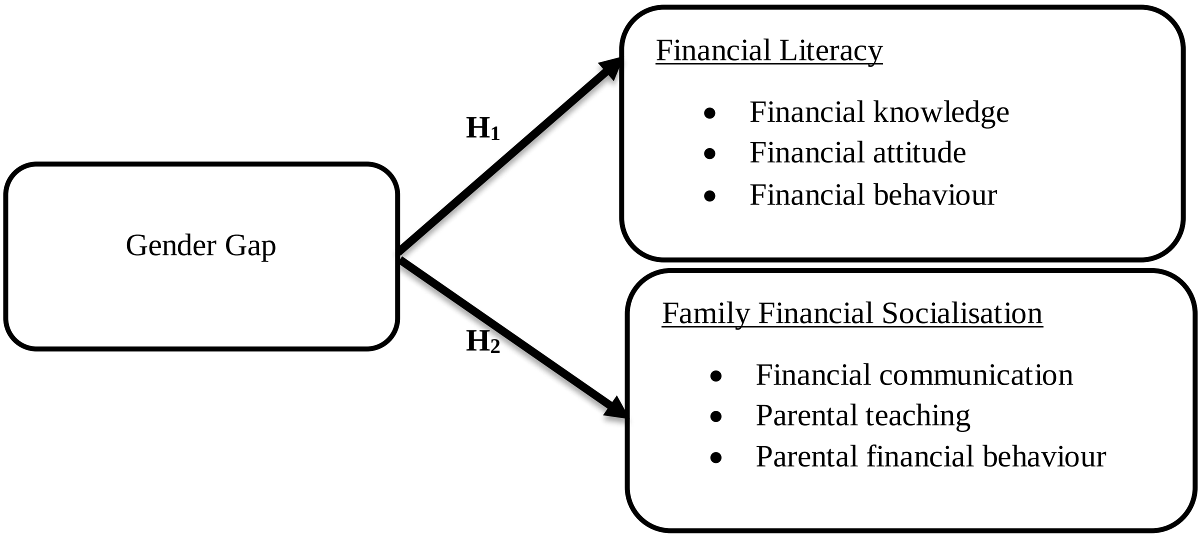


Figure 1.1 shows the following hypotheses:

$H_{1:}$ There is a gender gap among individuals in terms of their perceptions of financial literacy.

$H_{2:}$ There is a gender gap among individuals in terms of their perceptions of family financial socialisation.

1.7 RESEARCH DESIGN AND METHODOLOGY

In this section the research design, which is discussed in detail in Chapter 3, is introduced. This study will use quantitative research methodology because the main purpose of the study is to investigate the gender gap in financial literacy and family financial socialisation.

Primary data will be collected by means of a questionnaire which will be distributed to 200 respondents. The sample of this study is individuals in Port Elizabeth aged between 18 and 25 years, who are in matric or studying at a tertiary institution in Port Elizabeth and who are financially dependent on their parent(s). The respondents will be chosen using the non-probability snowball sampling technique. The researchers will select 20 respondents who meet the criteria of the study. These 20 respondents will then further distribute the questionnaires to others who also meet the criteria. This technique will help the researchers to acquire a large number of respondents in a short period of time.

Once the primary data is collected from the respondents, it will be analysed. The validity and reliability of the data will be analysed. This study will use content and construct validity. To ensure content validity, statements from previous questionnaires will be used and thereafter experts in the field of financial planning will scrutinise the questionnaire for content validity. To test construct validity, this study will use exploratory factor analysis to identify the number of constructs evaluated by a set of measures. Cronbach-Alpha coefficients will be used to determine the extent of the internal consistency of the test or scale.

The researchers will then use descriptive statistics to report the mean scores of the components of financial literacy and the components of family financial socialisation. For the purpose of this study, percentages and frequencies will be used to summarise the biographical information of the respondents while the mean and standard deviation will be used to summarise the information pertaining to the components of financial literacy and family financial socialisation. Once the descriptive statistics are calculated it will be possible to test the hypotheses of this study.

To test the hypotheses of this study, analysis of variance (ANOVA) will be used. ANOVA will be used to test the significant difference in financial knowledge, financial attitude and financial behaviour between males and females. ANOVA will also be used to test the significant difference in financial communication, parental teaching and parental financial behaviour of males and females. The ANOVA will be followed by a post hoc analysis. Post hoc analysis applies to tests of differences among sample statistics when the hypothesis to be tested has been developed by the values of the statistics (Salkind, 2010b:1056). One kind of post hoc analysis is honestly significantly different (HSD) (Salkind, 2010b:583).

1.8 SCOPE AND DEMARCATION

This study is focused on financial literacy and family financial socialisation, more specifically to determine the gender gap among males and females. Financial literacy consists of three components, namely, financial knowledge, financial attitude and financial behaviour. Family financial socialisation also consists of three components, namely, financial communication, parental teaching and parental financial behaviour. The focus of this study is on young individuals aged 18-25 who are currently pursuing further education in Port Elizabeth and who are financially dependent on their parent(s).

The results of this study can be used by parents to decrease the gender gap in financial literacy and family financial socialisation. The decrease in the gender gap will be a result of the provision of financial education from parents that is appropriate to males and females. Educators will be able to provide financial education relevant to males and females in terms of the gender gap that has been identified in this study. Furthermore, financial planners will also be able to use the results of this study to identify the gender gap when providing financial advice to clients. This will ensure that the advice that financial planners provide is suitable to the specific client, be it a male or female.

1.9 STRUCTURE OF THE CHAPTERS

Table 1.1 will provide the structure of the chapters of this study along with a brief description of the contents of the chapter.

TABLE 1.1: STRUCTURE OF CHAPTERS

Chapter	Content
Chapter 1	This chapter provides the introduction and background to the study including the problem statement, purpose, objectives and significance of the study. This is followed by the definition of concepts which provides a brief explanation of the components of financial literacy and family financial socialisation. This chapter also presents the theoretical framework along with the hypotheses of the study, research design and methodology and the scope and demarcation.
Chapter 2	This chapter will present a literature review including the importance of financial literacy and the history of family financial socialisation. This chapter will also provide an in-depth description of financial literacy, family financial socialisation and the gender gap that exists in financial literacy and family financial socialisation. The components of financial literacy as well as the components of family financial socialisation will also be discussed.

TABLE 1.1: STRUCTURE OF CHAPTERS (cont.)

Chapter 3	This chapter will present the research design and methodology that will be adopted in this study. This chapter will also include the methods for sampling, data collection and data analysis. Methods of data analysis includes validity and reliability, descriptive statistics and analysis of variance.
Chapter 4	This chapter will present the results of this study, including the data capturing and response rate of the respondents. This is followed by an analysis of the demographic information of the respondents. This chapter also presents the empirical results in terms of the respondents' perceptions of their levels of financial literacy and family financial socialisation. This includes a validity and reliability analysis of the components of financial literacy and family financial socialisation. This is followed by reformulated operational definitions and the theoretical framework, descriptive statistics and analysis of variance to test the hypotheses.
Chapter 5	This chapter will present the summary, conclusions and recommendations based on the findings of this study. A summary of all the previous chapters and a discussion of the results, conclusions and recommendations will also be provided. This chapter will then present the limitations, contributions and further research.

Source: Researchers own construct

Table 1.1 shows that five chapters will be covered in this study. This will be preceded by the summary.

1.10 SUMMARY

This chapter provided a brief outline of this study. This chapter introduced the topic of this study; the gender differences in financial literacy and family financial socialisation, as well as the background of this study. Little research has been done on the gender gap in financial literacy and family financial socialisation in South Africa. Therefore, the purpose of this study is to investigate the gender gap in financial literacy and family financial socialisation.

The research objectives of this study were outlined followed by a brief definition of concepts, namely, financial literacy and its components and family financial socialisation and its components. This chapter then provided a theoretical framework which presented the hypotheses of the study followed by a brief research design and methodology.

This chapter then provided the scope and demarcation of the study followed by the structure of the chapters in this study. The next chapter will be the literature review which will include an overview of financial literacy, family financial socialisation and the gender gap. This will be preceded by the summary.

CHAPTER 2

A LITERATURE REVIEW ON THE GENDER GAP IN FINANCIAL LITERACY AND FAMILY FINANCIAL SOCIALISATION

2.1 INTRODUCTION

The previous chapter introduced the topic of this study, namely: the gender differences in financial literacy and family financial socialisation. This included the background of the study, a problem statement, the research objectives and the research methodology.

This chapter will address the secondary objectives namely, determining the gender gap in financial literacy and family financial socialisation of individuals. It will also propose a theoretical framework showing the gender gap among individuals in terms of financial literacy and family financial socialisation.

This chapter will provide a description of financial literacy and the components of financial literacy, which are financial knowledge, financial attitude and financial behaviour. The importance of financial literacy will be highlighted. The literature review will also provide a history of family financial socialisation, the family financial socialisation agents along with a description of family financial socialisation and a discussion of the components namely: financial communication, parental teaching and parental financial behaviour. A description of gender gap will be provided along with the influence of the gender gap in financial literacy and in family financial socialisation. Lastly, a summary will be provided.

2.2 DESCRIPTION OF FINANCIAL LITERACY

Financial literacy is the ability to understand, transfer, decide and act on financial information in order to make decisions to succeed in the financial world (Danes & Haberman, 2007 IN Gudmunson & Danes, 2011:645). Similarly, Killins (2017:145) indicates that financial literacy refers to the ability to process economic information and make an informed decision about financial planning, wealth accumulation, debt and pensions. Hung *et al.* (2009:3) defines financial literacy as the ability to utilise financial knowledge and financial skills to be able to manage financial resources to achieve financial well-being. Therefore, based on these definitions, financial literacy is the financial knowledge that allows individuals to make sound financial decisions.

However, financial literacy is not limited to financial knowledge, it also consists of financial attitude and financial behaviour. Hung *et al.* (2009:10) states that there are three components of financial literacy namely, financial knowledge, financial attitude and financial behaviour. Remund (2010:279) further states five components of financial literacy, namely "knowledge of financial concepts, ability to communicate about financial concepts, aptitude in managing personal finances, skill in making appropriate financial decisions and confidence in planning effectively for future financial needs." However, this study will explore three components of financial literacy namely, financial knowledge, financial attitude and financial behaviour.

2.3 COMPONENTS OF FINANCIAL LITERACY

This section will provide a description of each component of financial literacy.

2.3.1 FINANCIAL KNOWLEDGE

Financial knowledge is an important aspect of financial literacy that refers to an individual's understanding of financial concepts such as budgeting and saving (Chowa *et al*., 2012:12). Huang, Nam and Sherraden (2013) IN Garg and Singh (2018:176) agrees that financial knowledge is how an individual understands financial concepts. In this study, financial knowledge will refer to an individual's understanding of financial concepts, which include saving and spending. Financial knowledge can be objective and subjective.

Objective financial knowledge refers to accurate stored information regarding specific financial concepts, whereas subjective financial knowledge refers to an individual's beliefs about their own understanding (Carlson, Vincent, Hardesty & Bearden, 2008:2). Alba and Hutchinson (1987) IN Carlson *et al.* (2008:2) state that objective financial knowledge is based on ability or expertise, reflecting what an individual knows about financial concepts. Subjective financial knowledge is based on an individual's expertise and experience, reflecting what an individual thinks they know about financial concepts (Alba & Hutchinson, 1987 IN Carlson *et al*., 2008:2). In this study, subjective financial knowledge will be measured in order to determine the perceptions individuals have regarding their levels of financial knowledge.

Financial knowledge has many concept areas such as compound interest, inflation, nominal and real values, risk diversification, bonds, stocks and mutual funds (Lusardi, 2008:2). Huston (2010) IN Ibrahim and Alqaydi (2013:127) state that financial knowledge has four concept areas, namely "basic financial concepts, borrowing concepts, savings and investment concepts, and protection (insurance) concepts." The concepts of financial knowledge that are important for this study are saving and investing because these knowledge areas are important for the financial behaviour of individuals.

2.3.2 FINANCIAL ATTITUDE

Financial attitude is the second important aspect of financial literacy and it refers to an individual's beliefs and values regarding the importance of financial concepts (Chowa *et al*., 2012:12). Ibrahim and Alqaydi (2013:129) concurs financial attitude refers to an individual's personal outlook toward financial matters. Therefore, in this study, financial attitude will refer to the way individuals evaluate financial concepts or tasks.

Financial attitude can be divided into two subcategories: financial attitude towards personal financial concepts (such as money attitudes) and financial attitude towards financial management practices (Taneja, 2012:95). Financial attitude towards personal financial concepts refers to an individual's beliefs regarding basic economics, debt, retirement and money. Financial attitude towards financial management practices refers to an individual's views of budgeting, saving, cash management, investments and debt management. (Taneja, 2012:95).

The first validated financial attitude scale was developed by Yamauchi and Templer in 1982. This scale yielded five factors, namely: power-prestige, retention time, distrust, quality and anxiety. (Taneja, 2012:96). Goldberg and Lewis (1978) IN Taneja (2012:96) make a significant contribution suggesting four terms of importance regarding money: "status, respect from others, freedom of choice and luxury of time." Furnham (1984) IN Taneja (2012:96) developed Money Beliefs and Behaviour Scale (MBBS) which identified six factors to evaluate an individual's financial attitude. These factors include "obsession, power, retention, security, inadequacy and effort/ability." (Klontz, Britt, Mentzer & Klontz, 2011:3-4).

The financial attitude towards personal financial concepts and financial management practices is extremely important in determining future financial behaviour (Du Plessis, Berndt & Petzer, 2009:2). This study will measure financial attitude using Yamauchi and Templer's money attitude scale, focusing on power-prestige.

2.3.3 FINANCIAL BEHAVIOUR

Financial behaviour is the third important aspect of financial literacy. Financial behaviour refers to the repetitive financial actions over a period of time which include spending, saving and investing (Gudmunson & Danes, 2011:650). Xiao (2016:6) states that financial behaviour refers to an individual's behaviour relevant to money management, which include earning, saving, borrowing, spending and protecting.

Financial behaviour can be divided into two categories, objective (known as observed financial behaviour) and subjective (known as self-reported financial behaviour) (Xiao, 2008:72). Objective financial behaviour involves observing financial situations and reviewing financial statements to view the spending behaviour of individuals. Subjective financial behaviour refers to an individual reporting his or her own money management practices. (Aprea, Wuttke, Breuer, Koh, Davies, Griemel-Fuhrmann & Lopus, 2016:429). This study will measure subjective financial behaviour in order to determine an individual's perceptions of their financial behaviour.

There are different types of financial behaviour which include cash, credit and savings behaviour (Xiao, 2008:70). This study will focus on the savings behaviour of individuals. Savings is defined as the portion of income not spent on current expenditure. Savings are important for unexpected future events and it helps individuals become financially secure. (Finance in the classroom, 2010).

2.4 IMPORTANCE OF FINANCIAL LITERACY

The potential benefits of financial literacy are manifold. This section will discuss the importance of financial literacy.

Financial literacy is important to protect individuals from accumulating high levels of debt. Over the past few years, households have incurred an increasing amount of debt. As the economy slowly recovered, debt levels declined, before increasing again as investors became more confident and started spending more. (Humphries, 2017). Low levels of financial literacy results in consumers borrowing more and saving less money (Stango & Zinman, 2009 IN Klapper *et al*., 2015).

Numerous studies have found that individuals are not being provided with sufficient financial education (Farinella, Bland & Franco, 2017:1). Low levels of financial literacy carry significant costs. Individuals are often not taught basic financial skills of budgeting and saving. Therefore, they tend to incur unnecessary debt, make poor financial decisions and overspend. (Farinella *et al.*, 2017:1).

Financial literacy is also important in times where there are increasingly complex financial products that are easily accessible to a wide part of the population. Governments in many countries are boosting access to financial services. The amount of people that own bank accounts and have access to credit products is increasing rapidly. (Klapper *et al.,* 2015). Therefore, it is important for all individuals to become financially literate or improve their levels of financial literacy to remain up to date with the changes occurring in the financial world.

It is important for all individuals to have financial literacy in order to make good economic decisions that will be beneficial to themselves and their families. People with strong financial skills are better at planning and saving for retirement (Behrman, Mitchell, Soo and Bravo, 2010; Lusardi & Mitchell, 2014 IN Klapper *et al.*, 2015). Financially literate investors are more likely to diversify risk by spreading funds across several ventures (Abreu & Mendes, 2010 IN Klapper *et al.*, 2015).

