GENDER DIFFERENCES IN INVESTMENT BEHAVIOR AMONG EMPLOYEES: A STUDY OF EMPLOYEES OF SAFARICOM LIMITED

BY

MUSULA TOM MUKOBA

UNITED STATES INTERNATIONAL UNIVERSITYAFRICA

SUMMER 2015
GENDER DIFFERENCES IN INVESTMENT BEHAVIOR AMONG EMPLOYEES:
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MUSULA TOM MUKOBA

A Research Project Report Submitted to the Chandaria School of Business in Partial
Fulfillment of the Requirement for the Degree of Masters in Business Administration
(MBA)

UNITED STATES INTERNATIONAL UNIVERSITY AFRICA

SUMMER 2015
DECLARATION

I hereby declare that this research report is based on actual and original work carried out by me and has not been submitted to any institution or university other than the United States International University Africa in Nairobi for academic credit. Any references used have been duly acknowledged through citation and referencing.

Signature: __________________________  Date: __________________________

Musula Tom Mukoba
Student ID: 639603

This research report has been presented for examination with my approval as the appointed supervisor.

Signed: __________________________  Date: __________________________

Dr. Timothy Okech.

Signed: __________________________  Date: __________________________

Dean, Chandaria School of Business
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DEDICATION

This research report is dedicated to my family who are my source of everyday inspiration. Special mention to my wife for her unrelenting faith in me and my two daughters; Nasambu and Namicha who have had to endure with my absence as I endeavored to complete this research. May the Almighty God bless you all for your love and patience!
ACKNOWLEDGEMENT

I am thankful to the Almighty God for giving me the strength, health and peace of mind that enabled me to endure throughout the duration of the research study.

My project supervisor, Dr. Timothy Okech was more than a friend to me and he constantly pointed me to the right direction as I was building up the research report. He was patient with me and offered utmost professional guidance and encouragement. I also wish to pay tribute to the staff of the United States International University, Africa, for their support and assistance in achieving the final research project.

Finally, I appreciate the most important people who directed and encouraged me in the adventure of academics and have been my anchor. They include my family, friends and colleagues at work who were understanding enough even when I barely had time for them while pursuing this course.
ABSTRACT

The purpose of the study was to determine if there are any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees. The following research questions underpinned the research study; Are there gender differences in investing decisions? Does financial socialization contribute in determining gender financial behavior? Do gender differences exist in financial literacy?

A descriptive research design was adopted for the study of this research problem. The target population for this study was 4500 employees of Safaricom Limited. In selecting the sample size, a stratified sampling technique and purposive sampling was used. The study used a formula to arrive at the sample size of 94 employee of Safaricom limited. The study used a survey questionnaire administered to each member of the sample population. The study administered the questionnaire individually to all respondents of the study. This study collected both primary and secondary data. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS (Version 20) and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS (Version 20) to communicate research findings. Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open ended questions.

The research was able to demonstrate the extent to which gender differences contribute in determining gender financial behavior. From the research findings, it was established that gender difference contribute in determining gender financial behavior to a great extent. The study further revealed that there was a negative relationship between gender differences and investing decision among employees of Safaricom Limited. The significance of financial socialization and financial literacy in determining gender financial behavior was noted to be significant.
The conclusion on the research was that gender differences affect the investment decision. It was further concluded that financial socialization and differences in financial literacy contribute in determining gender financial behavior.

The research recommended that there should be specific policies aimed at increasing women’s confidence in investment as they were found to display an increased risk aversion compared with men. It further recommended that financial socialization should not be discriminative on the basis of gender and should start at the earliest age possible. Finally women should seek financial literacy as a way of eliminating gender differences in investment behavior. As a recommendation for further research, a study on the factors that are considered by the different genders in investment decisions should be explored.
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CHAPTER ONE

1.0 INTRODUCTION
1.1 Background of the Study

Although gender differences in education, income, and wealth have been narrowing over time, women are generally still placed lower than men when it comes to measures of long-term financial security (Hira & Loibl, 2006). Researchers and financial practitioners have posited that women invest their financial resources more conservatively and, in general accept less financial risk than men (Lemaster & Strough, 2013). The disparity in long-term financial security between men and women is more pronounced in developing countries where gender equality across many spheres has not been realized and requires affirmative action through progressive legislation. This disparity in developing countries is compounded by cultural practices which promote a patriarchal system with Kenya being no exception (Suda, 2002).

Roszkowski and Grable (2010) describe risk in investment as the probability that an investment could result in a loss. They further describe risk tolerance as the degree of one’s preparedness to accept higher investment risk in anticipation of relatively higher returns. Bhushan and Medury (2013) state that an individual who is willing to invest should first conduct a market study and thereafter depending on his needs and circumstances, has to make a choice as to which investment option best fits him. Individuals will portray different behavior while investing, because such behavior is dependent upon the amount of risk one is willing to take and what the expectations are in terms of returns generated from such investments.

Eckel and Grossman (2008) identify the increasing interest in studies on gender and investment behavior. They however point out that these studies have mainly concentrated on data from developing countries especially the U.S. where triennial survey of consumer finances data is collected. It is broadly recognized that people in developed countries differ significantly in various aspects, such as beliefs, life styles, behaviors, habits, personal characteristics, from those in emerging and developing countries. As a result therefore, it
would be expected that findings on gender and investment behavior for developed countries may differ from those of emerging and developing countries, such as Kenya.

Leimberg, Satinsky, LeClair, and Doyle (1993) were among the earliest researchers to conceive the financial planning and investment model. The Leimberg et al. financial management model offers investment managers and researchers a conceptualization of the activities involved in working through the investment planning process. This framework is handy as an operational theoretical model given that it is holistic and gives equal weight to inputs, management processes, and outputs. The model suggested using the framework as a practical tool to assist investment managers summarize the activities involved in the process of investment and financial planning namely; gathering background information, establishing financial objectives, developing financial plans, controlling and executing plans, and measuring performance. This model shares similarities with the Deacon and Firebaugh (1988) theory which dwelt on systems discussion of family financial management.

A multidisciplinary approach to theoretical framework was adopted by Frese (2003) in his thesis that focused on factors that affect investments of an individual. He borrowed heavily from the disciplines of economics, psychology and biology and integrated literature from these divergent fields. He classified his findings on factors affecting investments as viewed from these various disciplines. Li (2004) also researched and formulated the investment decision support framework for retirement planning. He considered factors such as expected life, inflation, changing need, and medical expenses as the critical inputs.