2.5 HISTORY OF FAMILY FINANCIAL SOCIALISATION

The main focus of family financial socialisation is on the parent-child relationship. This relationship, compared to the other agents of family financial socialisation, is the most influential relationship. (Gudmunson & Danes, 2011:646).

Family financial socialisation has a link to social role theory in that children learn gender roles and attitudes through teaching and by observing their parents, teachers, peers and other socialisers. This means that children are taught and learn from their parents about financial management and parents contribute to how the children are financially socialised. (Eagly, 1987 IN Edwards, Allen & Hayhoe, 2007).

The social role theory argues that differing gender roles in part develop from the different roles occupied in the family and society. Therefore, females have a tendency to play communal roles and males act more in the agentic roles. (Lippa, 2002 IN Edwards *et al.*, 2007:92). The communal role includes being compassionate, nurturing, loving, concerned with the well-being of others and emotionally expressive. In contrast, the agentic role includes being independent, strong, determined and dominant. The emphasis on independence in the agentic role illustrates why males, in different cultures, constantly report stronger attitudes with regards to money as a way to ensure independence, compared to females. (Lippa, 2002 IN Edwards *et al*., 2007:92).

According to Eagly (1987) IN Edwards *et al.* (2007:92), gender gaps occur due to substantial constraints experienced by members of social groups as they tend to have similar social positions within organisations and other social structures such as families. For example, males have more dominant roles compared to females, they are the head of the home and take charge of the finances in the family context. Therefore, males are more likely to take on that same dominating role within an organisational structure, constantly leaving females little to no room to fulfil a dominating role in any social context (Lachance-Grzela & Bouchard, 2010:767). Younger males will expect to fulfil these same dominating roles and younger females will fulfil the same roles that the females in their lives have as this is how they were financially socialised throughout their childhood.

Lippa (2002) IN Edwards *et al.* (2007) believes that parents may give their daughters a kind of ‘dependence training’ on finances and their son a kind of ‘independence training’. This means that parents form the different gender specific roles that are adopted by their children. The process of forming these gender specific roles could be linked to the process of family financial socialisation, in which children are financially socialised to form part of the society.

2.6 DESCRIPTION OF FAMILY FINANCIAL SOCIALISATION

Family financial socialisation is a process that contributes to an individual’s financial viability and well-being, by them acquiring and developing values, attitudes, standards, norms, knowledge and behaviours from family members (Danes, 1994 IN Gudmunson & Danes, 2011:645). According to Bowen (2002) IN Kagotho, Nabunya, Ssewamala, Mwangi and Njenga (2017:134) family financial socialisation is required to successfully function in society because of the intentional and unintentional transmission of financial concepts by family members. Family financial socialisation is commonly viewed as a process that extends from childhood into early adulthood in which children develop consumer financial roles with the help of parents, teachers, friends, work experiences, and the media (Xiao, 2016). This means that family financial socialisation is the way in which individuals interact with their community in order to become financially literate.

Individuals may be socialised about financial concepts in many ways, for example parents may discuss their work experiences with their children or they can give their children allowances in order to teach them how to budget and learn the value of money (Lee & Mortimer, 2011:5). In addition, financial concepts such as saving and general money management can be taught and explained by parents to their children so that they can have the knowledge, develop positive attitudes and skills needed to be financially stable in the future (Grinstein-Weiss, Spader, Yeo, Key & Freeze, 2012:257).

The three components of family financial socialisation as derived from Xiao (2016:67) are financial communication, parental teaching and parental financial behaviour. These are important components in the process of family financial socialisation by which individuals learn positive financial behaviour from their parents through financial communication, financial teaching and observing financial behaviour. For instance, Grinstein-Weiss *et al.* (2012:267) revealed that receiving extensive amounts of money management teachings from parents helps individuals to have positive financial behaviours. In addition, observing parental financial behaviour results in higher rates of budgeting and savings by individuals (Palm, 2017:2). Furthermore, Gudmunson and Danes (2011:661) states that communication plays a vital role in financial socialisation and it is linked to financial behaviours of individuals.

For the purpose of this study, family financial socialisation will refer to the process in which individuals learn about financial concepts through financial communication, parental teaching and parental financial behaviour in order to be financially literate. Family financial socialisation mainly occurs through three agents, namely, friends, family and media. This study will focus on parents, as the family financial socialisation agent because parents significantly influence their children more than the other agents of family financial socialisation. (Sohn, Joo, Grable, Lee & Kim, 2012:3).

2.7 FAMILY FINANCIAL SOCIALISATION AGENTS

As previously indicated, individuals use many family financial socialisation agents such as friends, family and media (Hilgert, Hogarth & Beverly IN Sohn *et al.*, 2012:2) to learn about personal finances. Other family financial socialisation agents include workplaces, ethnic groups, formal educational institutions and religious organisations (Xiao, 2016:61). Xiao (2016:61) states that changes that occur in an individual's life, economic cycles and social policy changes also play a role as agents of family financial socialisation.

An individual's financial knowledge of personal finance topics is attained by the formal education socialisation agent. On the other hand, friends, as a socialisation agent, influence an individual's financial behaviour and consumer behaviour in terms of product choice or materialistic attitudes. (Sohn *et al*., 2012:3). According to Varcoe, Martin, Devitto and Go (2005) IN Sohn *et al.* (2012:3) financial knowledge and financial behaviour of individuals is improved by a professionally designed financial curriculum.

Media as a socialisation agent is used by individuals to acquire financial information. Lyons, Scherpf and Roberts (2006) IN Sohn *et al.* (2012:3) indicated that 33% of individuals have used media and internet sources to obtain financial information. Loibl and Hira (2005) IN Sohn *et al.* (2012:3) argues that media is a valuable self-directed learning source for financial information and that a sustainable amount of financial learning takes place at an individual's initiative. In addition, Sundarasen, Rahman, Othman and Danaraj (2016:143) state that media sources assist individuals in gaining an understanding of monetary matters. Television impacts an individual's materialistic demeanour and spending practices (Sundarasen *et al*., 2016:143). A positive relationship exists between the degree of media usage and financial practices as well as financial satisfaction (Loibl & Hira, 2005 IN Sohn *et al.*, 2012:3).

Formal educational institutions include the society, the classroom, classmates and the teacher (Robert & Dibie, 2017:34). Children spend the majority of their childhood in a school or other formal educational institution; therefore, most of their actions are in the presence of their classmates. Their classmates can therefore have a strong influence on the decisions that they make, including their financial decisions. The teacher also plays a significant role in the development of the children, they provide knowledge and skills that the children need to form part of the society. (Robert & Dibie, 2017:34). The gender of the family financial socialisation agent could determine the impact that the agent has on an individual. For example, students who receive financial advice may be more receptive to the advice if it was given by a male teacher compared to if it was from a female teacher.

Parents are one of the primary family financial socialisation agents that influence the money and saving attitudes, debt attitudes, knowledge acquisition and understanding of financial concepts of their children (Sohn *et al.*, 2012:3). Parents have a significant influence in the financial decisions and actions that their children make (Gudmunson & Danes, 2011:646). This study will focus on parents as the family financial socialisation agent because parents have an influence on the financial knowledge, financial attitude and financial behaviour of individuals. Therefore, parents may financially socialise their children through financial communication, parental teaching and parental financial behaviour. (Gudmunson & Danes, 2011:646).

2.8 COMPONENTS OF FAMILY FINANCIAL SOCIALISATION

Family financial socialisation has three components, financial communication, parental teaching and parental financial behaviour.

2.8.1 FINANCIAL COMMUNICATION

Financial communication refers to parents and children's ability to discuss financial topics such as financial management or spending behaviours. Financial communication about money saving, spending, earnings, investments and money management such as budgets need to be discussed. (Romo & Vangelisti, 2014:197). Solheim, Zuiker and Levochenko (2011:106) state that individuals are more financially literate when they come from families where money is openly discussed. In contrast, keeping secrets about money such as parents' income or budget may hinder a child's knowledge and growth behaviour in terms of money (Solheim *et al.*, 2011:106).

Financial communication supports the acquisition of responsible financial coping behaviours of individuals. (Serido, Shim, Mishra & Tang, 2010:461). In addition, Jorgensen and Salva (2010) IN Kim and Chatterjee (2013:74) state that discussions about finances with parents is seen to have an effect on the financial knowledge and behaviour of individuals. Thus, parents are able to teach their children about finances through financial communication. According to Silver (2018) effective communication is needed when teaching.

2.8.2 PARENTAL TEACHING

Parental teaching refers to the explicit channel parents use to instruct their children about financial concepts that enable children to manage money more effectively and have positive financial attitudes (Drever *et al*., 2015:22). Parental teaching may involve children receiving allowances from their parents as a way for them to learn how to budget and manage money effectively (Drever *et al*., 2015:25). Parental teaching provides individuals with their first exposure to financial concepts such as saving and money management. (Grinstein-Weiss *et al.,* 2012:257).

According to Lyons, Scherpf and Roberts (2006) IN Sundarasen *et al.* (2016:145) majority of individuals rely on their parents when growing up to pass on information of financial knowledge and financial skills to help them become more financially stable in the future. This information could also be passed down to children as they observe the financial behaviours of their parents.

2.8.3 PARENTAL FINANCIAL BEHAVIOUR

Parental financial behaviour is how parents act within the household. It includes the financial practices such as saving or paying bills on time that children can observe, model and apply in the financial world (Drever *et al.*, 2015:23). Parental financial behaviour works when parents are open about their financial behaviour, for example, when they help their children open a savings account and show them how they personally manage their own accounts (Johnson & Sherraden IN Drever *et al*., 2015:25). Parents could also draw up budgets so that their children can see and model their behaviour in terms of budget making and management.

Children who model after their parents' financial behaviour are confident when carrying out financial transactions and making financial decisions, if the guidance they received during childhood was from the positive financial behaviours of their parents. For that reason, positive and effective parental financial behaviour should be practiced because individuals learn to save and manage their money by observing their parents (Solheim *et al*., 2011:107). Therefore, parents' display of financial knowledge is where individuals learn about financial behaviour (Shim, Xiao, Barber & Lyons, 2009 IN Sundarasen *et al*., 2016:145).

Financial communication, parental teaching and parental financial behaviour are all important components of socialising individuals about financial concepts.

2.9 THE GENDER GAP

This section will provide a description of the gender gap and a discussion of the influence of gender on financial literacy and family financial socialisation.

2.9.1 DESCRIPTION OF THE GENDER GAP

The gender gap refers to the differences between males and females as reflected in social, intellectual, cultural, political, or economic attainments or attitudes (Harris, 2017). Scott (2018) states that gender differences involve characteristics that influence the behaviour of males and females. These behaviours may stem from psychological or physical factors (Scott, 2018). For the purpose of this study the gender gap in financial literacy and family financial socialisation will refer to the differences between males and females in their levels of financial knowledge, financial attitudes and financial behaviours. It will also refer to the difference between males and females in their levels of financial communication, parental teaching and parental financial behaviour. The following section will provide a discussion on the gender gap in financial literacy and family financial socialisation.

2.9.2 THE INFLUENCE OF GENDER ON FINANCIAL LITERACY

High levels of financial literacy lead to improved financial behaviour and financial outcomes such as saving money for old age and use of sophisticated investment products.

According to Grohmann (2016:531) several studies have found that females have lower levels of financial literacy compared to males and this difference is referred to as the financial literacy gender gap. Research shows that there may be three reasons this financial literacy gender gap exists; differences in socio-demographic characteristics, varying levels of financial responsibility and cultural differences (Grohmann, 2016:533). On the other hand, Bucher-Koenen, Lusardi, Alessie and Van Rooji IN Hasler and Lusardi (2017:2) investigated gender differences in certain countries and found that the financial literacy gender gap was independent of socioeconomic background as well as cultural and institutional context.

The results of a study conducted by Volpe (2002) IN Al-Tamimi and Kalli (2009:501) stated that females had lower levels of financial literacy compared to males. A global study by Atkinson and Messy (2012:11) agrees, revealing that females have much lower levels of financial knowledge, financial attitude and financial behaviour compared to males. Out of all the countries in the study, none of the countries revealed a higher score for females compared to males for any of the components of financial literacy (Atkinson & Messy, 2012:11).

Cole, Sampson and Zia (2009) IN Garg and Singh (2018:178) found low levels of financial literacy in families where females were the head of the household. Thus, one of the main reasons for the low levels of financial literacy among females compared to males is that females do not invest in gaining financial education but invest in household duties. Therefore, the levels of financial responsibility vary between males and females. (Filipiak & Walle, 2015 IN Garg & Singh, 2018:179).

According to Newcomb and Rabow (1999) IN Edwards *et al.* (2007:91) males believe that they have greater knowledge about money and are more confident in their understanding of financial concepts than are females. Males are also more obsessed with money, whereas females are more conservative and security conscious when it comes to money (Newcomb & Rabow, 1999 IN Edwards *et al.*, 2007:93).

The gender gap in financial literacy could be caused by the way in which individuals are financially socialised. This means that the gender gap in financial literacy could be caused by the gender gap in family financial socialisation.

2.9.3 THE INFLUENCE OF GENDER ON FAMILY FINANCIAL SOCIALISATION

Allen, Edwards, Hayhoe and Leach (2008); Hayhoe, Leach, Turner, Bruin and Lawrence (2000) IN Falahati and Paim (2011:1144) state that males and females have different beliefs about money because of the difference in family financial socialisation. Females are found to be more risk averse compared to males. This results in males seeing risky financial situations as an exciting challenge to participate in, whereas females see it as a threat and try to avoid it (Croson & Gneezy, 2009:453).

Males and females display different patterns in terms of their communication, with females engaging in higher levels of self-disclosure compared to males (Edwards *et al*., 2007:90). Edwards *et al.* (2007:90) conducted a survey to assess college students' communication with their parents regarding their financial situation. Results revealed females to be more open with their parents about financial matters even after controlling for financial dependence, which was also related to openness (Edwards *et al.*, 2007:90).

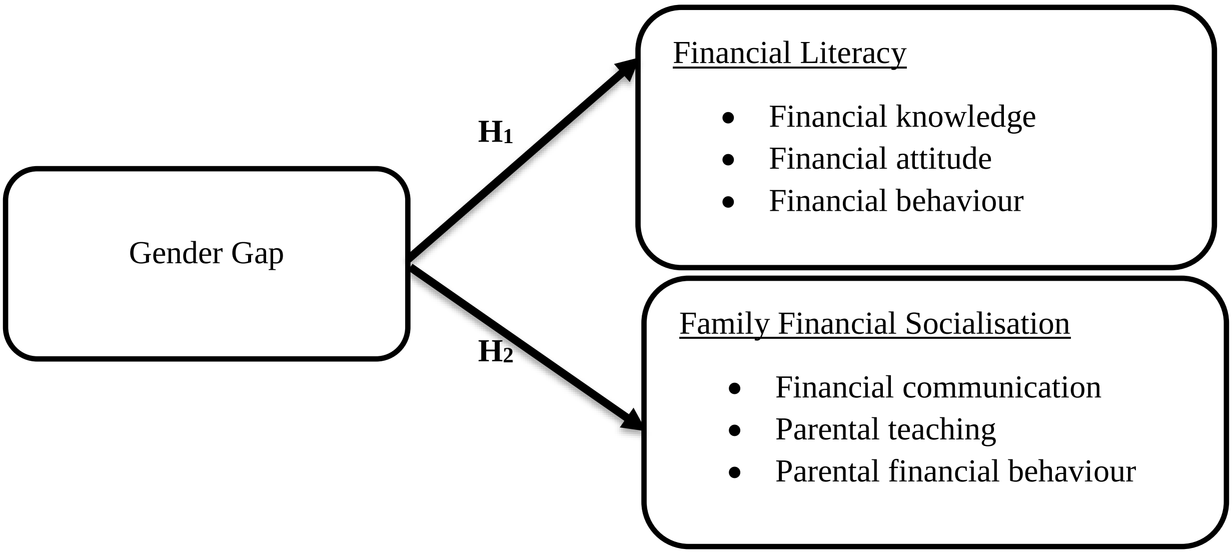
Parents have different financial expectations for males and females. Parents have higher financial expectations for males in terms of working and saving than females. Males are introduced to money management practices at a younger age than females. In addition, college-age males work more hours per week and receive less financial support from their families than do college-age females. (Newcomb & Rabow, 1999 IN Edwards *et al.*, 2007:92). Bailey and Lown (1993) IN Edwards *et al*. (2007:92) found parents of males more likely to talk with their children about money than parents of females.