Rangel (2004) came up with a theoretical model of family decision-making that brings out the responsibility of the individual in the family. This framework focuses on the influence of others within a family in the decisionmaking process. The preference of the different members of the family are also taken into consideration. Hurley (2005) researched on investment decision making under biases. She specifically looked at biases associated with risk preferences and job occupation. She found that the investment decision-making outcomes are more consistent and accurate through the reduction of biases.

Although studies on gender differences in investment decisions have largely been conducted in developed countries and predominantly the U.S., there are researchers who have attempted
to carry out such studies in Asia, Eastern Europe and Africa. In India; Kesavan, Chidambaram and Ramachandran (2012) conducted a study with the aim of getting more insight on the investment behavior of individuals based on their demographic factors such as age, gender, income, educational qualification, place and occupational pattern. Their findings indicated that these demographic factors did not influence the type of investment selected. Another research in India by Chitra & Sreedevi (2011) studied the influence of seven personality traits namely; emotional stability, extraversion, risk, return, agreeability, conscientiousness and reasoning on the choice of the investment pattern. Their findings indicated that personality traits of investors influence the choice of investment method.

Bayyurt, Karışık and Coşkun (2013) carried out an empirical study aimed establishing the investment behaviors of women and men by focusing on Turkey which is an emerging country. The study found that in Turkey, while men investors prefer common stocks and real estate to invest in women investors are more risk averse and invest in funds, time deposit and gold. They however did not find any gender differences in the preference of foreign currency investments. Willows (2012) conducted a study in a South African Investment House that offers unit trusts or mutual funds as its primary investment vehicle. She contrasted the returns of male versus female investors net of trading costs and concluded that; trading frequency lowers investors’ return, males trade more than females and lastly that on a risk adjusted basis, females earn higher returns than males.

In Kenya, the gender debate currently revolves around fair representation with a constitutional requirement of at least one third representation by either gender (Kaimenyi, Kinya, & Chege, 2013). There are also conscious efforts through equalization funds such as ‘Women Enterprise Fund’ to ensure women get access to credit and financing which is a vital input in investments (Ijaza, Mwangi, & Ng’etich, 2014). There is also a deliberate government policy to reserve and award at least 30% of government tenders and procurement to the youth, women and persons living with disability. It is against this backdrop that this research attempts to investigate whether there are any significant gender differences in investment behavior as observed from employees of Safaricom Limited.
1.2 Statement of the Problem

It is common practice for investment managers to make use of individual demographics such as gender in classifying investors into risk tolerance clusters. Such risk tolerance categorization forms the basis of establishing investment management standards, controlling purchases and sales of investments, and managing overall client resources (Roszkowski & Grable, 2010).

Whereas this could be valuable information in certain circumstances, it has been revealed that relying on a set of demographics factors for investors with different exposure levels to classify and determine investor risk tolerance could be misleading and may not necessarily improve investment outcome. In some cases use of such demographics as the indicator for risk tolerance has actually ended up in financial losses for investors (Bayyurt, Karışık, & Coşkun, 2013). In addition, there is general consensus among researchers and investment managers that more research concerning the efficacy of certain demographics in categorizing someone into a risk-tolerance cluster is needed (Roszkowski & Grable, 2010; Hira & Loibl, 2006; Lemaster & Strough, 2013). Developing an approach that looks at demographic factors for groups with similar exposure to both differentiate among levels of investor risk tolerance and classify individuals into risk categories could help improve investment outcome. This research study therefore aspired to investigate demographic differences in investment behavior among employees of the same organisation who were assumed to have relatively similar exposure and were expected to behave rationally.

1.3 Purpose of the Study

The study was aimed at determining if there were any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees.

1.4 Research Questions

1.4.1 Are there gender differences in investing decisions?
1.4.2 Does financial socialization contribute in determining gender financial behavior?
1.4.3 Do gender differences exist in financial literacy?
1.5 Significance of the Study
The project was aimed at providing an understanding of the effect of gender on investment behavior of employees. This information is beneficial to the following stakeholder groups:

1.5.1 Financial Investment Advisors
By understanding differences in investment behavior between male and female investors, investment advisors would be in a position to complement their investment advise with a measure of objectivity as opposed to relying on art, intuition, and experience in arriving at an estimate of investor risk tolerance. They would also be in a position to discuss what really matters to male and female investors and what they want their investments to achieve.

1.5.2 Public Policy Decision Makers
The existence of gender differences in investment behavior raises important questions for public policy framers, particularly in light of social security savings and retirement benefits. Given that women are expected to outlive men, there should be specific policy to address their welfare in retirement in light of their observed investment behavior.

1.5.3 Researchers and Academicians
There is hardly any research on gender and investment behavior in Kenya. Behavioral finance and economics is however gaining prominence and therefore this study would contribute greatly to the general knowledge in the field of investment behavior. It will also offer other researchers the opportunity to build on and advance this study in the local settings.

1.6 Scope of the Study
This study was conducted to determine whether there are gender differences in investment behavior among employees of Safaricom Limited; a telecommunication company with its headquarters in Westlands area of Nairobi County in the republic of Kenya. The research was carried out in the month of July 2015. To overcome the possible limitation of non-responsive respondents, all feedback was treated as highly confidential and there was no requirement to disclose the identity of respondents.
1.7 Definition of Terms

1.7.1 Gender
Gender refers to being either male or female and in the context of the research it is considered an important investor risk-tolerance consideration factor because more men than women tend to fit the personality trait of a thrill seeker or sensation seeker (Roszkowski & Grable, 2010). There also is a prevalent belief in our culture that men should, and do, take greater risks than women (Daruvala, 2007).

1.7.2 Investment Advisor
An investment advisor was defined in this research as a financial planner or investment expert. Financial planners and investment advisors are individuals who are paid to “advise clients about personal finances. He or she has undergone training and has met the qualifications for particular professional certification (He et al., 2007)

1.7.3 Financial Risk Tolerance
Financial risk tolerance is the acceptable amount of risk that an investor is willing to take for a given level of return (Jianakoplos & Bernasek, 2007). An investor with a high level of risk tolerance would be expected to accept a higher exposure to risk in the sense of taking sole responsibility, acting with less information, and requiring less control than would someone with a low level of risk tolerance (Ball et al., 2010)

1.7.4 Stereotyping
Stereotyping is the act of assigning to a member of a particular group a characteristic or trait based solely on the individual’s membership in that group. An individual is not seen as a distinct being with his own individual attributes but solely as a member of a group conforming to some pattern (Grossman & Lugovskyy, 2011).

1.8 Chapter Summary
The subsequent areas of discussion are contained within as sub-sections in the introduction section. They include the following; background of the problem, statement of the problem, purpose of the study, research objectives, significance of the study, scope of the study and definition of terms. Of importance is the determination of whether there are any gender
differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees. In chapter two, literature review is covered and chapter three then delves into the research methodology. Chapter four will be data analysis, interpretation and presentation while chapter five will be summary of finding conclusion and recommendations.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter covers the literature related to the area under study. It reviews the information from other researchers who have carried out their research in a similar field of study. The research questions will be reviewed in detail to establish the relationship between gender and investment behavior among employees.

2.2 Gender Differences in Investing Decisions

According to Ricciardi and Simon (2000), research into behavioral finance has gained prominence over the last decade with attempts to understand the investment decisions of individuals. They further state that behavioral finance can be broken down into the three disciplines of psychology, sociology and finance. These three disciplines are then responsible for shaping the choices and investment behavior of individuals.
Fama and French (1992) in their efficient market hypothesis postulate that individuals are expected to take decisions and act in a manner that will allow them to maximise their utility; that is portray rational investment behavior. However, certain risk taking behavior points to the contrary (Eckel & Grossman, 2008). Individuals deviate from rational behavior when they feel overconfident, act on gut feeling, act out of personal preferences or put too much weight on past experiences (Willows & West, 2012).

2.2.1 Investment Preferences and Risk Differences
The empirical study conducted by Jianakoplos and Bernasek (1998) is among the earliest studies that attempted to use the Survey of Consumer Finances to establish gender differences in investment behavior. Basing their study on the 1989 Survey of Consumer Finances in the United States they established that 57% of women were not willing to take any financial risks as compared to 41% of men.
Charness and Gneezy (2007) conducted a research on the same topic and classified stocks and personal businesses as more risky investments while, certificates of deposits, government bonds and real estate were viewed as relatively low-risk and lower return investments. Consequently, it was revealed that women choose to invest in stocks and personal businesses less often and in low amounts than men but they choose to invest more often and in high amounts in low-risk, lower return assets, the certificates of deposit and homes.

When making long-term investment decisions like pension funds, the conservative strategy of women was observed to be more pronounced. This was however partly due to the lower wealth accumulated given that they have lower incomes as compared to their male counterparts. The results were however not significantly different even after controlling for economic and demographic variables (Charness & Gneezy, 2007). Women were also found to adopt a risk aversive strategy regardless of their occupation, experience and level of expertise. It was evidenced that a woman fund manager would still assume a risk aversive stance and thus advises her clients to choose lower risk and lower return investment.

The approach however adopted by women appears to be in line with the risk and return relationship theory as postulated by (Howells & Bain, 2008). They opine that the expected return of a security increases as the risk of that security increases and vice versa. Women investors have been found to prefer more certainty and lower returns as a trade-off (Roszkowski & Grable, 2010). However, risk and volatility is perceived and interpreted by long-term not just as risk but as the opportunity to achieve higher returns (Howells & Bain, 2008).
2.2.2 Influence of Overconfidence in Investment Decisions

Overconfidence has been well-defined as the tendency for people to overestimate their knowledge, cognitive abilities and the precision of their information and thereby overestimate their own chances of success (Deaves, Luders, & Schröder, 2010). In his study, Benos (1998) concluded that overconfidence emanated from individual’s overestimates of the accuracy of their own information. Individuals even when presented with evidence that they are overestimating the accuracy of their information will still proceed to overestimate the accuracy but to a lower degree (Weinstein, 1980).

Barber & Odean (2001) carried out a research using data for over 35,000 households and found that men are more prone to overconfidence than women, especially in male-dominated fields such as finance. Rational investors trade only if the expected gains exceed transactions costs. Overconfident investors on the other hand overestimate the level of accuracy of their information and as a result the expected gains of trading are also overestimated. Such
confident investors may even trade when the true expected net gains are negative (Barber & Odean, 2001)

The overconfidence nature of the male species is an evolutionary trait where in the early days of hunters and gatherers men were required by nature to be overconfident in their skills in order to take upon the tasks not only hunting of for food but also for overall survival (Subrahmanyam, 2007). In an experiment on 1,359 stock market investors and general business people, it was found that women had considerably lower confidence in an investment assignment than men. Even after adjusting for experience, education and value of the investment; women were still found to have lower confidence in their investment decisions (Estes & Hosseini, 1988)

Gysler, Kruse, and Schubert (2002) conducted a study in which men’s and women’s overconfidence levels were split into high knowledge and low knowledge groups. The conclusion from this research was that men were found to be significantly more overconfident in both knowledge groups. Nonetheless, it was observed that as knowledge increased men became more risk averse while women took up more risk thus narrowing the overconfidence gap (Gysler, Kruse, & Schubert, 2002). Bhandari and Deaves (2006) also found that male pension plan participants in Canada were more overconfident than their female counterparts even when there were no notable differences in investment knowledge.

Bengtsson, Persson, and Willenhag (2005) conducted a research on overconfidence at the Stockholm University in Sweden with a group of Macroeconomics students. Exams were structured in such a way that there were four compulsory questions and for a student to pass (P) they must obtain a P grade for each of the four questions, else they will receive a fail (F) grade. For a student to get a very good (VG) grade, such a student must obtain a VG grade for each of the four questions as well as a VG grade for the fifth optional question. When the student completed the four compulsory questions, they would not know if they had obtained the four VG grades and hence decide if or not to attempt the fifth question. The decision was whether to attempt the fifth question on the basis of the students’ perception of their own results in the first four questions. The findings indicated that 78.8% of the female students passed the exam (P) and 11.8% got a VG grade. For the male students, 76.5% passed the
exam (P) and 16.1% obtained a VG grade. The conclusion was that female students were better at passing the exam while the male students were significantly better at passing with a VG grade and this was based on the overconfidence level of the male students on obtaining a VG grade on the compulsory questions. Of the 480 male students who qualified to take up the fifth question, 87.1% seized the opportunity and 83.8% of the 506 female students that qualified for the fifth question took it up.

Grinblatt and Keloharju (2009) conducted a research in Finland which indicated that overconfident investors were more predisposed to overtrading and this is in congruent to (Barber & Odean, 2001) findings in the USA. Overconfident investors were found to often underestimate their risk and as such hold high-risk, high-return portfolios (De Long, Shleifer, Summers, & Waldmann, 1990). The findings were that such overconfident investors performed much better than the less confident due to overreaction in their assessment of average investments. They exploit their information more aggressively either in the long run or short run (De Long, et al., 1990). According to Hirshleifer and Ying Luo (2001) since the overconfident investors exploit valid information, their aggressiveness results in higher than expected profits and this is in agreement with (De Long, et al., 1990).