Therefore, this study will focus on the differences in family financial socialisation of males compared to females. The theoretical framework depicts the influence of gender on financial literacy and on family financial socialisation.

2.10 THEORETICAL FRAMEWORK OF THE STUDY

Figure 2.1 presents the relationship between gender and financial literacy and family financial socialisation.

FIGURE 2.1: THEORETICAL FRAMEWORK ON GENDER GAP



Based on Figure 2.1 the following hypotheses are presented:

H_1: There is a gender gap among individuals in terms of their perceptions of financial literacy.

H_2: There is a gender gap among individuals in terms of their perceptions of family financial socialisation.

These hypotheses will further be developed and tested in Chapter 3 and 4. The following section will provide a summary of the chapter.

2.11 SUMMARY

Due to the complex financial decisions that individuals have to make, it has become increasingly important for every individual to become financially literate. Financial literacy refers to the ability to process economic information and make informed financial decisions to ensure financial well-being. Financial knowledge, financial attitude and financial behaviour all form part of being financially literate.

Family financial socialisation is the process of acquiring and developing values, attitudes, standards, norms, knowledge and behaviours from family members that contributes to an individuals' financial viability and well-being. Family financial socialisation includes three components, namely financial communication, parental teaching and parental financial behaviour. Individuals attain financial information through family financial socialisation agents such as family, friends and media.

The gender gap refers to the differences between males and females with regards to their social, intellectual and economic achievements or attitudes. Females are more open to communicate about financial decisions. However, females do not invest in financial education but rather in their household duties. Parents tend to be more open about finances with male children than with female children. Males invest more in financial education and therefore are more financially literate compared to females.

The next chapter will discuss the research methodology, where the research design, research methodology and research methods adopted in this study will be discussed. The data collection process and the analysis thereof will be described.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter provided a literature review on financial literacy, family financial socialisation and the gender gap that exists within financial literacy and family financial socialisation. This chapter will address the methodological objective namely, to determine the appropriate research design to investigate the gender gap among individuals in Port Elizabeth. This chapter provides the research design and methodology that will be adopted to measure the levels of financial literacy and family financial socialisation amongst young males and females who are financially dependent on their parent(s). To achieve this, a research design and methodology must be adopted.

This chapter will present the research design to provide an overview of the entire research plan. Secondly, the research methods, data collection and data analysis will be discussed. Furthermore, this chapter will present the secondary and primary data, population, sample, sampling technique and research instrument used to measure the level of financial literacy and family financial socialisation. Additionally, this chapter will present the analysis of the primary data using methods such as validity, reliability and descriptive statistics while the hypotheses will be tested using inferential statistics known as analysis of variance (ANOVA).

3.2 RESEARCH DESIGN

There are two main research designs, namely quantitative and qualitative research. Quantitative research involves defining occurrences using a large sample and structured data procedures (Struwig & Stead, 2013:3). Aliaga and Gunderson (2002) IN Muijs (2010:1) describes quantitative research as "explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular statistics)." Quantitative research usually relies on quantitative data. According to Struwig and Stead (2013:6) quantitative data can be collected by means of interviews and questionnaires.

In contrast, Saldana (2011:3) defines qualitative research as an inclusive term for various methods of studying natural social life. Qualitative research usually relies on qualitative data. Qualitative data can be collected using open-ended interviews, focus group interviews and by observing the participants (Struwig & Stead, 2013:102).

In this study, quantitative research design will be used in order to investigate the gender gap in financial literacy and family financial socialisation. This is because quantitative research allows for a large number of respondents (sample) with the use of a closed-ended questionnaire**.** This research will also test hypotheses and thus advanced statistical techniques will be used to determine the gender gap in financial literacy and family financial socialisation. This means that a quantitative research design is suitable for this study. Once a quantitative research design is selected, a decision needs to be made on the population and sampling technique that are best suited for this study.

3.2.1 TARGET POPULATION AND SAMPLING

A population is defined as the group of individuals that the researcher is interested in for the study (Holcomb, 2017:2). The population of this study are individuals aged 18 to 25 years old, who are in their final year of school (matric) or who are studying at a tertiary institution in Port Elizabeth and who are financially dependent on their parent(s). This study is interested in younger individuals as they have low levels of financial literacy and they are mainly financially supported by their parent(s) (Wuttke, Seifried, Schumann & Budrich, 2016:83). However, the entire population will not be used because it is impossible for the researchers to reach all individuals aged 18 to 25 in Port Elizabeth. Therefore, this study will use a sample which is a representative of the population (Salkind, 2010c:1295). In order for a sample to be selected, a sample frame is required.

A sample frame refers to a list of everyone and everything that the researcher wants to study (Stephanie, 2018). The sample frame of this study is the list of all individuals in Port Elizabeth aged 18 to 25 years and who are financially dependent on their parent(s). However, a sample frame is not accessible for this study because there is no readily available database of all individuals who meet the specific criteria of this study and thus it would be too time consuming as well as expensive to develop such a database for that purpose.

Therefore, the sample of this study will be individuals who are aged 18 to 25 years and who are in their final year of school (matric) or who are studying at a tertiary institution (undergraduate) in Port Elizabeth and who are financially dependent on their parent(s). This study will target a maximum of 200 males and females (50% males and 50% females) who are aged 18 to 25 years.

There are two sampling methods to choose from, namely; non-probability and probability sampling. Non-probability sampling refers to the technique used where the probability of an individual in the population being chosen is unknown and researchers randomly select from the sample. Probability sampling refers to the technique used where there is a non-zero probability of an individual being included in the sample. (Struwig & Stead, 2013:116). There are four non-probability sampling techniques, namely; convenience sampling, judgement sampling, quota sampling and snowball sampling. There are five probability-sampling techniques, namely; random probability sampling, stratified random sampling, cluster sampling, systematic sampling and multi-stage area sampling. (Struwig & Stead, 2013:118). This study will use non-probability sampling because the researchers have no access to a sampling frame and thus not all individuals will have equal opportunity to be selected.

The method used for sampling will be the non-probability snowball sampling. Salkind (2010c:1298) states that snowball sampling is used to identify individuals who are difficult to find. The researchers will select 20 respondents who meet the criteria and enlist their help in finding additional respondents who also meet the criteria. In other words, the researchers will ask the initial 20 respondents to find additional respondents. This technique will be very useful as it will help the researchers acquire a larger number of respondents.

3.3 DATA COLLECTION METHOD

This study will collect secondary and primary data. Secondary data is information found from the work of other researchers that is made available (Struwig & Stead, 2013:82). A comprehensive literature search will be conducted to identify the gender gap in financial literacy and family financial socialisation. To conduct this research, both international and national data searched will be done by the Nelson Mandela University library, which to date includes: Sabinet databases; ISAP (National library of South Africa); Sae Publications; EBSCO: MatserFile premier, Business Source premier, Academic Source premier; FS Articles First; Kovsidex; SA Cat and FS WorldCat; ScienceDirect; UPECAT; Google searches; Dialog; Dissertation Abstracts database. The secondary research will be used to build a comprehensive theoretical model identifying the relationship between gender and the levels of financial literacy as well as the levels of family financial socialisation of individuals. Additionally, the secondary research will be used to develop the questionnaire for this study. Primary data involves collecting data for the purpose of the study (Grimsley, 2018). This study will use a questionnaire to collect the primary data.

3.3.1 QUESTIONNAIRE DESIGN

A questionnaire is designed to gather primary data from respondents (Struwig & Stead, 2013:93). According to Pattern (2017:2), advantages of using questionnaires are that they provide a resourceful way to gather primary data in an anonymous manner. However, the response rate may be low and some respondents may be swayed by social desirability (Pattern, 2017:4). A questionnaire can have closed-ended and open-ended questions. Closed-ended questions also known as scaled-response questions refer to a number of statements that measure attitudes or perceptions using a Likert-type scale. Open-ended questions allow respondents to freely respond in their own words or express any relevant ideas. (Struwig & Stead, 2013:96 & 98). This study will make use of closed-ended questions in the questionnaire that will be distributed to the respondents. This study will use closed-ended questions because the researchers are interested in the respondents' attitudes and perceptions. A categorical scale and Likert scale will be used in this study. A categorical scale is used to collect biographical information of the respondents while the Likert scale helps the researchers get an insight of the respondent's attitudes and perceptions.

Section A of the questionnaire will collect information regarding the biographical information of the respondents, which includes their gender, age and qualification. Section B will collect information on the components of financial literacy namely, financial knowledge, financial attitudes and financial behaviour. In terms of financial literacy, five statements were used to measure financial knowledge, six statements for financial attitude and five statements for financial behaviour. Please see table 3.1 for specific statements pertaining to financial knowledge, financial attitude and financial behaviour. Section C will also collect information about the components of family financial socialisation namely, financial communication, parental teaching and parental financial behaviour. In terms of family financial socialisation, four statements were used to measure financial communication, five statements for parental teaching and five statements for parental financial behaviour. Please see table 3.2 for specific statements pertaining to financial communication, parental teaching and parental financial behaviour. Section A will use categorical scales to categorise the respondents while section B will use a Likert scale. The Likert scale will range from one to five. Five being strongly agree and one being strongly disagree. Refer to ANNEXURE A for a copy of the questionnaire.

Table 3.1 presents the statements measuring the components of financial literacy.

TABLE 3.1: FINANCIAL LITERACY STATEMENTS

FINANCIAL KNOWLEDGE	**REFERENCES**
I know how to track my investments.	Fonseca, Mullen, Zamarro & Zissimopoulos. 2012.
I am knowledgeable about how to invest my money.	Grable, Archuleta & Nazarina IN Grable, Archuleta & Nazarina. 2011.
I know a lot about investments.	Grable, Archuleta & Nazarina IN Grable, Archuleta & Nazarina. 2011.
Compared to most people, I know a lot about investing.	Grable, Archuleta & Nazarina IN Grable, Archuleta & Nazarina. 2011.
When it comes to investing, I really know more than my friends.	Grable, Archuleta & Nazarina IN Grable, Archuleta & Nazarina. 2011.
FINANCIAL ATTITUDE	
I use money to influence other people to do things for me.	Grable, Archuleta & Nazarina IN Grable, Archuleta & Nazarina. 2011.
I behave as if money were the ultimate symbol of success.	Robb & Sharpe. 2009.
I must admit that I purchase things because I know they will impress others.	Garber & Koyama. 2016.
In all honesty, I own nice things in order to impress others.	Yamauchi & Templer. 1982.
I must admit that I sometimes boast about how much money I make.	Yamauchi & Templer. 1982.
People I know tell me that I place too much emphasis on money as a sign of success.	Yamauchi & Templer. 1982.
FINANCIAL BEHAVIOUR	
I contribute to a savings account on a regular basis.	Oseifuah. 2010.
I set money aside for emergencies.	Ksendzova & Donnelly. 2017.
I save for a long-term goal such as buying a car or a house etc.	Ksendzova & Donnelly. 2017.
I regularly set money aside for savings.	Ksendzova & Donnelly. 2017.
I regularly set money aside for possible unexpected expenses.	Ksendzova & Donnelly. 2017.

Table 3.1 shows that the number of statements measuring financial knowledge, attitude and behaviour. Table 3.2 presents the statements measuring the components of family financial socialisation.

TABLE 3.2: FAMILY FINANCIAL SOCIALISATION STATEMENTS

FINANCIAL COMMUNICATION	**REFERENCES**
While I was growing up, my parent(s) discussed with me the importance of saving.	Shim, Barber, Card, Xiao & Serido. 2010.
While I was growing up, my parent(s) explained to me how to make financial decisions.	Chowa. Despard & Osei-Akoto. 2012.
While I was growing up, my parent(s) discussed with me how to finance my college/ university education.	Shim, Barber, Card, Xiao & Serido. 2010.
While I was growing up, my parent(s) discussed with me how to establish a good credit rating.	Shim, Barber, Card, Xiao & Serido. 2010.
PARENTAL TEACHING	
While I was growing up, my parent(s) taught me how to be a smart shopper.	Shim, Barber, Card, Xiao & Serido. 2010.
While I was growing up, my parent(s) gave me an allowance to teach me how to manage money.	Webley & Nyhus IN Grohmann, Kouwenberg & Menkhoff. 2015.
While I was growing up, my parent(s) taught me about donating money to charity.	Kim & Chatterjee. 2013.
While I was growing up, my parent(s) spoke to me about the importance of saving.	Shim, Barber, Card, Xiao & Serido. 2010.
While I was growing up, my parent(s) taught me about budgeting.	Webley & Nyhus IN Grohmann, Kouwenberg & Menkhoff. 2015.
PARENTAL FINANCIAL BEHAVIOUR	
While I was growing up, my parent(s) tracked their monthly expenses.	Shim, Barber, Card, Xiao & Serido, J. 2010.
While I was growing up, my parent(s) paid their bills on time.	Garrison. 2010.
While I was growing up, my parent(s) saved money.	Garrison. 2010.

TABLE 3.2: FAMILY FINANCIAL SOCIALISATION STATEMENTS (cont.)

PARENTAL FINANCIAL BEHAVIOUR	REFERENCES
I make financial decisions based on what my parent(s) have done in similar situations.	Shim, Barber, Card, Xiao & Serido, J. 2010.
My parent(s) have been the greatest influence on how to make financial decisions.	Sallie. 2015.

Table 3.2 shows the number of statements measuring financial communication, parental teaching and parental financial behaviour. Once the researcher has developed the questionnaire it needs to be administered to the respondents.

3.3.2 ADMINISTRATION OF QUESTIONNAIRE

There are different ways to administer a questionnaire. There are self-administered questionnaires which refer to an instrument that is completed by the respondent in order for researchers to collect information. This is a low-cost technique that allows for larger samples than other methods allow. (Bourque & Fielder, 2003:2). These include postage, e-mail, in-person drop-off and fax which are all hard copies of the questionnaire.

Posting questionnaires to respondents is a way to reach a large number of respondents in different locations and it is low in cost. However, posting questionnaires may get lost in bulk and therefore it has a low response rate. (Zikmund, Babin, Carr & Griffin, 2013:217). Questionnaires sent via E-mail speeds up the distribution process, it reduces the printing and travelling costs and it results in a faster turnaround time. However, researchers have to keep in mind that not all individuals have access to E-mails. (Zikmund *et al*., 2013:224). Web-based questionnaires allow for researchers to use more complex questions. Respondents feel more at ease and are honest in their responses on web-based questionnaires. (de Leeuw IN Alasuutari, Bickman & Brannen, 2008:322). In-person drop-off is ideal for longer questionnaires. It is higher in cost as researchers will have to travel to every respondent, however, it has a high response rate compared to mail questionnaires. (Zikmund *et al*., 2013:223). Fax machines can be used to easily distribute the questionnaires to respondents. This reduces the cost of having to print the questionnaires and it reduces travel expenses. However, not many individuals use fax machines anymore. (Zikmund *et al*., 2013:224).

Researchers can also conduct telephonic questionnaires which are low cost as the researchers do not have to travel and one researcher can call many respondents in a short period of time (de Leeuw IN Alasuutari *et al.*, 2008:320).

The questionnaires of this study will be self-administered by the researchers to the individuals who meet the criteria of this study. For the purpose of this study, self-administered in-person drop-off will be the most effective method of collecting the primary data. The researchers will distribute the questionnaire to 20 respondents who meet the criteria of the study. Those 20 respondents will then distribute the questionnaire to others who also meet the criteria. This is because the study will target 200 individuals and thus a high response rate is desirable.

3.3.3 ETHICAL CONSIDERATION FOR THE QUESTIONNAIRE

Struwig and Stead (2013:68-69) state that researchers must use a guideline on how to conduct research in an ethically acceptable way. This prevents researchers from engaging in scientific misconduct, plagiarizing the work of others, disregarding confidentiality or falsely report results of their study just to mention a few. Resnick (2015) states that being ethical promotes values of trust, respect and accountability and it also helps researchers gain the support of the public. Therefore, researchers of the study will ensure that the ethical guidelines are followed to prevent the study from giving false results.

Nelson Mandela University requires ethics clearance to be obtained from BES FRTI and Nelson Mandela University REC-H (Research ethics committee- Human). During research, external stakeholders may be involved either as participants or respondents and because of this, one will have to have full ethics clearance needed from the university REC-H or a Proforma Ethics Form E. For this study, the researchers will require a Proforma Ethics Form E in order to receive ethics clearance.