Dittrich, Guth, and Maciejovsky (2001) found out that increase or decreases in overconfidence is dependent upon the complexity of the task at hand and the perceived accompanying uncertainty. The complexity of a task can determine the amount of overconfidence and overconfidence would decline when the observed uncertainty is high. Ricciardi and Simon (2000) use the example of the space shuttle Challenger incident to explain the concept of overconfidence. Ricciardi and Simon (2000) using the example of the space shuttle Challenger explosion explain that there should have been no surprise for anyone familiar with the history of Booster Rockets as there was only one failure in every 57 trials. In just under one year before the disaster, NASA had put the probability of an accident to one in every one hundred thousand. That was seen as optimism that was far from unusual as all categories of experts, from nuclear engineers to physicians are fond of displaying overconfidence in their plans.
Similarly, investors are capable of forgetting and failing to learn from previous mistakes such as bad investment or financial choices. Ricciardi and Simon (2000), concur that failure to learn from past financial decisions has the ability to strengthen the overconfidence problem because investors keep being overly-optimistic concerning their financial decisions. According to Graham, Stendardi, Edward, Myers, & Graham (2002), women who possess lesser inclination towards overconfidence in investment choices will usually display an increased risk aversion compared with male counterparts. However, the lower inclination towards overconfidence is accompanied by more thoughtful and informed investment decisions (Graham, et al. 2002). Women then, with less confidence in financial investments would be likely to consider all information available and to ask more questions making them better investors than men and this is supported by (Willows & West, 2012)

Overconfidence generally improves market efficiency over rationality provided overconfidence is not too high because it introduces information into the market while having a comparatively small effect in generating mispricing (Willows & West, 2012). A market with very high overconfidence can also have superior price quality to a rational market when there is a high amount of private information acquired relative to publicly available information (Ricciardi & Simon, 2000).

2.2.3 Self-Attribution Bias and Self-Efficacy Factors
Hirshleifer and Ying Luo (2001) define self attribution bias as the phenomenon observed when people attribute successful outcomes to their own abilities but are quick to blame unsuccessful outcomes on external factors that are beyond them. Self-efficacy on the other hand is the measure of the belief in an individual’s own ability to complete assignments and tasks and reach the expected goals (Ormrod, 2006). Gysler, et al. (2002) conducted a study and found out that men perceived that their initial knowledge of an assignment was much higher than women. This was irrespective of whether the men in the research had the knowledge to do the task or not. They additionally note that as men gained knowledge in undertaking an assignment, they became less confident in their ability to do the task and more risk averse. On the other hand as women expanded their knowledge in undertaking a task, their skills confidence levels went up and were as a result able to seek more risk.
In a study on self estimates of Intelligence Quotient (I.Q) tests Hogan (1978) found out that men generally evaluate their intelligence as being higher than women’s. Rammstedt and Rammsayer (2002) don’t fully concur with Hogan (1978), based on Thurstone’s primary mental abilities, their findings indicated that in general men don’t estimate their intelligence as much higher than that of women. The differences however are only visible within specific areas such as mathematics and reasoning where men estimated their intelligence to be higher than women. Conversely, women also estimated their abilities higher than men in the domains of art and music.

Endres, Chowdhury and Alam (2008) conducted a research to examine whether men and women accurately recognize their self-efficacy and if they set goals in a complex financial decision situation. Their findings indicated that men’s self-efficacy was substantially higher than that of women. It was however noted that both men and women significantly underestimated their own self efficacy and generally women were observed to be less confident. Other findings in their study indicated that women’s personal goals were significantly less challenging than that of men’s.

Beyer (1998) picked a study where tasks were seen as gender neutral and found that no differences were evident in the self-perception between women and men. Nevertheless, it was found that for masculine related tasks, women often underestimated their own performance and gave a more conservative response bias. It was also found that women were perceived to have higher negative recall bias, implying that they are likely to recall their past mistakes more than men do (Beyer, 1998). A higher negative recall bias is however of importance when it comes to learning from the past mistakes and seeking for continuous improvement.

According to Barber and Odean (2001) investing has been perceived as a more male dominated field from the historical times and is therefore more of masculine task than feminine. This being the case, it would imply that women’s self perception in investing
would be lower than men’s. Women would also naturally underestimate their own performance in an investment situation.

An empirical study conducted in the U.S.A by Minter, Grunppen, Napolitano, and Gauger (2005) found that men and women espouse success and failures differently. Women were found to attribute success for a well undertaken task to external factors such as good luck and support from immediate colleagues, friends and family. For poorly executed task, women were found to cite lack of skills as the raison d'être. Men on the other hand were found to attribute good performance to their skills and bad performance to external factore such as bad luck. The observed self-serving bias in men goes to reinforce the findings that men are more overconfident than women (Willows & West, 2012)

2.3 Financial Socialization and its Contribution in Determining Gender Financial Behavior

2.3.1 Social Learning and Financial Social Learning Theory
Social learning has been defined as the process of learning behavior from the environment through the process of observation (Bandura, 1977). Financial social learning on the other hand as described by Danes (1994) is much more inclusive than learning to effectively function in the marketplace. It is the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to the financial viability and individual well-being. Socialization begins in childhood in our society and continues, to some extent, throughout life. Parents may expect their older children to be financially independent but Danes and Hira (1987) found that they have little financial knowledge to draw upon.

In a study of college students, Danes & Hira (1987), established that students had low levels of knowledge in insurance, credit cards, and overall financial management areas. They only knew general facts about money management topics, but lacked knowledge in specifics. The question, then, is how much money management knowledge and attitudes about money are transferred from parents to children within families? Financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior in
people at a very early age. Of importance is to understand whether gender role in financial socialization is responsible for the perceived lower levels of overconfidence in women and low risk tolerance.

In the social learning theory, Bandura (1977) posits that people learned their own behavior by observing behaviors of the people that are close and intimate to their lives. The process of learning by observing was referred to as modeling and it was argued that people learn more quickly and more effectively through modeling. Children more often that not, imitate and role play their parents’ behaviors when they are with their peers.

Prior research suggests that socially stereotyped gender roles have an impact on behavioral differences in males and females (Hare-Mustin & Maracek, 1990). However, gender is often thought of as not necessarily whether an individual is biologically male or female, but as the way they have been socialized to act as feminine or masculine (Hare-Mustin & Maracek, 1990). Even as every individual presumably undergoes socialization and acquires attitudes and behaviors through social learning, social learning may not be equal depending on one’s gender. Notably, individuals may be socialized differently regarding money and financial behaviors depending on their gender.

Garrison and Gutter (2010), note that the stereotypic social construction defined for a typical female is that of an emotional and sensitive homemaker and caretaker whereas the typical male is seen as an aggressive and assertive family defender and supporter. This stereotypical view permeates the modern labour division where women are unconditionally expected to be stay at home mums to take care of the family while men are expected to be industrial or economic drivers.

As a result of socialization at an early age, men learn to be outgoing and achievement oriented whereas women learn to be emotionally oriented and reserved in their in their relations with others (Chen & Volpe, 2002). Powell and Ansic (1997) in congruence found out that girls are generally socialized to respect male authority and avoid expressing
assertiveness and aggressiveness while on the other hand boys are encouraged through socialization to be assertive and aggressive.

**2.3.2 Agents of Financial Socialization**
The key agents of financial socialization as conceived by Ward (1974) were; family, peer group and mass media. Researchers have in the recent past however included two other agents that have been noticed to greatly influence socialization; these are culture and institutions (Beutler & Dickson, 2008; Gudmunson & Danes, 2011).

Keranne & Hogg (2010) posited that the family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life as children transit into young adults and finally into adults. According to Allen (2008) parents directly or indirectly affect financial socialization of their children. The financial socialization process constitutes of modelling consumer behavior, coming up with dos and don’ts on children’s consumer behavior and having candid conversations concerning buying choices, finances, credit and savings (Allen, 2008).

Parent-child interaction about money, financial monitoring and parental warmth were found to explain the observed cognitive behavioral characteristics of adolescents’ financial behaviors (Kem et al, 2011). Parents who were more cautious as money managers were found to better socialize their children into avoiding unnecessary debt (Hibbert et al, 2004). On the other hand, money was viewed as a source of problems by young adults who came from a family where parents argued about money (Allen 2008). Jinhee Kim and Swarn Chatterjee (2013), argued that parents’ inability to provide warmth and comfort during difficult financial periods could also result in the development of financial worry in childhood and consequently foster reluctance in young adulthood to seek financial and emotional support during times of crisis.

Prior investigations have found that parental socialization and instruction in financial matters exert a positive influence on a child’s efforts to acquire adaptive financial knowledge, skills, and attitudes (Jorgensen & Salva, 2010; Kim et al, 2011). As Danes (1994) found out, the
parent’s own financial beliefs and experiences and the age at which a child is initiated into financial matters have an impact on parental influence in financial socialization. It has nonetheless been observed that parental guidance declines gradually as children develop into adolescents (Jorgensen and Savla, 2010).

Sociological research implied that gender social role significantly influences gender social behavior. According (Hare-Mustin & Marachek, 1990), gender is not necessarily explained whether a person is male or female, but socially interpreted as the way that an individual learns to act as a stereotyped masculine or feminine”. Social learning resources and focus might not be equally disseminated to male and female, the resultant being having individuals socialized differently regarding money and more importantly their financial behavior. On the basis of that view, Chen and Volpe (2002) found that, generally, women tended to have insufficient financial knowledge compared to men, and ranked personal finance as less important subject.

2.3.3 Biological Determinism versus Socialization in Predicting Behavior

In explaining ‘Sex’ and ‘Gender’ Berenbaum (2002) advanced that sex usually refers to the anatomical structure of a person, in particular to the sexual organs of the body, which is usually fixed from birth onwards. Sex characterizes the differences between a man and a woman’s body. Gender on the other hand refers to the social role of an individual, based on the person’s sex. Gender is seen as relating to the meanings that are attached to the anatomical make-up of men and women within a culture. This is not only limited to the physical reality but a whole set of outward and hence historical and social factors that determine gender.

Berenbaum (2002) in an empirical research on the issue of genetics and social roles went about to establish whether there is evidence that any human behaviors are male-oriented or female-oriented. She found out that from a young age, girls and boys are apt to choose different kinds of toys, splitting stereotypically into the "truck" and "Barbie doll" camps. Boys tend toward more active and aggressive play than girls, and fare better than girls in tests of spatial, navigational, and mathematical abilities. She further found that female strengths
usually include better verbal skills, precision manual dexterity, emotion decoding, and the ability to recall objects and their locations within a confined space.

Berenbaum (2002) concluded, that there was evidence that biology does work on behavior that shows sex differences, however she pointed out that socialization plays a significant role in amplifying the differences. She explained that most people start out with small biological differences which send us off on different environmental trajectories. Socialization then magnifies the differences until they become bigger over time. She gives an example of a girl with a slightly increased predisposition to be interested in babies, who after hanging around babies becomes so comfortable with babies and after getting praises for babysitting it becomes a strong interest due to the magnification of socialization. Berenbaum (2002) posits that the debate is whether ‘nature’ or ‘nurture’ namely biology evolution or sociology evolution, is primarily responsible for development of human behavior.

Berenbaum (2002) contends that with training and support, individuals can strengthen cognitive and behavioral skills across the gender divide notwithstanding the cause of the difference, the behavior can be changed by the right intervention. Men could be taught to be more emotionally sensitive, and women to have better spatial abilities. Taifel & Turner (1986) in the social identity theory state that people through participating in identified groups are motivated and gain higher self-esteem. The group to which a person belongs will consequently show their participants the pattern of who they are and how they should behave in the social atmosphere (Terry, D.J., Hogg, M.A. 1996). Taking an example of male and female as two clusters, women should feel the sense of belonging to the socially defined feminine group and men are disposed to join the masculine group. The inference would be that women raise their sense of self-esteem to become more feminine and male raise their self-esteem to become more masculine.

Byanyima (2005) postulated that in the society male and female social roles are divided as bipolar in which individuals have to be at least one end of a linear spectrum and individuals must conform into either normal man or woman. She further added that usually, communities bestow the roles by expecting that biological women and men follow these ‘appropriate’
roles. Although cultures may differ from one society to another, majority favor a patriarchal system with men perched at the top (Byanyima, 2005).

Simone de Beauvoir (1949), a philosopher and feminist described women's experience of life by stating that, “one is not born a woman, one becomes one.” Gender sociologists believe that culture and customs shape behaviors of biological gender. Schwalbe (2005) demonstrated that human beings were taught to be their culturally defined male or female via different social agents including parents, friends, teachers, schools, and even modern media, and that their learned social and family roles must be consistent with social expectation.