The researchers will ensure inform consent from the respondents by providing them with all information on the cover letter of the questionnaire. After all ethical consideration, the questionnaire will be administered to the respondents. The questionnaires will then be collected from the respondents and checked whether it is completed correctly. Incomplete questionnaires will be disregarded and complete questionnaires will be captured in Microsoft Excel. Once all the questionnaires are collected from the respondents, their responses will be entered in

Microsoft Excel. It will then be analysed to see whether there is any missing data and if the data collected is valid and reliable.

3.4 DATA ANALYSIS

Once primary data have been collected, it will be analysed. There are various methods to use when analysing data. The following methods will be used in this study: validity and reliability, descriptive and inferential statistics, and analysis of variance.

3.4.1 VALIDITY AND RELIABILITY OF THE MEASURING INSTRUMENT

Validity refers to the degree to which an instrument measures what it is intended to measure (Tavakol & Dennick, 2011:53). Struwig and Stead (2013:146) mention the different types of validity, namely, face validity, content validity, construct validity, convergent and discriminant validity as well as criterion-related validity. Criterion-related validity consists of predictive validity and concurrent validity (Struwig & Stead, 2013:147). This study will use content validity. Content validity refers to the extent that the items reflect the theory of the study (Struwig & Stead, 2013:146). To ensure content validity, statements from previous questionnaires were used and thereafter experts in the field of financial planning scrutinised the questionnaire for content validity. This study will also use construct validity which refers to whether the scores of an instrument measure the distinct dimension that it is intended to measure (Salkind, 2010a:229). To test construct validity, this study will use factor analysis. There are two types of factor analysis techniques, namely; confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) (Yong & Pearce, 2013:79). This study will use exploratory factor analysis to identify the number of constructs evaluated by a set of measures (Fabrigar & Wegener, 2012:3). An exploratory factor analysis also provides information to assist in the interpretation of the nature of the factors (Fabrigar & Wegener, 2012:4). Statements with a factor loading of 0.5 will be retained for the study and thus will construct the factor. Thereafter, reliability will be determined.

Reliability refers to the degree to which the data are correct, consistent or stable (Struwig & Stead, 2013:138). Struwig and Stead (2013:139) also make mention of the four ways to determine the reliability of data. These include test-retest reliability, parallel-forms reliability, split-half reliability and internal consistency reliability (Struwig & Stead, 2013:138). This study will use internal consistency reliability. Internal consistency reliability describes the quality of the composite or scale of the data (Bentler, 2009:137). Struwig and Stead (2013:140) state that internal consistency calculates the extent to which the test items all reflect the same attribute. Cronbach-Alpha coefficients are used to determine the extent of the internal consistency of a test or scale. Cronbach-Alpha coefficients will be calculated for each of the components of financial literacy and family financial socialisation. An alpha value between 0.7 and 0.95 is viewed as an acceptable value (Tavakol & Dennick, 2011:54). This study will accept an alpha of 0.7 (Sass, 2011:354). This means that all factors with an alpha of 0.7 will be retained. In addition, descriptive statistics need to be calculated on the empirical data.

3.4.2 DESCRIPTIVE STATISTICS

This study will use descriptive statistics to organise and summarise large amounts of data that need to be interpreted. Struwig and Stead (2013:165) mention measures of central tendency and dispersion, skewness and kurtosis as the main types of descriptive statistics used in quantitative research. Holcomb (2017) further states that central tendency and dispersion includes calculating the mode, median and mean of the samples. In order to determine the degree to which the scores are spread out, the range, standard deviation and variance will be calculated (Struwig & Stead, 2013:166). For the purpose of this study, percentages and frequencies will be used to summarise the biographical information of the respondents while the mean and standard deviation will be used to summarise the information pertaining to the components of financial literacy and family financial socialisation. Once the descriptive statistics are calculated it will be possible to test the hypotheses of the study.

3.4.3 TESTING OF THE HYPOTHESES

This section will use inferential statistics to test the hypotheses of this study. Inferential statistics makes use of a random sample of data from a population to define and interpret the population (What are Inferential Statistics? 2018). One form of inferential statistics that will be used to test the hypotheses is ANOVA. A hypothesis refers to “a provisional idea whose merit requires further evaluation” (Salkind, 2010b:585). Salkind (2010b:586) states the two kinds of hypotheses, namely, null hypothesis and alternative hypothesis. A null hypothesis is assumed to be true until it is shown to be false, whereas an alternative hypothesis describes the possibility that an observed difference is true (Salkind, 2010b:586). This study will use alternative hypotheses. The following hypotheses have been developed for the study:

$H_{1:}$ There is a gender gap among individuals in terms of their perceptions of financial literacy.

H_2: There is a gender gap among individuals in terms of their perceptions of family financial socialisation.

In this study, analysis of variance (ANOVA) will be used to test the hypotheses. ANOVA is a statistical test that helps researchers determine if their survey or experiment results are significant (Roberts & Russo, 2014). ANOVA is used to compare the variation of means between groups with the amount of variation within the groups (Statistics: ANOVA Explained, 2013).

There are two types of ANOVA (Struwig & Stead, 2013:170). The first is factorial ANOVA which is used to examine the independent variable and the interaction effects of two or more groupings on the dependent variable. According to Struwig and Stead (2013:171) groups or treatments make up the independent variables while the dependent variable is the score from a measure. The second type of ANOVA is one-way or single-factor ANOVA. For the purpose of this study single-factor ANOVA will be used. Single-factor ANOVA is used to test two groups to see if there is a significant difference between them. It determines whether the independent variable (gender) differs statistically significantly with regard to the group mean scores from one dependent variable (the components of financial literacy and the components of family financial socialisation). Significance level refers to the degree of risk associated with rejecting a null hypothesis when it is true (Salkind, 2010c:204). For the purpose of this study, a hypothesis at a significance level of 0.05 will be accepted for this study.

Therefore, in this study, ANOVA will be used to test the significant difference in financial knowledge, financial attitude and financial behaviour between males and females. ANOVA will also be used to test the significant difference in financial communication, parental teaching and parental financial behaviour of males and females. The significant level is 0.05 and thus a hypothesis with a significant level of 0.05 will be accepted.

In order to determine the pattern of differences between the means, ANOVA will be followed by a post hoc analysis. Post hoc analysis applies to tests of differences among sample statistics when the hypothesis to be tested has been developed by the values of the statistics. (Salkind, 2010b:1056). Salkind (2010b:1063) mentions Tukey's honestly significant difference (HSD) test as one type of post hoc analysis. HSD is used to compute the honestly significant difference between a set of means using a statistical distribution. (Salkind, 2010b:583).

3.5 SUMMARY

The purpose of this chapter was to describe the research design and methodology adopted for this study. The chapter presents the sample which are individuals aged between 18 and 25 years old who are in matric or studying at a tertiary institution (undergraduate) in Port Elizabeth and who are financially dependent on their parent(s). A snowball sampling method was adopted as the researchers identified 20 individuals who met the criteria and these individuals then distributed the questionnaire to others who also met the criteria.

For the purpose of this study, primary data will be collected by use of a questionnaire. The questionnaire will consist of closed-ended questions because the researchers are interested in the respondents' attitudes and perceptions. The questionnaires will be self-administered by the researchers. The researchers require a Proforma Ethics Form E in order to receive ethics clearance to distribute the questionnaire.

This chapter also provides an explanation of how validity and reliability can be tested using the different statistical tests such as content validity, construct validity and exploratory factor analysis. Cronbach-Alpha coefficients will be used to determine the extent of the internal consistency of each of the components of financial literacy and family financial socialisation.

This primary data will be analysed by means of descriptive and inferential statistics. Descriptive statistics will be used to summarise the biographical information of the respondents. ANOVA will be used to determine the gender differences in financial literacy levels and family financial socialisation levels of individuals.

The results of the data collected through the questionnaire will be presented and summarised in tables in Chapter Four. These results will also be interpreted in Chapter Four.

CHAPTER 4
EMPIRICAL RESULTS

4.1 INTRODUCTION

The primary objective of the study was to investigate the gender gap in financial literacy and family financial socialisation. The previous chapter provided the research design and methodology of the study. This included data collection methods, namely the questionnaire used to collect the primary data of the study. The chapter also presented the data analysis methods employed in this study. The objective of this chapter is to analyse the primary data in order to test the hypotheses of this study, namely, investigating the gender gap exists among individuals in terms of their financial literacy and family financial socialisation. Therefore, this chapter will report the results of the study.

This chapter reports on the response rate that was achieved for this study. Thereafter, the demographic information of the respondents is provided, followed by the validity and reliability results of the factors. These factors are then reformulated and descriptive statistics of the factors are discussed. The hypotheses of the study will be presented.

4.2 DATA CAPTURING AND RESPONSE RATE

The questionnaires were distributed to 229 individuals who are between the ages of 18 to 25. Of the 229 questionnaires distributed, 203 were returned to the researchers. Only 199 of the questionnaires were usable for statistical purposes, giving a response rate of 89%. The data in the questionnaire was then captured in Microsoft Excel and Statistica was used to perform a statistical analysis of the 199 respondents. Depictions of the demographic information of the respondents will be shown in the following section.

4.3 DEMOGRAPHIC INFORMATION

Section A of the questionnaire collected demographic information of the respondents. The demographic information included financial dependency on parent(s), living arrangement, gender, qualification, age, marital status, population and status (student or scholar). Table 4.1 presents a summary of the demographic information of the respondents.

TABLE 4.1: DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

Financial dependency	**Frequency**	**Percentage**
Financially dependent on parent(s)	171	85.93
Not financially dependent on parent(s)	28	14.07
Total	199	100.00%
Living arrangement	**Frequency**	**Percentage**
Living with parent(s)	173	86.93
Not living with parent(s)	26	13.07
Total	199	100.00%
Gender	**Frequency**	**Percentage**
Male	103	51.76
Female	96	48.24
Total	199	100.00%
Age	**Frequency**	**Percentage**
18-19	71	35.68
20-21	54	27.14
21+	74	37.18
Total	199	100.00%
Marital status	**Frequency**	**Percentage**
Never married	186	93.47
Married	3	1.51
Living with a partner	3	1.51
Divorced	3	1.51
Not willing to say	4	2.00
Total	199	100.00%
Population	**Frequency**	**Percentage**
Asian	6	3.02
Black	85	42.71
Coloured	94	47.24
White	11	5.53
Other	3	1.51
Total	199	100.00%
Highest Qualification	**Frequency**	**Percentage**
Matric certificate	101	50.75
Diploma	18	9.05
Bachelor’s degree	39	19.60
Postgraduate degree	32	16.08
Not willing to say	9	4.52
Total	199	100.00%
Status	**Frequency**	**Percentage**
Scholar (Matric)	44	22.11

TABLE 4.1: DEMOGRAPHIC INFORMATION OF THE RESPONDENTS (cont.)

Status	**Frequency**	**Percentage**
Student (Above matric)	140	70.35
Missing	15	7.54
Total	199	100.00%

Source: Primary data

Table 4.1 shows that the majority of the respondents were financially dependent on their parents (85.93%) while 14.07% indicated that they were not. Of the respondents, 86.93% indicted that they lived with their parents which suggests that 13.07% of the respondents did not live with their parents. The sample was unevenly distributed between male and female respondents, with 103 (51.76%) of the respondents being male and 96 being female (48.24%). The majority of the respondents were between the ages of 18 to 19 (35.68%), followed by respondents who were between 20 to 21 years old (27.14%). In terms of education qualification, most of the respondents had a matric certificate as their highest qualification (50.75%), 9.04% of the respondents had a diploma as their highest qualification, 19.60% had a bachelor's degree while 16.08% of the respondents had a postgraduate degree as their highest qualification. Only 4.52% of the respondents did not specify their highest qualification.

In terms of ethnicity, 47.24% of the respondents belonged to the coloured population group while 42.71% of the respondents belonged to the black population group and only 5.53% of the respondents belonged to the white population group. Furthermore, most of the respondents indicated that they were never married (93.47%) as expected while only 1.51% indicated they were married, 1.51% of the respondents indicated they were living with their partner and 1.51% indicated they were divorced. In addition, majority of the respondents (70.35%) were students, (had passed matric level) and those who were scholars (are at matric level) were 22.11%. The following section will present the validity and reliability of the primary data collected.

4.4 VALIDITY AND RELIABILITY OF THE MEASURING INSTRUMENT

Validity refers to the degree to which an instrument measures what it is intended to measure (Tavakol & Dennick, 2011:53). Content and construct validity was assessed for this study. Content validity refers to the extent that the items reflect the theory of the study (Struwig & Stead, 2013:146). Construct validity refers to whether the scores of an instrument measure the distinct dimension that it is intended to measure (Salkind, 2010a:229). To ensure content validity, statements from previous questionnaires were used and thereafter experts in the field of financial planning scrutinised the questionnaire in order to determine if the results of the factors reflect the theory of this study. To test construct validity, this study used exploratory factor analysis (EFA) to identify the number of constructs evaluated by a set of measures (Fabrigar & Wegener, 2012:3). An exploratory factor analysis also provides information to assist in the interpretation of the nature of the factors (Fabrigar & Wegener, 2012:4). Statements with a factor loading of 0.5 were retained for the study and thus factors consisted of items with a factor loading of 0.5 (Basto & Pereira, 2012:15). Thereafter, reliability will be determined.

Once validity of the measuring instrument was determined, reliability was calculated. Reliability refers to the degree to which the data are correct, consistent or stable (Struwig & Stead, 2013:138). Cronbach-Alpha coefficients were used to determine the extent of the internal consistency of a test or scale. Cronbach-Alpha coefficients were calculated for each of the components of financial literacy and family financial socialisation. An alpha value between 0.7 and 0.95 is viewed as an acceptable value (Tavakol & Dennick, 2011:54). This study used an alpha of 0.7 as the accepted level (Sass, 2011:354). Furthermore, Field (2005:1) also suggests that 0.7 is an acceptable value for Cronbach-Alpha.

The following section will show the factor structure of the questionnaire by depicting a table with the factor loadings of all the variables present in the questionnaire.

4.4.1 FACTOR STRUCTURE

As previously indicated exploratory factor analysis (EFA) was used and the statements with a factor loading of 0.5 were retained to portray the below factor structure. Table 4.2 shows the factor loadings of all the statements in the questionnaire that was distributed to respondents.

TABLE 4.2: FACTOR LOADINGS

Variable	Factor Loadings (Varimax raw) Extraction: Principal components (Marked loadings are >.500000)					
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
FK1	0.206780	-0.001800	**0.755059**	0.251217	-0.100982	-0.003347
FK2	0.110881	0.047299	**0.791669**	0.141763	0.089814	0.047689
FK3	0.129783	0.059393	**0.832229**	-0.014073	0.067342	0.097777
FK4	0.048938	0.005155	**0.878373**	0.000741	0.022207	0.003782

TABLE 4.2: FACTOR LOADINGS (cont.)