2.4 Gender Differences in Financial Literacy

2.4.1 Gender and Financial Literacy

Hung and Brown (2012) define financial literacy in line with the OECD/INFE definition as a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing. Primarily, financial literacy would be impacted by individual traits such as cognitive ability, personality type, and preferences (OECD, 2013).

Empirical evidence indicates a positive impact of financial literacy on financial behavior and financial status in a number of behavioral areas with financially-literate individuals found to be better at budgeting, saving money, and controlling spending (Perry and Morris, 2005); handling mortgage and other debt (Lusardi and Tufano, 2009); participating in financial markets (Van Rooij, Lusardi et al., 2011); planning for retirement (Lusardi and Mitchell, 2008); and finally, successfully accumulating wealth (Stango and Zinman, 2009). Yoong (2010) found out that the typical consumer has limited objective as well as perceived subjective understanding of financial issues, and many consumers express lack of ability and or motivation to gain and understand financial information and knowledge.

Hung and Brown (2012) acknowledge that gender differences in financial literacy do exist; they suggest that women are shown to be relatively less financially skilled than men along several dimensions though they recognize that country-specific context varies. Rawlings and
Rubio (2005) found out that financial literacy differences affect relative economic power within the household if men and women allocate household resources according to different preferences. Households have been found not to act as a single unitary decision maker; where resources are in women’s hands it has been observed to be more likely spent on improving family well-being, particularly that of children (Handa and Davis, 2006)

Delavande et al. (2008) conducted a research using largely the same sample of individuals, undertook a Cognitive Economics Survey which showed that women’s mean scores were lower than men’s on 25 financial knowledge questions, including more sophisticated financial concepts such as portfolio diversification, institutional knowledge, and aspects of how annuities work.

In the US, National Council on Economic Education conducted an online survey to a sample of American teens and adults; knowledge was ascertained in the areas of; economics and the consumer; factors pertaining to production; money, interest rates and inflation; personal finance, government and in economics. It was found out that overall performance was higher for men, on average, than for women (Markow and Bagnaschi, 2005). Similarly, the US National Foundation for Credit Counseling’s fifth annual financial literacy survey conducted in March, 2011, concluded that women are significantly less likely than men to give themselves a failing grade for their personal finance knowledge (National Foundation for Credit Counseling, 2011).

Across different countries, MasterCard Worldwide measured financial literacy in 24 markets. The topics of interest included basic money management, financial planning and investments. The outcome of the survey is broadly consistent with other prior results, but gives more information on women in the Asia Pacific, Africa and Middle East regions. In several markets where the study was conducted, a knowledge gaps exist and the survey’s sampling frame had important limitations, as it selected only urban adult residents with a bank account, and is therefore not representative of the country’s population as a whole (Mastercard International, 2011).
2.4.2 Gender differences in financial behavior and strategies

Hung and Brown (2012) contend that in addition to gender differences in financial knowledge and attitudes, men and women also display a set of different financial behaviors and strategies. Women are not always outperformed by men in all domains: for instance they are more likely than men to have a budget and to keep track of their finances. Nevertheless, in several countries there are areas where women show vulnerabilities, including in making ends meet and saving, as well as in choosing and holding financial products (Hung and Brown, 2012). The existing evidence, albeit limited to a small number of countries, suggests that gender differences in the ability to make ends meet and in saving are partially related to differences in socio-economic differences across men and women.

According to OECD (2013) survey, the responsibilities for household finances and budgeting in many countries fall to the women or have women playing an important role managing the household finances. It was found out that in the Czech Republic, Peru, Poland, the UK and the British Virgin Islands (BVI) almost one third of married or cohabiting respondents indicated that the wife or the female partner had main day-to-day financial responsibility. A way to gain insights on individuals’ ability to keep track of their finances is to look whether they have personal or joint responsibility for day to day money management decisions in their household and have a budget. The findings that women are more likely to have a budget is also in line with the fact that they are significantly more likely than men to report that they keep a close watch on their financial affairs in Estonia, Norway, Poland and the UK, even though gender differences are not very (OECD, 2013).

Nibud (2012) carried out a research conducted in the Netherlands which showed that women are more likely than men to know what their balance is, to give estimates of household expenses, and to plan their spending on costly items. In New Zealand, results of the 2006 and 2009 Financial Knowledge Survey indicated that men were less likely than women to control their expenses: women were found to keep a fairly close eye on their expenses, or that they used records to keep track of their expenses (ANZ–Retirement Commission, 2009). In Portugal, women gained higher scores than men in a composite index measuring short-term money management capability and saving propensity (Banco de Portugal, 2011). In the
United Kingdom, women outperformed men at keeping track of finances (Atkinson et al., 2006).

OECD (2013) found out that when times are tough and individuals are trying to make ends meet, women preferred to reduce their spending by cutting down on costs of non-essentials. On the other end, men were found to prefer looking for extra money. Further analysis suggests that men and women are not equally able to make ends meet, in spite of women being better at keeping track of their finances. Moreover, men and women appear to engage in different strategies when their income does not cover their living costs. In a range of countries, including Armenia, Germany, South Africa and the BVI women are more likely than men to have experienced problems in covering living costs in the previous year.

Women’s inability to make ends meet can be a sign of a lower ability to save for unexpected expenses and of low financial literacy, but at the same time it is certainly related to women’s lower income levels on average. In Australia women appear to be better than men at budgeting but at the same time they feel less comfortable about their financial position than men, with fewer women reporting that they could get by for some time in case of a financial emergency. On the contrary men were found more likely to take up a second job or work overtime to earn the extra money to make ends meet (Australian Government and Financial Literacy Foundation, 2008).

2.4.3 Gender Differences in Access to Entrepreneurship and to Finance
Weiler and Bernasek (2001) note the growing interest in research around entrepreneurship. They further opine that despite this fact, the number of women entrepreneurs has increased fundamentally in the recent years and the potential of women entrepreneurship has only started to emerge but is still lags behind that of men. Allen et al., (2007) observed the proportions of entrepreneurship in 43 countries and revealed that in most of these countries the proportion of women’s entrepreneurship were lower than that of men.