Variable	Factor Loadings (Varimax raw) Extraction: Principal components (Marked loadings are >.500000)					
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
FK5	0.037001	0.129773	**0.769280**	0.170664	0.174205	0.030471
FA1	0.174560	**0.675509**	-0.062756	-0.113898	-0.041917	-0.292210
FA2	-0.072591	**0.762703**	0.047971	0.047858	0.102015	-0.187050
FA3	-0.293242	**0.732193**	-0.026186	0.027739	0.063111	0.231095
FA4	-0.253455	**0.771241**	0.052660	0.113721	0.114519	0.257240
FA5	0.036535	**0.734758**	0.198547	0.065957	-0.148947	0.084953
FA6	0.135396	**0.623968**	0.115867	-0.042841	-0.164303	-0.069729
FB1	0.140207	-0.001635	0.059142	**0.790140**	-0.110627	-0.013344
FB2	-0.045658	0.120926	0.149836	**0.811667**	0.188537	0.119058
FB3	0.253516	-0.021181	0.129426	**0.605992**	-0.245936	0.123284
FB4	0.139466	-0.085714	0.132901	**0.838194**	-0.000192	-0.024043
FB5	-0.079947	0.118303	0.028922	**0.786285**	0.203850	0.190196
FB6	0.363203	0.016267	0.045762	0.158321	0.107227	**0.740085**
FB7	0.310290	0.083091	0.101681	0.113453	0.127341	**0.759080**
FC1	**0.690841**	0.027595	0.135172	0.141275	0.337880	0.259750
FC2	**0.800094**	-0.057550	0.120500	0.021572	0.141704	0.195606
FC3	**0.756054**	-0.080761	0.117395	-0.015561	-0.147097	0.145116
FC4	**0.623854**	-0.063503	0.051026	0.223694	0.023861	0.247137
FT1	0.339457	0.103403	0.161521	0.323391	0.433070	0.147736
FT2	**0.527862**	-0.078600	0.081519	0.186463	0.254050	0.131890
FT3	0.078879	0.286063	-0.044787	0.280240	0.394279	0.206227
FT4	**0.555961**	0.021513	0.067899	0.325170	0.472806	0.096761
FT5	**0.760227**	-0.181763	0.187098	-0.021498	0.181754	0.015049
PB1	0.424501	-0.111448	0.104260	0.050432	**0.515682**	-0.118807
PB2	0.124506	-0.041685	0.096333	0.005286	**0.747887**	0.130688
PB3	0.369569	0.089035	0.149328	0.026319	**0.612279**	0.199925
Expl.Var	4.318985	3.333290	3.554949	3.554835	2.330344	1.805423
Prp.Totl	0.143966	0.111110	0.118498	0.118494	0.077678	0.060181

Source: Primary data

Table 4.2 shows the factor loadings of each of the components of financial literacy and family financial socialisation. All the components with a factor loading of 0.5 and above indicate that the statements are valid. The following section shows the validity and reliability of financial literacy, namely, the validity and reliability of financial knowledge, financial attitude and financial behaviour.

4.4.2 FINANCIAL LITERACY

Section B of the questionnaire collected information about the respondents' perceptions of their levels of financial literacy. The questionnaire used 18 items to measure the financial literacy. Financial literacy consisted of financial knowledge, financial attitude and financial behaviour of the respondents. Table 4.3 shows the factor loadings and the Cronbach-Alpha coefficient for financial knowledge.

TABLE 4.3: VALIDITY AND RELIABILITY OF FINANCIAL KNOWLEDGE

% of Variance: 3.333		**Cronbach-alpha: 0.885**		
Item	**Statement**	**Factor loading**	**Item-total correlation**	**Cronbach-alpha deletion**
FK1	I know how to track my investments.	0.755	0.688	0.869
FK2	I am knowledgeable about how to invest my money.	0.792	0.724	0.859
FK3	I know a lot about investments.	0.832	0.740	0.856
FK4	Compared to most people, I know a lot about investing.	0.878	0.774	0.848
FK5	When it comes to investing, I really know more than my friends	0.769	0.690	0.867

Source: Primary data

Table 4.3 shows that all five items (FK1, FK2, FK3, FK4 and FK5) that were originally developed to measure financial knowledge loaded onto factor three. Of these items, FK4 and FK3 had the highest factor loading of 0.878 and 0.832 respectively. Factor three also reported a Cronbach-Alpha coefficient of 0.885 which is greater than 0.7 and thus the factor was considered reliable. Factor three was named financial knowledge and will be reformulated based on the items. This factor was considered valid and reliable. The next table shows the validity and reliability of financial attitude. Table 4.4 shows the factor loadings and Cronbach-Alpha coefficient for financial attitude.

TABLE 4.4: VALIDITY AND RELIABILITY OF FINANCIAL ATTITUDE

% of Variance: 3.333		**Cronbach-alpha: 0.821**		
Item	**Statement**	**Factor loading**	**Item-total correlation**	**Cronbach-alpha deletion**
FA1	I use money to influence other people to do things for me.	0.676	0.481	0.814
FA2	I behave as if money were the ultimate symbol of success.	0.763	0.630	0.784
FA3	I must admit that I purchase things because I know they will impress others.	0.732	0.641	0.781
FA4	In all honesty, I own nice things in order to impress others.	0.771	0.695	0.769
FA5	I must admit that I sometimes boast about how much money I make.	0.735	0.613	0.789
FA6	People I know tell me that I place too much emphasis on money as a sign of success.	0.624	0.473	0.815

Source: Primary data

Table 4.4 shows that all six items (FA1, FA2, FA3, FA4, FA5 and FA6) that were originally developed to measure financial attitude loaded onto factor two. Of these items, FA4 and FA2 had the highest factor loading of 0.771 and 0.727 respectively. Factor two also reported a

Cronbach-Alpha coefficient of 0.821 which is greater than 0.7 and thus the factor was considered reliable. Factor two was named financial attitude and will be reformulated based on the items. This factor was considered valid and reliable. The next table shows the validity and reliability of financial behaviour. Table 4.5 shows the factor loadings and Cronbach-Alpha coefficient for financial behaviour.

TABLE 4.5: VALIDITY AND RELIABILITY OF FINANCIAL BEHAVIOUR

% of Variance: 3.555		**Cronbach-alpha: 0.847**		
Item	**Statement**	**Factor loading**	**Item-total correlation**	**Cronbach-** alpha **deletion**
FB1	I contribute to a savings account on a regular basis.	0.790	0.678	0.809
FB2	I set money aside for emergencies.	0.812	0.713	0.800
FB3	I save for a long-term goal such as buying a car and a house etc.	0.606	0.496	0.858
FB4	I regularly set money aside for savings.	0.838	0.757	0.789
FB5	I regularly set money aside for possible unexpected expenses.	0.786	0.646	0.818

Source: Primary data

Table 4.5 shows that only five items (FB1, FB2, FB3, FB4 and FB5) that were originally developed to measure financial behaviour, loaded onto factor four. Of these items, FB4 and FB2 had the highest factor loading of 0.838 and 0.812 respectively. Factor four also reported a Cronbach-Alpha coefficient of 0.847 which is greater than 0.7 and thus the factor was considered reliable. Factor four was named financial behaviour and will be reformulated based on the items. This factor was considered valid and reliable. The next table shows the validity and reliability of family financial socialisation.

4.4.3 FAMILY FINANCIAL SOCIALISATION

Section C of the questionnaire collected information about the respondents' perceptions of their levels of family financial socialisation. The questionnaire used 12 items to measure family financial socialisation. Family financial socialisation consisted of financial communication, parental teaching and parental financial behaviour of the respondents. Table 4.6 shows the factor loadings and the Cronbach-Alpha coefficient for financial role models.

TABLE 4.6: VALIDITY AND RELIABILITY OF FINANCIAL ROLE MODELS

% of Variance: 1.805		**Cronbach-alpha: 0.787**		
Item	**Statement**	**Factor loading**	**Item-total correlation**	**Cronbach-alpha deletion**
FB6	I make my financial decisions based on what my parent(s) have done in similar situations.	0.740	0.649	
FB7	My parent(s) have been the greatest influence on how I make my financial decisions.	0.759	0.649	

Source: Primary data

Table 4.6 shows that two items, FB6 and FB7 loaded onto factor six. These items expected to load onto financial behaviour but loaded as a separate factor on the factor structure. FB7 has a higher factor loading of 0.760, compared to FB6, with a factor loading of 0.740. The factor financial role model was reliable because it reported a Cronbach-Alpha coefficient of 0.787 which is greater than 0.7 and thus the factor was considered reliable. Therefore, factor six, namely, financial role model was considered valid and reliable. Table 4.7 shows the factor loadings and Cronbach-Alpha coefficient for financial communication and teaching.

TABLE 4.7: VALIDITY AND RELIABILITY OF FINANCIAL COMMUNICATION AND TEACHING

% of Variance: 4.319		Cronbach-alpha: 0.866		
Item	**Statement**	**Factor loading**	**Item-total correlation**	**Cronbach-alpha deletion**
FC1	My parents discussed the importance of saving.	0.691	0.745	0.835
FC2	My parents explained their financial decisions.	0.800	0.776	0.829
FC3	My parents discussed how to finance my college/university education with me.	0.756	0.590	0.855
FC4	My parents discussed how to establish a good credit rating.	0.624	0.575	0.857
FT2	My parent(s) gave me an allowance to teach me how to manage money.	0.528	0.507	0.866
FT4	My parent(s) spoke to me about the importance of saving.	0.556	0.626	0.850
FT5	My parent(s) taught me about budgeting.	0.760	0.695	0.840

Source: Primary data

Table 4.7 indicates that seven items loaded onto factor one, that is, four items (FC1, FC2, FC3 and FC4) from financial communication and three items (FT2, FT4 and FT5) from parental financial teaching. The four items that were expected to load on financial communication and three items that were expected to load onto financial teaching loaded onto factor one. Of these items, FC2 and FT5 had the highest factor loading of 0.800 and 0.760 respectively. Factor one also reported a Cronbach-Alpha coefficient of 0.866 which is greater than 0.7 and thus the factor was considered reliable. Factor one was named financial communication and teaching and will be operationalised based on the items. This factor was considered valid and reliable.

The next table, table 4.8 shows the validity and reliability of parental financial behaviour. Table 4.8 shows the factor loadings and Cronbach-Alpha coefficient for parental financial behaviour.

TABLE 4.8: VALIDITY AND RELIABILITY OF PARENTAL FINANCIAL BEHAVIOUR

% of Variance: 2.330		**Cronbach-alpha: 0.716**		
Item	**Statement**	**Factor loading**	**Item-total correlation**	**Cronbach-alpha deletion**
PB1	My parent(s) tracked their monthly expenses.	0.516	0.499	0.693
PB2	My parent(s) paid their bills on time.	0.748	0.544	0.626
PB3	My parent(s) saved money.	0.612	0.584	0.564

Source: Primary data

Table 4.8 shows that all three items, PB1, PB2 and PB3, which were originally developed to measure parental financial behaviour loaded onto factor five. Of these items, PB2 and PB3 had the highest factor loading of 0.748 and 0.612 respectively. Factor five also reported a Cronbach-Alpha coefficient of 0.716 which is greater than 0.7 and thus the factor was considered reliable. Factor five was named parental financial behaviour and will be operationalised based on the items. This factor was considered valid and reliable. The next section shows the reformulated operational definitions and hypotheses.

4.5 REFORMULATED OPERATIONAL DEFINITIONS AND HYPOTHESES.

Based on the validity and reliability results of the study, the components of financial literacy and family financial socialisation will be reformulated. Table 4.9 provides the reformulated operational definitions of the components of financial literacy and the components of family financial socialisation.

TABLE 4.9: REFORMULATED OPERATIONAL DEFINITIONS OF THE STUDY

Factor	Reformulated definition
Financial knowledge	Financial knowledge refers to individuals who know how to track their investments and how to invest their money. It also refers to the extent of knowledge of investments, in comparison to other people.
Financial attitude	Financial attitude refers to the belief that individuals use money to impress others, to purchase things because it will impress others and to influence other people to do things for them. It also refers to individuals who boast about how much money they make, placing much emphasis on money as the ultimate symbol of success.
Financial behaviour	Financial behaviour refers to individuals who contribute to a savings account on a regular basis, set money aside for emergencies or possible unexpected expenses and save for a long-term goal such as buying a car or a house.
Financial role models	Financial role models refers to parents who have the greatest influence on an individuals' financial decisions to such an extent that these individuals make the same financial decisions as their parents.
Financial communication and teaching	Financial communication and teaching refers to parents who discussed with their children the importance of saving, how to finance their college education and how to establish a good credit rating. It also refers to parents who explained their financial decisions to their children and taught them the importance of budgeting and money management by giving them an allowance. Lastly, it refers to individuals who discussed their financial decisions with their family members.
Parental financial behaviour	Parental financial behaviour refers to parents who track their monthly expenses, pay their bills on time and save money.

Source: Researchers own construct

Table 4.9 provides the reformulated operational definitions of the components of financial literacy and the components of family financial socialisation. Thereafter the theoretical framework of the study is presented.

Figure 4.1 presents the relationship between gender and financial literacy and family financial socialisation.

FIGURE 4.1: THEORETICAL FRAMEWORK ON GENDER GAP

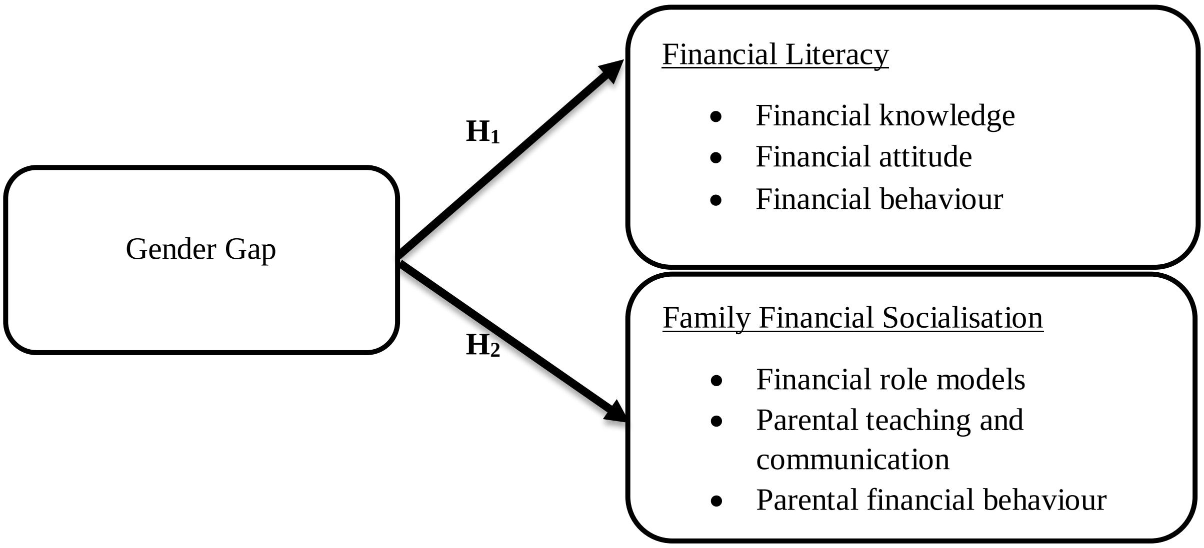


Figure 4.1 shows that the components of financial literacy are financial knowledge, financial attitude and financial behaviour while the components of family financial socialisation are financial role models, financial communication and teaching and parental financial behaviour.

Based on the results of the EFA, the components of financial literacy remained the same, as expected. However, the components of family financial socialisation have changed. Parental teaching became financial communication and teaching. A new component was identified, namely, financial role models and parental financial behaviour remained the same.

On this basis the hypotheses were reformulated and are provided below:

H_1: There is a gender gap among individuals in terms of their perceptions of financial literacy.

H_2: There is a gender gap among individuals in terms of their perceptions of family financial socialisation.

The following section will provide the descriptive statistics of the factors.

4.6 DESCRIPTIVE STATISTICS

Descriptive statistics such as mean, mode, standard deviation and percentages were calculated for the factors of financial literacy and family financial socialisation. A 5-point Likert-scale was used to measure the factors in the questionnaire, namely, financial knowledge, financial attitude, financial behaviour, financial role models, financial communication and teaching and parental financial behaviour. Table 4.10 shows the descriptive statistics for the components of financial literacy (financial knowledge, financial attitude, financial behaviour) and family financial socialisation (financial role models, financial communication and teaching and parental financial behaviour).

TABLE 4.10: DESCRIPTIVE STATISTICS FOR FINANCIAL LITERACY AND FAMILY FINANCIAL SOCIALISATION

Factor	Mean	Std. Dev.	Disagree (%)	Neutral (%)	Agree (%)
Financial knowledge	2.97	0.93	47.24	34.67	18.09
Financial attitude	1.96	0.83	84.42	13.07	2.51
Financial behaviour	3.22	0.98	37.19	37.69	25.12
Financial role models	3.28	1.16	29.65	33.17	37.18
Financial communication and teaching	3.44	0.92	28.64	37.19	34.17
Parental financial behaviour	3.93	0.86	8.54	32.16	59.3

Source: Primary data

Table 4.10 shows that the respondents scored an overall low mean score for both financial literacy and family financial socialisation with 3.93 for parental financial behaviour, being the highest mean and 1.96 for financial attitude, being the lowest mean.

Financial knowledge reported a mean of 2.97. The majority of the respondents were neutral (34.67%) in their responses regarding their subjective levels of financial knowledge, while 47.24% disagreed and only 18.09% agreed to the statements. This means that the majority of the respondents, 47.24%, do not know how to track their investments and how to invest their money.

Financial attitude reported a mean of 1.96, which is the lowest mean overall. The majority of the respondents disagreed (84.42%) with the statements measuring financial attitude, while 2.51% of the respondents agreed and 13.07% of the respondents responded neutral to the statements. This means that the majority of the respondents disagreed that they use money to influence other individuals to do things for them, nor purchase items to impress others, nor do they see money as the ultimate symbol of success.

Financial behaviour reported a mean of 3.22. Of the respondents, 37.19% disagreed to the statements regarding their perceptions of their financial behaviour, 37.69% of the respondents responded neutral and 25.12% of the respondents disagreed to the statements. This means that most of the respondents were neutral as to whether they budget or save on a regular basis.

Financial role models reported a mean of 3.28. Of the respondents, 29.65% disagreed to the statements regarding parents as their financial role models, 33.17% of the respondents were neutral and 37.18% of the respondents agreed with the statements. This means that the majority of the respondents perceive their parents to be the greatest financial influence in their lives.

Financial communication and teaching reported a mean of 3.44. Of the respondents, 28.64% disagreed to the statements, 37.19% of the respondents responded neutral and 34.17% of the respondents agreed to the statements measuring financial communication and teaching. This means that the majority of the respondents were neutral as to whether their parents discussed with them the importance of saving, budgeting and how to establish a good credit rating.

Parental financial behaviour reported the highest mean overall of 3.93. Of the respondents, 8.54% disagreed to the statements, 32.16% of the respondents responded neutral and 59.3% of the respondents agreed to the statements regarding parental financial behaviour. This means that the majority of the respondents' parents tracked their monthly expenses, paid their bills on time and saved their money.

The following section will provide the results of the hypotheses of the study.

4.7 TESTING THE HYPOTHESES OF THE STUDY

The main aim was to investigate the gender gap in financial literacy and family financial socialisation. To test the hypotheses of the study, ANOVA was used. ANOVA is a statistical test that helps researchers determine if their survey or experiment results are significant (Roberts & Russo, 2014). ANOVA is used to compare the variation of means between groups with the amount of variation within the groups (Statistics: ANOVA Explained, 2013). Significance level refers to the degree of risk associated with rejecting a null hypothesis when it is true (Salkind, 2010c:204). The significant level is 0.05 and thus a hypothesis with a significant level of 0.05 was accepted for the study. In order to determine the pattern of differences between the means, ANOVA was followed by a post hoc analysis namely, Tukey's honestly significant difference (HSD). HSD is used to compute the honestly significant difference between a set of means using a statistical distribution. (Salkind, 2010b:583).

This section will present the results of ANOVA for the components of financial literacy. ANOVA was used to test the hypotheses of the study and Tukey's HSD was used to show where the differences lie in the primary data. The first hypothesis was:

$H_{1:}$ There is a gender gap among individuals in terms of their perceptions of financial literacy.

Table 4.11 shows the gender gap among individuals in terms of their perceptions of financial literacy (financial knowledge, financial attitude and financial behaviour).

TABLE 4.11: T-TEST AND ANOVA FOR FINANCIAL LITERACY

Factor	**Mean**		**t-value**	**P-value**
	Males	**Females**		
Financial knowledge	3.109	2.831	-2.123	0.035
Financial attitude	2.186	1.722	-4.081	0.000
Financial behaviour	3.322	3.110	-1.537	0.126

Table 4.11 shows that the male respondents scored a higher mean of 3.109 compared to the female respondents in respect of their perceived financial knowledge. The male respondents and female respondents had a significant difference in terms of their subjective financial knowledge. This means that male respondents and female respondents have different perceptions of their subjective financial knowledge. Male respondents were neutral on the statements measuring subjective financial knowledge while female respondents disagreed with

the statements measuring financial knowledge. This suggests a gender gap in terms of financial knowledge.

Table 4.11 also shows that male respondents scored a higher mean of 2.186 compared to female respondents in respect of their perceived financial attitude. The male respondents and female respondents had a significant difference in terms of their financial attitude. This means that the male respondents and female respondents have different perceptions of their financial attitude. Male respondents disagreed to the statements measuring financial attitude while female respondents strongly disagreed with the statements measuring financial attitude. This suggests a gender gap in terms of financial attitude.

Table 4.11 shows that male respondents scored a higher mean of 3.322 compared to female respondents in respect of their perceived financial behaviour. However, both male respondents and female respondents were neutral in their responses to the statements measuring financial behaviour. Female respondents reported a mean of 3.110 and male respondents reported a mean of 3.322. This suggests that there is no gender gap in terms of financial behaviour.

Based on the result of the ANOVA, there is a significant difference between male and female respondents in terms of subjective financial knowledge and financial attitude but not for financial behaviour. Therefore, $H_{1:}$ There is a gender gap among individuals in terms of their perceptions of financial literacy, is partially accepted.

The next section will deal with the second hypothesis of the study, which was:

$H_{2:}$ There is a gender gap among individuals in terms of their perceptions of family financial socialisation.

Table 4.12 shows the gender gap among individuals in terms of their perceptions of family financial socialisation (financial role models, financial communication and teaching and parental financial behaviour).

TABLE 4.12: T-TEST AND ANOVA FOR FAMILY FINANCIAL SOCIALISATION

Factor	Mean		t-value	P-value
	Males	Females		
Financial role models	3.311	3.255	-0.337	0.736
Financial communication and teaching	3.362	3.518	1.197	0.971
Parental financial behaviour	3.942	3.910	-0.260	0.779

Table 4.12 shows that male respondents scored a higher mean of 3.311 compared to female respondents in respect of their perceived financial role models. The male respondents and female respondents had no significant difference in terms of their perceived financial role models. This means that male respondents and female respondents do not have significantly different perceptions of their financial role models. Both male respondents and female respondents were neutral on the statements measuring financial role models. This suggests that a gender gap in terms of financial role models does not exist.

Table 4.12 shows that female respondents scored a higher mean of 3.518 compared to male respondents in respect of their perceived financial communication and teaching. The male respondents and female respondents had no significant difference in terms of their perceived financial communication and teaching. This means that male respondents and female respondents do not have significantly different perceptions of their financial communication and teaching. Both male respondents and female respondents were neutral on the statements measuring financial communication and teaching. This suggests that a gender gap in terms of financial communication and teaching does not exist.

Table 4.12 also shows that male respondents scored a higher mean of 3.942 compared to female respondents in respect of their perceived parental financial behaviour. The male respondents and female respondents had no significant difference in terms of their perceived parental financial behaviour. This means that male respondents and female respondents do not have significantly different perceptions of their parental financial behaviour. Both male respondents and female respondents were neutral on the statements measuring parental financial behaviour. This suggests that a gender gap in terms of parental financial behaviour does not exist.

Based on the results of the ANOVA, there is no significant difference between males and females in terms of financial role models, financial communication and teaching and parental financial behaviour. Therefore, $H_{2:}$ There is a gender gap among individuals in terms of their perceptions of family financial socialisation, is rejected.

The following section will provide a summary of the chapter.

4.8 SUMMARY

In this chapter, the empirical results of the study were presented. Firstly, the researchers reported on the demographic information of the respondents which were summarised in tables. The researchers then reported on the validity and reliability of the components of financial literacy and the components of family financial socialisation. This information was also summarised in tables. Exploratory factor analysis was used to assess construct validity and Cronbach-Alpha coefficients were used to assess the reliability of the measuring instrument. Satisfactory evidence was provided for financial knowledge, financial attitude and financial behaviour and parental financial behaviour. However, some items did not load as expected resulting in new factors, namely financial role models and financial communication and teaching. This resulted in the operational definitions rephrased.

The researchers then used descriptive statistics to report the mean scores of the components of financial literacy and the components of family financial socialisation. An analysis of variance and t-test was conducted between the male and female respondents. Based on the results of the ANOVA, H_1: There is a gender gap among individuals in terms of their perceptions of financial literacy, was partially accepted by the primary data of the study and H_2: There is a gender gap among individuals in terms of their perceptions of family financial socialisation, was not supported by the primary data of the study.

The final chapter will provide the main findings of the study. The researchers will make the various recommendations to the relevant stakeholders. Lastly, the researchers will state the limitations and contributions of this study and make recommendations for future research.

CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The primary objective of this study was to investigate the gender gap in financial literacy and family financial socialisation. Chapter 4 reported on the primary information collected from the respondents in order to investigate the gender gap in terms of their financial literacy and family financial socialisation. Chapter 4 presented the results of this study, including the data capturing and response rate of the respondents. This included the results in terms of the respondents' perceptions of their levels of financial literacy and family financial socialisation. In addition, the validity and reliability results of the components of financial literacy and family financial socialisation were included. This was followed by reformulated operational definitions, the theoretical framework, descriptive statistics and analysis of variance results of the study.

This chapter will provide a summary of the research objectives, main findings of the literature review, research design and methodology and the main findings from the empirical investigation. Conclusions and recommendations will also be presented based on the findings from the literature and empirical chapters. This chapter will also present the contributions and limitations of this study with recommendations for future research on the gender gap in financial literacy and family financial socialisation.

The following section will present the research objectives of the study.

5.2 RESEARCH OBJECTIVES

Table 5.1 depicts the research objectives, including the primary objectives, secondary objectives and methodological objectives of each previous chapter of this study.

TABLE 5.1: RESEARCH OBJECTIVES

Primary objective:
To investigate the gender gap in financial literacy and family financial socialisation.

TABLE 5.1: RESEARCH OBJECTIVES (Cont.)

Secondary objectives	**Chapters**
To determine the gender gap among individuals in terms of financial literacy.	Chapter Two
To determine the gender gap among individuals in terms of family financial socialisation.	Chapter two
To propose a theoretical framework showing the gender gap among individuals in terms of financial literacy and family financial socialisation.	Chapter two
Methodological Objectives	**Chapters**
To determine the appropriate research design to investigate the gender gap among individuals in Port Elizabeth.	Chapter Three
To obtain primary information from individuals in order to investigate the gender gap in terms of their financial literacy and family financial socialisation.	Chapter Four
To analyse the primary data in order to test the hypotheses of the study, namely; a gender gap exists among individuals in terms of their financial literacy and family financial literacy socialisation.	Chapter Four

Source: Researchers own construct

Table 5.1 shows the primary objective of the study. In order to achieve the primary objective of this study, the above secondary objectives were formulated. To achieve the methodological objectives addressed in chapter three and four a research design and methodology were adopted for this study. In addition, data analysis methods needed for this study were adopted. Furthermore, questionnaires were used to obtain primary information and presenting the respondents' results.

The following section provides the summary of literature findings.

5.3 SUMMARY OF THE LITERATURE CHAPTERS

Chapter 1 provided an introduction and background to the study. The problem statement and primary and secondary objectives of the study were then presented. In addition, the methodological objectives and the significance of the study were also included in chapter 1. Furthermore, the definitions of financial literacy and its components (financial knowledge, financial attitude and financial behaviour) were provided. Chapter 1 also defined family financial socialisation and its components (financial communication, parental teaching and parental financial behaviour). The chapter ended with the scope and demarcation of the study, the structure of the chapters and a summary.

Thereafter, chapter 2 provided a literature review on financial literacy and family financial socialisation. This was done to achieve the secondary objectives namely to determine the gender gap among individuals in terms of financial literacy and family financial socialisation. Firstly, chapter 2 provided the description of financial literacy and its components as well as the importance of financial literacy. The components of financial literacy were identified as financial knowledge, financial attitude and financial behaviour.

Financial knowledge refers to an individual's understanding of financial concepts such as budgeting and saving (Chowa *et al*., 2012:12). In this study, financial knowledge referred to an individuals' knowledge about how to track their investments, how to invest their money and how much they know about investments compared to most people, including their friends. Financial attitude refers to an individual's beliefs and values regarding the importance of financial concepts (Chowa *et al*., 2012:12). In this study financial attitude referred to whether individuals use money to influence other people to do things for them, whether individuals behave as if money were the ultimate symbol of success and if they purchase things because they know they will impress others. In addition, financial attitude also referred to whether individuals sometimes boast about how much money they make and others who know them, tell them that they place too much emphasis on money as a sign of success.
Financial behaviour refers to the repetitive financial actions over a period of time which include spending, saving and investing (Gudmunson & Danes, 2011:650). In this study, financial behaviour referred to individuals contributing to a savings account on a regular basis, setting money aside for emergencies, unexpected expenses and saving for a long-term goal such as

buying a car or a house, etc. Therefore, in this study, financial literacy referred to financial knowledge, attitude and behaviour necessary to make sound financial decisions.

Chapter 2 described family financial socialisation and discussed its components. The components of family financial socialisation were financial communication, parental teaching and parental financial behaviour. Financial communication refers to parents and children's ability to discuss financial topics such as financial management or spending behaviours (Romo & Vangelisti, 2014:197). In this study, financial communication referred to whether parents discussed with their children the importance of saving, how to finance college education and how to establish a good credit rating. Financial communication also referred to whether individuals talked about their financial decisions with their family members and if their parents explained their financial decisions to them.

Parental teaching refers to the explicit channel parents use to instruct their children about financial concepts that enable children to manage money more effectively and have positive financial attitudes (Drever *et al*., 2015:22-23). In this study, parental teaching referred to whether individuals were taught by their parents about donations, how to be a smart shopper and how to budget. Parental teaching also referred to whether parents spoke about the importance of saving and gave individuals an allowance to teach them how to manage money. Parental financial behaviour refers to how parents act within the household. It includes the financial practices such as saving or paying bills on time that children can observe, model and apply in the financial world (Drever *et al*., 2015:23). In this study, parental financial behaviour referred to whether parents tracked their monthly expenses, paid their bills on time and saved money. Parental financial behaviour also referred to whether individual's make their financial decisions based on what their parent(s) did in similar situations and whether their parent(s) are role models about how to manage financial matters.

Therefore, in this study, family financial socialisation referred to financial communication, parental teaching and parental financial behaviour which influences how an individual is financially socialised.

The family financial agents discussed in chapter 2 were friends, family and media (Hilgert, Hogarth & Beverly IN Sohn *et al.*, 2012:2). Other family financial socialisation agents include workplaces, ethnic groups, formal educational institutions and religious organisations (Xiao, 2016:61). However, parents are the primary family financial socialisation agent that influence the money and saving attitudes, debt attitudes, knowledge acquisition and understanding of financial concepts of their children (Sohn *et al*., 2012:3). Therefore, this study will focus on parents as the only family financial socialisation agent that influences individuals.

In terms of gender gap, it was discussed that males have more dominant roles compared to females. Males are the head of the home and take charge of the finances in the family context. Therefore, male children are more likely to grow up and take on that same dominating role within a family. (Lachance-Grzela & Bouchard, 2010:767). The gender gap was described as the differences between males and females as reflected in social, intellectual, cultural, political, or economic attainments or attitudes (Harris, 2017). In this study the gender gap in financial literacy and family financial socialisation referred to the differences between males and females in terms of their levels of financial knowledge, financial attitudes and financial behaviours. It also referred to the difference between males and females in terms of financial communication, parental teaching and parental financial behaviour. Parents tend to be more open about finances with male children than with female children and males invest more in financial education and therefore are more financially literate compared to females. (Filipiak & Walle, 2015 IN Garg & Singh, 2018:179 and Bailey & Lown (1993) IN Edwards *et al.*, 2007:92).

Thereafter, the study discussed the research design and methodology that would be adopted for the study.

5.4 RESEARCH DESIGN AND METHODOLOGY

Quantitative research design was used for this study in order to investigate the gender gap in financial literacy and family financial socialisation. Quantitative research allows the researchers to test a theory or hypothesis about the relationship between two or more variables. (Struwig & Stead, 2013:4). In this study, the researchers were examining the relationships between gender gap and financial literacy and between gender gap and family financial socialisation. The population of this study were individuals aged 18 to 25 years who are in their final year of school (matric) or who are studying at a tertiary institution in Port Elizabeth (undergraduate) and who are financially dependent on their parent(s). Since it is impossible to use the whole population while conducting research a sample was drawn from the population. The sample is a representative of the population (Salkind, 2010c:1295). The sample included individuals who are aged 18 to 25 years and who are in their final year of school (matric) or who are studying at a tertiary institution (undergraduate) in Port Elizabeth and who are financially dependent on their parent(s). This study used non-probability snowball sampling because the researchers had no access to a sampling frame thus not all individuals would have had an equal opportunity to be selected (Struwig & Stead, 2013:116-118 & Salkind, 2010c:1298). The researchers selected 20 respondents who met the criteria and enlisted their help in finding additional respondents who also met the criteria. This technique was very useful and helped the researchers acquire a larger number of respondents.