OECD (2013) posits that not only do women have more difficulties in accessing salaried employment on an equal basis with men, but they also lag behind when they engage in
entrepreneurial activities. In all regions of the world there are more male than female entrepreneurs, with a relatively high proportion of enterprises with at least one female owner in East Asia, Eastern Europe and Central Asia, and Latin America (35-45%) and a very low proportion in South Asia (less than 30%). In setting up business, it was found out that women generally start on a smaller scale compared to men and confine themselves in a limited range of sectors that more often than not require low capital intensity. Even when enterprises in the same size class and industry are compared, women-owned businesses are found to have lower sales, profits and labor productivity (IFC, 2011)

Countries with generally lower per capita and GDP tend to have a higher percent of women entrepreneurs as opposed to countries with higher per capita and GDP (Pines, Lerner & Schwartz, 2010). This they attributed to the tendency of women in countries with lower per capita and GDP having no other option for making a living and therefore being pushed into entrepreneurship. This phenomenon helps to explain the different motivations for starting a business; the ‘necessity’ versus ‘opportunity’ motivational factors. Allen et al., (2006) observed that another category of necessity entrepreneurship exists and is common among women whereas opportunity entrepreneurship is predominant among men. Orhan and Scott (2001) chose the terminologies push versus pull factors as the reason behind getting into entrepreneurship. The push factors force people to become entrepreneurs, whereas pull factors appeal them to entrepreneurship. The influence for women in poor countries, appears to be mainly swayed by push rather than by pull factors.

In a study on gender and entrepreneurship at Ben-Gurion University in Israel, Pines and Schwartz (2008) found that about double the number of men either had a business or intended to start a business compared to women. Men also voice a greater predilection for being entrepreneurs and see themselves as more entrepreneurial and as possessing greater business acumen than women. It was however noticed that all the gender differences nevertheless disappear in the group of students who either owned a business or intended to start a business.
According to OECD (2013), access to finance is a key constraint for both male and female micro and small enterprises in developing countries. Nevertheless, women have more hurdles in accessing finance, and lesser women than men get capital from banks to finance their businesses. Additionally, women might be charged higher interest rates and asked for more guarantees, as they often have shorter credit histories, less operating capacity and collaterals. Bucher-Koenen et al., (2012) point out that gender differences in financial literacy are strongly correlated with differences in socio-economic conditions of men and women. This therefore implies that addressing the factors that limit girls and women’s access to education and employment opportunities would be likely to have positive effects, among the others, also on reducing the gender gap in financial literacy, thus improving women’s financial empowerment.

2.5 Chapter Summary
The chapter provided a general discussion of the literature reviewed and this was necessary in order to see what prior studies had found out in this field and their relevance in assisting to answer the research questions of this study. The chapter has also explained some of the theoretical frameworks and empirical findings behind the study of gender differences in financial behavior. Chapter three will then deal with research methodology, the population of study, sampling design adopted and the data collection methodology.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

Research methodology refers to the general approach to reviewing a research topic. It is the framework underlying the strategy of a research. The chapter specifies the methodology, which was used to carry out the study. It further describes the type and source of data, the target population and sampling methods and the techniques that was used to select the sample size. The chapter further gives a description of how data was collected and analyzed. The suitable methodology in this study gives the guidelines for information gathering and processing.

3.2 Research Design

Research design is the basic plan that indicates an overview of the activities that are necessary to execute the research project. A descriptive research design was used to study this research problem. Cooper and Schindler (2003) define a descriptive study as one that is concerned with finding out the what, where and how of a phenomenon. This method was concerned with intense investigation of problem solving situations in which problems are relevant to the research problem.

The research project focused on determining if there were any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees. The underscoring concept was to choose a number of targeted cases where an in-depth analysis had identified the possible alternatives for solving the research questions based on the existing solution applied in the selected case study. The study attempted to offer to describe and define the subject, by creating a profile of group of problems (Cooper & Schindler, 2003).
3.3 Population and Sampling Design

3.3.1 Target Population
In the field of statistics, a target population refers to the specific population about which information is desired. Ngechu (2004) describes a population as a well-defined set of people, services, elements, events or group of things or households that are under study and generalize the results. The definition assumes that the population is not homogeneous. The target population for this study was the employees of Safaricom limited who are approximately 4,500 in number and are distribution across gender as indicated in the table below. According to Mugenda and Mugenda (2008) the target population ought to have some observable features, to which the study intends to generalize the results thereof. This definition is based on the assumption that the population is not homogeneous.

Table 3.1: Target Population

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of Employees</th>
<th>Percentage of Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>2088</td>
<td>46%</td>
</tr>
<tr>
<td>Male</td>
<td>2412</td>
<td>54%</td>
</tr>
<tr>
<td>Total</td>
<td>4500</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Safaricom Human Resources (2015)

3.3.2 Sampling Design

3.3.2.1 Sampling Frame
The definition of a sampling frame has been given as the complete list of all sampling units, from which a sample can be selected (Kombo and Tromp, 2006). The sampling frame for this study was 4500 employees of Safaricom Limited.

3.3.2.2 Sampling Technique
In this study, stratified sampling technique was used to select the sample. Kerry and Bland (1998) opine that this technique produces estimates of the overall population parameters with a greater precision and ensures a more representative sample is derived from a relatively
homogeneous population. This in turn increases the precision of any estimation methods used. Cooper & Schindler (2006) further state that if well chosen, samples of about 10% of a population can often give good dependability. Stratified random sampling technique was used since population of interest is not homogeneous and could be subdivided into groups or strata to obtain a representative sample. The elements of stratification comprised of gender, age and marital status.

3.3.2.3 Sample Size

The study made use of Slovin (1960) sample size formula to compute the sample size of 94 employees of Safaricom Limited from the available population. The selection was arrived at as follows:

\[
n = \frac{Z^2 p \cdot q N}{e^2 (N - 1) + Z^2 p \cdot q}
\]

Where \( n \) = the required sample size
\( P \) = proportion of population with the required characteristics of the study
\( Q = p \) roportion of population without the required characteristics of the study (1-\( P \))
\( N \) = Total population
\( e \) = accuracy level required. Standard error = 1%
\( Z \) = \( Z \) value at the level of confidence of 95% = 1.96

\[
n = 1.96^2 \times 0.5 \times 0.5 \left( \frac{4500}{0.1^2 \times 4499 + 1.96^2 \times 5.5 \times 0.5} \right)
\]

\[
n = 0.9604 \left( \frac{4500}{44.99 + 0.9604} \right)
\]

\[
n = \frac{4321.8}{45.9504}
\]

\[
n = 94.05
\]

\[
n = 94
\]

From the above population, a sample of 2.08% was selected from within each group in proportions that each group bears to the study population. This sample is appropriate because the population is not homogeneous and the units are not uniformly distributed. Furthermore, owing to the big number of target population and given the time and resource constraints, the
sampling at least 30 elements is recommended by Mugenda & Mugenda (1999). This generated a sample of 94 respondents which the study sought information from.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of Employees</th>
<th>Proportion</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>2088</td>
<td>2.08</td>
<td>44</td>
</tr>
<tr>
<td>Male</td>
<td>2412</td>
<td>2.08</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>4500</td>
<td>2.08</td>
<td>94</td>
</tr>
</tbody>
</table>

**3.4 Data Collection Methods**

With regard to determining if there are any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees, the study made use of survey questionnaires administered to each participant of the sample population. The questionnaires comprised of open and close-ended questions with the close-ended questions intended to provide more structured responses for the purpose of deriving more tangible recommendations. These close-ended questions were used to test the rating of various attributes and helped in reducing the number of related responses in order to obtain wide ranging responses. On the other hand, open-ended questions provided supplementary information that may not have been captured in the close-ended questions.