Secondary and primary data was used in this study. Secondary data was used to conduct a comprehensive literature review to identify the gender gap in financial literacy and family financial socialisation. Thereafter, primary data was collected, a questionnaire was used to collect the primary data of this study. The questionnaire used in this study had closed-ended questions. This study used closed-ended questions because the researchers were interested in the respondents' attitudes and perceptions. A categorical scale and Likert scale was used in this study because a categorical scale is used to collect biographical information of the respondents while the Likert scale helped the researchers get an insight of the respondent's attitudes and perceptions (Struwig & Stead, 2013:98). The questionnaires of the study were self-administered by the researchers to the individuals who met the criteria of the study, namely, individuals who are aged 18 to 25 years and who are in their final year of school (matric) or who are studying at a tertiary institution (undergraduate) in Port Elizabeth and who are financially dependent on their parent(s).

For this study, the researchers required a Proforma Ethics Form E in order to receive ethics clearance from the university because external stakeholders were involved as respondents. These guidelines on how to conduct research in an ethically acceptable way were followed. The researchers ensured consent from the respondents by providing them with all information on the cover letter of the questionnaires that were distributed. The researchers did not falsify report results by manipulating the questionnaire responses. The researchers did not plagiarize the work of others by referencing the sources used nor did they copy the results of previous studies. The researchers also did not engage in scientific misconduct by offering money or gifts to respondents for their participation.

Validity of the research instrument was assessed through content and construct validity. Content validity refers to the extent that the items reflect the theory of the study (Struwig & Stead, 2013:146) and construct validity refers to whether the scores of an instrument measure the distinct dimension that it is intended to measure (Salkind, 2010a:229). Content validity was assessed through the use of financial planning experts while construct validity was assessed through exploratory factor analysis (EFA) with a loading of 0.5 (Fabrigar & Wegener, 2012:4). Exploratory factor analysis was used to identify the number of constructs evaluated by a set of measures (Fabrigar & Wegener, 2012:3) and also provided information to assist in the interpretation of the nature of the factors (Fabrigar & Wegener, 2012:4).

Reliability was assessed through the use of Cronbach-Alpha coefficients, with a reliability of 0.7 (Sass, 2011:354). This study used descriptive statistics to organise and summarise the large amounts of data that needed to be interpreted (Struwig & Stead, 2013:165). This study used percentages and frequencies to summarise the demographic information of the respondents. Mean scores and standard deviation was used to summarise the information pertaining to the components of financial literacy and family financial socialisation. Inferential statistics makes use of a random sample of data from a population to define and interpret the population (What are Inferential Statistics? 2018). One form of inferential statistics that was used to test the hypotheses of this study was ANOVA. Therefore, to test the hypotheses, an ANOVA was conducted to determine the significant difference between male and female respondents in terms of their financial knowledge, financial attitude and financial behaviour. ANOVA was also used to test the significant difference between male and female respondents in terms of financial communication, parental teaching and parental financial behaviour. The significant level was 0.05 and thus a hypothesis with a significant level of 0.05 was accepted (Salkind, 2010a:1368). Furthermore, a Post hoc analysis, namely, Tukey's honestly significance difference (HSD) was conducted to determine the pattern of differences between the means.

Once the research methodology was complete, the data collection instrument, namely, the questionnaire was developed and distributed to the individuals who met the researcher's criteria. The criteria was individuals who are aged 18 to 25 years and who are in their final year of school (matric) or who are studying at a tertiary institution (undergraduate) in Port Elizabeth and who are financially dependent on their parent(s). Thereafter, the questionnaires were collected and the responses of the respondents was captured in excel and analysed and the missing data was also indicated in excel. The next section will provide the main findings of the empirical investigation found in chapter 4.

5.5 MAIN FINDINGS FROM THE EMPIRICAL INVESTIGATION

Chapter 4 reported the empirical results of the study. The questionnaires were distributed to 229 individuals who were between the ages of 18 to 25, who are in their final year of school (matric) or who are studying at a tertiary institution (undergraduate) in Port Elizabeth and who are financially dependent on their parent(s). Of the 229 questionnaires that were distributed, 203 were returned to the researchers. However, only 199 of the questionnaires were usable for statistical purposes, giving a response rate of 89%.

The sample of the study was unevenly distributed between male and female respondents, with 103 of the respondents being male and 96 being female. Majority of the respondents were financially dependent on their parents (85.93%) and 86.93% of the respondents indicated that they lived with their parents. The majority of the respondents were between the ages of 18 to 19 (35.68%), followed by respondents who were between the ages of 20 to 21 (27.14%). In terms of education qualification, 50.75% of the respondents had a matric certificate as their highest qualification while the rest of the respondents had a diploma (9.05%), bachelor's degree (19.60%), other qualifications (16.08%) and 4.52% did not state their highest qualification. Furthermore, in terms of ethnicity, 47.24% of the respondents belonged to the coloured population group while 42.71% of the respondents belonged to the black population group and only 5.53% of the respondents belonged to the white population group. Majority of the respondents indicated that they were never married (93.47%) and majority of the respondents (70.35%) were students meaning they had passed matric level.

To measure validity of the components of financial literacy (knowledge) exploratory factor analysis was performed. Exploratory factor analysis showed that all five items (FK1, FK2, FK3, FK4 and FK5) that were originally developed to measure financial knowledge loaded onto factor three as expected. The factor financial knowledge reported a Cronbach-Alpha coefficient of 0,885, meaning that it was reliable. Thus, the factor financial knowledge was valid and reliable.

Exploratory factor analysis showed that all six items (FA1, FA2, FA3, FA4, FA5 and FA6) that were originally developed to measure financial attitude loaded onto factor two as expected.

The factor financial attitude reported a Cronbach-Alpha coefficient of 0.821, meaning that it was reliable. Thus, the factor financial attitude is valid and reliable.

Exploratory factor analysis showed that five items (FB1, FB2, FB3, FB4 and FB5) that were originally developed to measure financial behaviour loaded onto factor four as expected. The factor financial behaviour reported a Cronbach-Alpha coefficient of 0.846, meaning that it was reliable. Thus, the factor financial behaviour is valid and reliable.

Therefore, the components of financial literacy (financial knowledge, financial attitude and financial behaviour) were valid and reliable.

To measure the validity of components of family financial socialisation, exploratory factor analysis was performed. Exploratory factor analysis showed that two factors, FB6 and FB7 loaded onto factor six instead of factor five. Therefore, factor six was named financial role models. The factor financial role models reported a Cronbach-Alpha coefficient of 0.787, meaning that it was reliable. Thus, the factor financial role model is valid and reliable.

Exploratory factor analysis showed that seven items loaded onto factor one, that is, four items (FC1, FC2, FC3 and FC4) from financial communication and three items (FT2, FT4 and FT5) from parental financial teaching. Factor one was then named financial communication and teaching. The factor financial communication and teaching reported a Cronbach-Alpha coefficient of 0.866, meaning that it was reliable. Thus, the factor financial communication and teaching is valid and reliable.

Exploratory factor analysis showed that all three items (PB1, PB2 and PB3) that were originally developed to measure parental financial behaviour loaded onto factor five as expected. The factor parental financial behaviour reported a Cronbach-Alpha coefficient of 0.716, meaning that it was reliable. Thus, the factor parental financial behaviour is valid and reliable.

Therefore, the components of family financial socialisation (financial role models, financial communication and teaching and parental financial behaviour) were valid and reliable.

Based on the validity and reliability results of the study, the components of financial literacy and family financial socialisation were reformulated. Table 5.2 provides the reformulated operational definitions of the components of financial literacy and the components of family financial socialisation.

TABLE 5.2: REFORMULATED OPERATIONAL DEFINITIONS OF THE STUDY

Factor	**Reformulated definition**
Financial knowledge	Financial knowledge refers to individuals who know how to track their investments and how to invest their money. It also refers to the extent of knowledge of investments, in comparison to other people.
Financial attitude	Financial attitude refers to the belief that individuals use money to impress others, to purchase things because it will impress others and to influence other people to do things for them. It also refers to individuals who boast about how much money they make, placing much emphasis on money as the ultimate symbol of success.
Financial behaviour	Financial behaviour refers to individuals who contribute to a savings account on a regular basis, set money aside for emergencies or possible unexpected expenses and save for a long-term goal such as buying a car or a house.
Financial role models	Financial role models refers to parents who have the greatest influence on an individuals' financial decisions to such an extent that these individuals make the same financial decisions as their parents.
Financial communication and teaching	Financial communication and teaching refers to parents who discussed with their children the importance of saving, how to finance their college education and how to establish a good credit rating. It also refers to parents who explained their financial decisions to their children and taught them the importance of budgeting and money management by giving them an allowance. Lastly, it refers to individuals who discussed their financial decisions with their family members.
Parental financial behaviour	Parental financial behaviour refers to parents who track their monthly expenses, pay their bills on time and save money.

Source: Researchers own construct

Table 5.2 provides the reformulated operational definitions of the components of financial literacy and the components of family financial socialisation. Thereafter the mean scores for the components of financial literacy and family financial socialisation will be discussed.

Once the operational definitions was reformulated, the theoretical framework along with the hypotheses of the study was adjusted.

FIGURE 5.1: THEORETICAL FRAMEWORK ON GENDER GAP

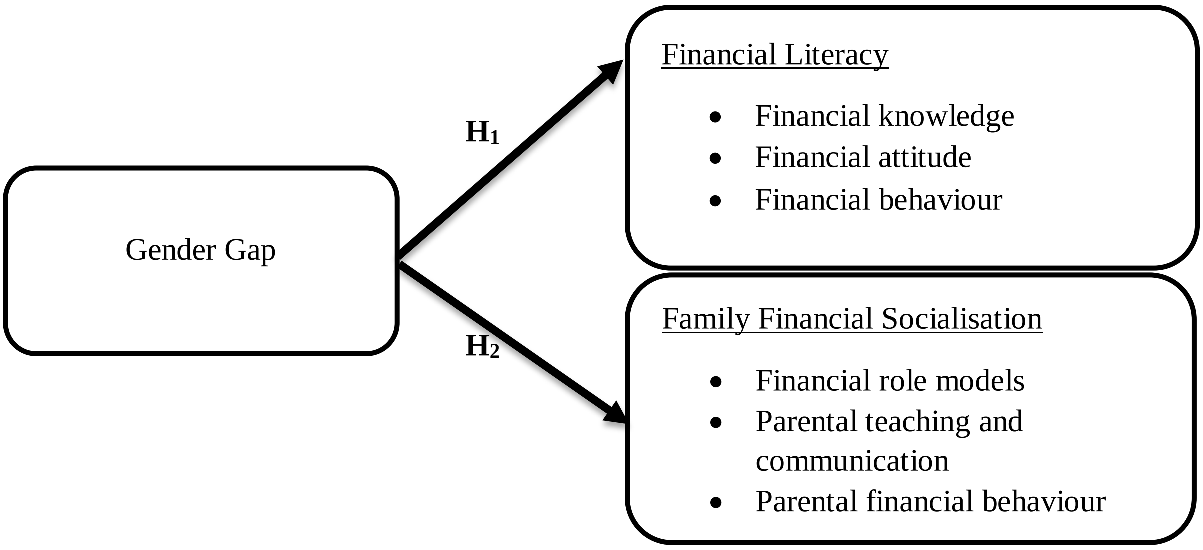


Figure 5.1 shows that the components of financial literacy are financial knowledge, financial attitude and financial behaviour while the components of family financial socialisation are financial role models, financial communication and teaching and parental financial behaviour.

The following section provides the discussion of the results of the study and conclusions.

Once the operational definitions have been reformulated and the theoretical framework has been changed, descriptive statistics for the factors of financial literacy and family financial socialisation were calculated. Percentages and frequencies were used to summarise the biographical information of the respondents. Mean and standard deviation were used to summarise the information pertaining to the components of financial literacy and family financial socialisation.

Descriptive statistics were calculated to summarise the components of financial literacy (financial knowledge, financial attitude and financial behaviour). This was measured using a Likert scale of one to five, with one being strongly disagree and five being strongly agree. Financial knowledge had a mean of 2.97 which indicated that the majority of the respondents disagreed with the statements measuring their financial knowledge. This means that the respondents low levels of financial knowledge with regards to investments. Financial attitude had a mean of 1.96 which indicated that the majority of the respondents strongly disagreed to the statements measuring their financial attitude. This means that the respondents do not place a high regard on money as a symbol of prestige or success. Financial behaviour had a mean of 3.22 which indicated that most of the respondents were neutral in their responses to the statements measuring their financial behaviour. This means that the respondents do not practice budgeting or saving on a regular basis.

Descriptive statistics were calculated to summarise the components of family financial socialisation. Financial role models had a mean of 3.28 which indicated that the respondents were neutral in their responses to the statements measuring their perceived financial role models. Financial communication and teaching had a mean of 3.44 which indicated that the respondents were neutral in their responses to the statements measuring their perceived financial communication and teaching. Parental financial behaviour had a mean of 3.93 which indicated that the respondents were neutral in their responses to the statements measuring their perceived parental financial behaviour. The neutral responses to the statements measuring the components of family financial socialisation mean that the respondents did not know or were not sure how to answer the statements. This means that they were not properly financially socialised by their parents.

An analysis of variance was used to test the hypotheses of the study. The significant level was 0.05 and thus a hypothesis with a significant level of 0.05 was accepted for the study. For hypothesis one to be accepted, all components of financial literacy had to indicate a gender gap otherwise it was partially accepted or rejected.

In respect of financial knowledge, the male respondents scored a mean of 3.109 while the female respondents scored a mean of 2.831. This indicated that the male respondents were neutral in their responses to the statements measuring their financial knowledge while the female respondents disagreed with the statements measuring financial knowledge. There was a statistically significant difference between male and female respondents in terms of their subjective financial knowledge with a value of $p= 0.035$ and this suggests that a gender gap in financial knowledge does exist.

In respect of financial attitude, the male respondents scored a mean of 2.186 while the female respondents scored a mean of 1.722. There was a statistically significant difference between male and female respondents in terms of their financial attitude with a value of $p= 0.000$, suggesting that a gender gap in terms of financial attitude does exist.

In respect of their perceived financial behaviour, the male respondents scored a mean of 3.322 while the female respondents scored a mean of 3.110. There was no statistically significant difference between male and female respondents in terms of their financial behaviour with a value of $p= 0.126$, suggesting that a gender gap in terms of financial behaviour does not exist.

The results of this study found that there is a gender gap among individuals in terms of their financial knowledge and financial attitude but not in terms of their financial behaviour. Therefore, hypothesis one was partially accepted. Thereafter the second hypothesis was tested.

In respect of their perceived financial role models, the male respondents scored a mean of 3.311 while the female respondents scored a mean of 3.255. There was no statistically significant difference between male and female respondents in terms of their financial role models with a value of $p= 0.736$. This suggested that a gender gap in terms of financial role models does not exist.

In respect of financial communication and teaching, the male respondents scored a mean of 3.362 while the female respondents scored a mean of 3.518. There was no statistically significant difference between male and female respondents in terms of their financial communication and teaching with a value of $p= 0.971$. This suggested that a gender gap in terms of financial communication and teaching does not exist.

In respect of their perceived parental financial behaviour, the male respondents scored a mean of 3.942 while the female respondents scored a mean of 3.910. There was no statistically significant difference between male and female respondents in terms of their parental financial behaviour with a value of p= 0.779. This suggested that a gender gap in terms of financial role models does not exist.

The results of this study found that no gender gap exists among individuals in terms of their financial role models, financial communication and teaching and parental financial behaviour. Therefore, hypothesis two was rejected.

5.6 DISCUSSION OF RESULTS AND CONCLUSIONS

This study found three components of financial literacy to be valid and reliable. These three components were financial knowledge, financial attitude and financial behaviour. A study done by Atkinson and Messy (2012:6) also indicated that the components of financial literacy include financial knowledge, financial attitude and financial behaviour.

This study focused on three components of family financial socialisation, namely: financial communication, parental teaching and parental financial behaviour. This study found that communication and teaching is one component. This is because the results of the study showed that financial communication and parental teaching loaded together. The reason that financial communication and parental teaching loaded together could be that effective communication is needed when teaching (Silver, 2018). Other studies have also found communication and teaching to be one component. Grusec and Davidov (2007) IN Kim, LaTaillade and Kim (2011:670) stated that parents interact with their children by communicating and teaching, as one component. Parent and child financial communication is important for children in order to become financially literate. Parent's guide and teach their children about money through communication and sharing their values, attitudes and behaviours. (Bakir, Rose & Shoham, 2006 IN Kim & Chatterjee, 2013:74).

Two of the items that were expected to load onto parental behaviour, loaded as a separate factor. A new component emerged from the data, namely financial role models. Financial role models refers to parents who have the greatest influence on an individuals' financial decisions to such an extent that these individuals make the same financial decisions as their parents. Shim *et al*. (2010:1461) defined adopting parental financial role modelling as an individuals' assessment of the degree to which they currently imitate the way in which their parents managed their finances. According to Shim *et al.* (2010:1466) parental financial behaviour predicted the adoption of parental financial role modelling, and parental teaching predicted financial role modelling as well as financial knowledge (as two separate components).

The results of the study found that there is a significant difference between male and female respondents in terms of their financial knowledge, with male respondents responding neutral to the statements measuring their financial knowledge while female respondents disagreed to the statements. Similar studies have found the same result (Atkinson & Messy, 2012:11; Fonseca *et al.*, 2012:2; Sereetrakul, Wongveeravuti & Likitapiwat, 2013:70). According to Fonseca *et al.* (2012:8) male respondents more often than female respondents, specialise in financial decisions thereby acquiring more financial knowledge.

The results of the study found that there is a significant difference between male and female respondents in terms of their financial attitude, with male respondents having disagreed with the statements measuring their perception of financial attitude compared to female respondents who strongly disagreed to the statements. A study done by Atkinson and Messy (2012:11) found the same result. According to Borden, Lee, Serido and Collins (2008:26) findings regarding the gender gap in terms of financial attitude have been mixed. Xiao, Noring and Anderson (1995) IN Borden *et al.* (2008:26) found that male respondents had a higher level of financial attitude compared to female respondents. Whereas, Joo, Grable and Bagwell (2003) IN Borden *et al.* (2008:26) found no gender gap in terms of financial attitude among individuals.

The results of the study found that there was no significant difference between male and female respondents regarding their financial behaviour. This means that there is no gender gap among individuals in terms of financial behaviour. A study conducted by Atkinson and Messy (2012:11) disagrees, stating that females have much lower levels of financial behaviour compared to males. In addition, Newcomb and Rabow (1999) IN Edwards *et al.* (2007:93) state that females are more conservative and security conscious compared to males, when it comes to money. The reason for this could be that these respondents do not receive enough money in order to save on a regular basis.

The results of the study found that there is no significant difference between male and female respondents in terms of the components of family financial socialisation. In terms of their perceived financial role models, the male respondents scored a mean of 3.311, while the female

respondents scored a mean of 3.255. In terms of financial communication and teaching, the male respondents scored a mean of 3.362, while the female respondents scored a mean of 3.518. In terms of their perceived parental financial behaviour, the male respondents scored a mean of 3.942, while the female respondents scored a mean of 3.910. This means that there is no gender gap among individuals in terms of their perceived family financial socialisation.
This means that the way that male respondents are financially socialised does not differ to the way that female respondents are financially socialised. Other studies disagree (Edwards *et al.*, 2007:90; Allen *et al.*, 2008 & Hayhoe *et al.*, 2000 IN Falahati & Paim, 2011:1144) stating that there is a gender gap among individuals in terms of their levels of family financial socialisation. It can be concluded therefore that due to the lack of financial education in South Africa, males and females are not financially socialised efficiently.

In conclusion, this study found a significant difference between male and female respondents in terms of subjective financial knowledge and financial attitude but not in terms of their financial behaviour. This means that H_1, namely that there is a gender gap among individuals in terms of their perceptions of financial literacy, is partially supported by the primary data of the study (Volpe, 2002 IN Al-Tamimi & Kalli, 2009:501). Therefore, there is a gender gap among individuals in terms of their perceptions of financial literacy with male respondents having a higher level of financial literacy compared to female respondents.

This study also found that there is no significant difference between male and female respondents in terms of financial role models, financial communication and teaching and parental financial behaviour. This means that H_2, namely that there is a gender gap among individuals in terms of their perceptions of family financial socialisation, is not supported by the primary data of the study. Therefore, no gender gap exists among individuals in terms of their perceptions of financial socialisation. Other previous studies have found a gender gap in family financial socialisation (Allen *et al.*, 2008; Hayhoe *et al.*, 2000 IN Falahati & Paim, 2011:1144). The reason for there being no gender gap in family financial socialisation could be the low levels of financial education in South Africa, which results in individuals not being financially socialised efficiently.

It should be noted that both male and female respondents reported low means scores for both financial literacy and family financial socialisation. It can be concluded that the reason for these low levels of financial literacy and family financial socialisation is that individuals are not being financially socialised and therefore lack financial literacy.

The following section provides the recommendations of the study.

5.7 RECOMMENDATIONS

In order to reduce the gender gap in financial literacy and family financial socialisation, parents should focus on financial literacy and family financial socialisation.

Parents need to be aware of the significant difference between male and female respondents in terms of their perceived financial knowledge pertaining to investment concepts. When providing their children with financial education, parents should emphasize investment concepts to their daughters as the results of this study and other previous studies show that females have lower levels of financial literacy (Grohmann, 2016:531).

In order to improve the financial attitude of their children, parents need to teach their children the true value of money. The reason for this is that males tend to view money as a symbol of success. Females on the other hand, have a more conservative approach when it comes to money. (Newcomb & Rabow, 1999 IN Edwards *et al.*, 2007:93).

Parents need to be aware that their children, both male and female, have low savings behaviour. In order to improve the savings behaviour of their children, parents should encourage their children to save and teach them the importance of saving money for the future or for an unexpected emergency. According to Cameron, Calderwood, Cox, Lin and Yamoaka (2013:4) an import factor associated with financial literacy is the way that individuals experience managing their own finances. Parents need to teach their children how to budget, plan their savings, keep their receipts, pay their debt and save regularly (Borden *et al.*, 2008:26).

Parents need to do more in terms of family financial socialisation as respondents scored low on the components of family financial socialisation, irrespective of gender. This means parents should communicate and teach their children about financial concepts. While doing so, parents should also ensure that the male respondents' perceived confidence levels match with their actuality.

Educational institutions, including high schools and tertiary educational institutions should include a compulsory financial literacy subject/module where individuals will gain a basic understanding of financial concepts. This will help female respondents to gain confidence about investment concepts. This will also help teach the respondents about saving. Female respondents were found to have lower levels of financial literacy and family financial socialisation compared to male respondents and therefore female respondents have a greater responsibility to educate themselves in order to improve their levels of financial literacy. It is recommended that female respondents invest more time in gaining a greater understanding of financial concepts and financial practices. This will help female respondents to improve their financial behaviour and make better financial decisions that will result in a better future for them financially. (Filipiak & Walle, 2015 IN Garg & Singh, 2018:179).

Individuals whose parents had financial difficulties followed the financial patterns of their parents, repeating their financial difficulties. Parents are the key influence in their children's lives, therefore the positive or negative financial knowledge, financial attitudes and financial behaviour that individuals have regarding money are influenced by their parents. (Jorgensen & Salva, 2010:468). According to Cameron e*t al.* (2013:5) parents who have more financial resources are more likely to pass on financial experience and knowledge to their children. Therefore, parents need to be taught by educators how to socialise their children, as currently parents are not socialising their children. The reason for this could be that parents do not know enough.

Financial advisors need to be aware that male and female clients have different levels of financial literacy. The financial advisor should be aware of the level of financial literacy of their clients before advising them. The financial advisor might need to provide more explanations of the terminology and financial practices when advising female clients compared to when advising male clients.

The following section provides the shortcomings of the research.

5.8 CONTRIBUTIONS AND SHORTCOMINGS OF THE RESEARCH

This is one of the few studies in South Africa that has investigated the gender gap. This study shows the components of financial literacy and family financial socialisation that are valid and reliable for a South African context. Future studies can use the questionnaire to identify items that measure the components of financial literacy and the components of family financial socialisation. The measuring instrument developed in this study could be used as a baseline and as a source for further investigation in the field of financial literacy.

The results of this study provide insight for financial institutions and schools, both of which need to be aware of the gender gap in financial knowledge and financial attitude. Financial institutions and schools also need to be aware of the low levels of financial literacy and family financial socialisation among individuals.

Educators will be able to provide financial education relevant to male and female students in terms of the gender gap that has been identified in this study. Educators can design financial education that is relevant to male and female students. In addition, financial planners will also be able to use the results of this study to identify the gender gap when providing financial advice to clients. This will ensure that the advice that financial planners provide is suitable to the specific client, be it a male or female.

There is a need for financial education on a national scale, throughout South Africa. The quality of financial education in South Africa should be increased as well as an improved availability of financial education in South Africa. Financial education should target young and old students.

The following shortcomings can be noted about this study. This study targeted individuals aged between 18 and 25 years, who are situated in Port Elizabeth and who are financially dependent on their parents. Thus, non-probability sampling was used in order to distribute the questionnaires to a greater number of individuals. The problem that arose was individuals not returning the questionnaires or individuals not completing the questionnaires correctly.
One limitation was the lack of availability of a sample frame, meaning that not all individuals had an equal opportunity to be selected for this study. Another limitation is the measuring instrument that was used. Some of the items cross loaded or did not load as expected. This resulted in a new factor forming and two factors joining together to become one.

This study only focused on three components of financial literacy and three components of family financial socialisation in order to measure the levels of financial literacy and family financial socialisation of the respondents. There are many components that make up financial literacy and family financial socialisation. Therefore, a gender gap could exist in family financial socialisation, however not in terms of the three components that were used in this study.

5.9 FUTURE RESEARCH

Future research should also include employed individuals who do not live with their parents and who are not financially dependent on their parents. This will be used to compare the financial literacy levels of individuals who are not financially dependent and those who are.

Future research should include individuals who are pursuing a tertiary education in the finance field and compare their levels of financial literacy and family financial socialisation to individuals who are not studying finance related courses. This would be to identify the effectiveness of the finance related course and whether the students take the theory and apply it in their lives.

Future research should include other components of financial literacy and family financial socialisation in order to get more accurate results.

However, this study provided valuable results in terms of the gender gap pertaining to financial literacy and family financial socialisation in a South African context.

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ANNEXURE A: QUESTIONNAIRE

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July – August 2018

Dear Respondent,

The researchers are busy with their Honours degree in Business Management at the Nelson Mandela University. As part of their degree, they are conducting a research project to **investigate the gender differences in financial literacy and family financial socialisation of young individuals.** We kindly request that you complete the following questionnaire regarding your levels of financial literacy and family financial socialisation. The questionnaire should take approximately 15 minutes to complete. There are no right or wrong answers. Only your honesty and the perceptions you hold are important.

You are not obliged to take part in this research. You may withdraw from the survey at any time without any penalty. Your participation is completely voluntary, however it would be greatly appreciated if you could respond to the questions that follow so as to assist the students in completing their research project. Participation will be anonymous and all information will be treated in the strictest confidence.

The results of the survey will be used for publication purposes only and your identity and personal information will be kept completely confidential at all times. By completing this survey you will be providing implicit consent to participate in this study. Please feel free to contact us with regards to any queries you might have or if you are interested in the results of the study. Your participation in the study will be most appreciated and we thank you in advance.

Yours sincerely

RESEARCHER:
Ms F Phiri

SUPERVISOR:
Dr X Antoni

RESEARCHER:
Ms D Goldman

SECTION A: GENERAL INFORMATION

Please indicate your response by placing an "**X**" in the appropriate box.

1. Are you financially dependent on your parent(s)?

Yes, I am financially dependent on my parent(s).	1
No, I am not financially dependent on my parent(s).	2

2. Are you currently living with your parent(s)?

Yes, I am currently living with my parent(s).	1
No, I do not live with my parent(s).	2

3. Please indicate your gender (for statistical purposes only).

Male	1
Female	2

4. Please indicate your age (for statistical purposes only).

18 - 19	1
20 - 21	2
22 - 24	3
24+	4

5. Please indicate your marital status

Never married	1
Married	2
Living with a partner	3
Divorced	4
Other, please specify:	

6. Please indicate your population group (for statistical purposes only).

Asian	1
Black	2
Coloured	3
White	4
Other, please specify:	5

7. Please indicate your highest qualification (for statistical purposes only).

Matric Certificate	1
Diploma	2
Bachelor's Degree	3
Other, please specify:	4

8. Are you a scholar or a student? (for statistical purposes only).

Scholar (matric)	1
Student (above matric)	2
Other, please specify:	

SECTION B: FINANCIAL LITERACY

Below are a number of statements that relate to the financial literacy of individuals. The columns are graded from 1 (strongly degree) to 5 (strongly agree). Please indicate your extent of agreement with the statements by placing a cross (**x**) in the appropriate column.

1	**STATEMENTS RELATING TO FINANCIAL LITERACY**	**STRONGLY DISAGREE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**STRONGLY AGREE**
1	I know how to track my investments.	1	2	3	4	5
2	I am knowledgeable about how to invest my money.	1	2	3	4	5
3	I know a lot about investments.	1	2	3	4	5
4	Compared to most people, I know a lot about investing.	1	2	3	4	5
5	When it comes to investing, I really know more than my friends.	1	2	3	4	5

2	**STATEMENTS RELATING TO FINANCIAL LITERACY**	**STRONGLY DISAGREE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**STRONGLY AGREE**
1	I use money to influence other people to do things for me.	1	2	3	4	5
2	I behave as if money were the ultimate symbol of success.	1	2	3	4	5
3	I must admit that I purchase things because I know they will impress others.	1	2	3	4	5
4	In all honesty, I own nice things in order to impress others.	1	2	3	4	5
5	I must admit that I sometimes boast about how much money I make.	1	2	3	4	5
6	People I know tell me that I place too much emphasis on money as a sign of success.	1	2	3	4	5

3	**STATEMENTS RELATING TO FINANCIAL LITERACY**	**STRONGLY DISAGREE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**STRONGLY AGREE**
1	I contribute to a savings account on a regular basis.	1	2	3	4	5
2	I set money aside for emergencies.	1	2	3	4	5
3	I save for a long-term goal such as buying a car or a house etc.	1	2	3	4	5
4	I regularly set money aside for savings.	1	2	3	4	5
5	I regularly set money aside for possible unexpected expenses.	1	2	3	4	5
6	I make my financial decisions based on what my parent(s) have done in similar situations.	1	2	3	4	5
7	My parent(s) have been the greatest influence on how I make my financial decisions.	1	2	3	4	5

SECTION C: FAMILY FINANCIAL SOCIALISATION

Below are a number of statements that relate to the family financial socialisation of individuals. The columns are graded from 1 (strongly degree) to 5 (strongly agree). Please indicate your extent of agreement with the statements by placing a cross (**x**) in the appropriate column.

	STATEMENTS RELATING TO FAMILY FINANCIAL SOCIALISATION	**STRONGLY DISAGREE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**STRONGLY AGREE**
While I was growing up:						
1	My parent(s) discussed with me the importance of saving.	1	2	3	4	5
2	My parent(s) explained to me how to make financial decisions.	1	2	3	4	5
3	My parent(s) discussed with me how to finance my college/university education.	1	2	3	4	5
4	My parent(s) discussed with me how to establish a good credit rating.	1	2	3	4	5

5	**STATEMENTS RELATING TO FAMILY FINANCIAL SOCIALISATION**	**STRONGLY DISAGREE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**STRONGLY AGREE**
While I was growing up:						
1	My parent(s) taught me how to be a smart shopper.	1	2	3	4	5
2	My parent(s) gave me an allowance to teach me how to manage money.	1	2	3	4	5
3	My parent(s) taught me about donating money to charity.	1	2	3	4	5
4	My parent(s) spoke to me about the importance of saving.	1	2	3	4	5
5	My parent(s) taught me about budgeting.	1	2	3	4	5

6	**STATEMENTS RELATING TO FAMILY FINANCIAL SOCIALISATION**	**STRONGLY DISAGREE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**STRONGLY AGREE**
While I was growing up:						
1	My parent(s) tracked their monthly expenses.	1	2	3	4	5
2	My parent(s) paid their bills on time.	1	2	3	4	5
3	My parent(s) saved money.	1	2	3	4	5

THANK YOU FOR YOUR PARTICIPATION