The questionnaire was carefully designed and tested with a few members of the population for further improvements. This was done in order to enhance its validity and accuracy of data to be collected for the study.

**3.5 Research Procedures**

The study administered the questionnaire individually to all respondents of the study. The study exercised care and control to ensure all questionnaires issued to the respondents were received and to achieve this, the study maintained a serialized register of questionnaires, which were sent, and those that were received back. The questionnaire was administered using a drop and pick later method.
As part of fieldwork management and to ensure a high response rate, the questionnaire was followed with a telephone call to explain the objectives of the research study and to offer personal assurances that information provided will be treated with utmost confidentiality. Additionally, the respondents were offered a copy of the completed research project if they so wished.

### 3.6 Data Analysis Methods

Completed questionnaires were edited for completeness, accuracy and consistency before any processing of the responses was done. The statistical tool SPSS version 20 was used to analyze the quantitative data collected and this was then presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions to communicate research findings.

Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open ended questions. This study was interested in determining if there are any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees.

### 3.7 Chapter Summary

The chapter covered a description of the research methodology used in this study including the population, sampling design and size, data collection and analysis methods. For data analysis and presentation, both quantitative and qualitative methods of analysis were used. The population consisted of 4,500 employee of Safaricom. The data was collected using a structured questionnaire designed by the researcher. This questionnaire was pilot tested with a sample of 15 respondent’s. The corrections and changes arising from the pre testing were made and the actual survey carried out. The next chapter, presents the results of the survey.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the findings of the study and provides an interpretation of the results. Background information of the respondents and the findings of the analysis based on the objectives of the study are presented. Use of descriptive and inferential statistics was adopted to present the findings of the study.

4.2 Response Rate and Background of the Respondents

4.2.1 Response Rate

A response rate of 86.2 percent was achieved by using a sample size of 94 respondents from whom 81 filled in and returned the questionnaires as represented in figure 4.1 below. The response rate was deemed satisfactory and representative enough to make conclusions for the study. According to Mugenda and Mugenda (1999), a response rate of 50 percent and above is sufficient for analysis and reporting;

This section presents the response rate of the study

![Response Rate](image.png)

**Figure 4.1: Response Rate**

4.2.2 Demographic Information

In the subsection respondent demographic are provided, these are the gender, age, level of education, years of working in the organization and level of management.
From the findings, the study revealed that majority of the respondent as shown by 59.3 percent indicated that they were males whereas 40.7 percent of the respondent indicated that they were females. This is an indication that both male and female were involved in this study, though not in equal proportion. This shows that the findings of the study will not suffer from gender biasness.

**Gender of the Respondents**

![Gender of the Respondents Chart]

**Figure 4.2: Gender of the Respondents**

The study required the respondent to indicate their age and based on the findings, it was found that most of the respondents, as indicated by 44.4 percent were aged between 31 to 40 years, another 35.8 percent of the respondent indicated that they were aged between 41 to 50 years. A further 13.6 percent of the respondent were aged between 18 to 30 years, and 6.2 percent of the respondents specified that they were aged above 50 years. This implied that respondents of the different age categories were engaged in this study.

**Age of the Respondents**

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>above 50 years</td>
<td>6.2</td>
</tr>
<tr>
<td>41 to 50 years</td>
<td>35.8</td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>44.4</td>
</tr>
<tr>
<td>18-30 years</td>
<td>13.6</td>
</tr>
</tbody>
</table>

**Figure 4.3: Age of the respondent**
The study required the respondents to indicate their highest level of education attained. From the research findings, majority of the respondents as shown by 60.5 percent indicated that they were at degree level, 27.2 percent of the respondents indicated their highest level of education as masters’ degree, 7.4 percent of the respondents indicated their level of education as PhD while 4.9 percent of the respondents indicated diploma as their highest education level. This indicates that the respondents were educated well enough to understand the questions and thus would give credible information related to this study.

### Education Level of the Respondents

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>4.9</td>
</tr>
<tr>
<td>Degree</td>
<td>60.5</td>
</tr>
<tr>
<td>Masters</td>
<td>27.2</td>
</tr>
<tr>
<td>PhD</td>
<td>7.4</td>
</tr>
</tbody>
</table>

**Figure 4.4: Education Level of the Respondents**

The number of years that respondents had served in the organization was also considered and from the research findings, majority of the respondents, as represented by 50.6 percent were found to have served for a period of 1 to 5 years, another 27.2 percent of the respondents specified that they had served for 5 to 10 years, 17.3 percent had served for over 10 years, while 4.9 percent of the respondents have served for less than one year. This implication is that a majority of the respondents had worked for a considerable period of time and therefore they were in a position to give credible information relating to this study.
Period of Service in the Organization

<table>
<thead>
<tr>
<th>Period of Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 10 years</td>
<td>17.3%</td>
</tr>
<tr>
<td>5-10 years</td>
<td>27.2%</td>
</tr>
<tr>
<td>1-5 years</td>
<td>50.6%</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

Figure 4.5: Period of Service in the Organization

Respondents were asked to specify at what level of management they fall into. The findings indicated that a majority of the respondents as shown by 53.1 percent were in the middle management level, 37.0 percent were in the top management level, whereas 9.9 percent of the respondents were cadre staff. These findings depict that all the management levels in the organization were represented in this study.

Respondents Level of Management

<table>
<thead>
<tr>
<th>Level of Management</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>37.0%</td>
</tr>
<tr>
<td>Middle management</td>
<td>53.1%</td>
</tr>
<tr>
<td>Cadre staff</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Figure 4.6: Respondents’ Level of Management
4.3 Gender Differences in Investing Decisions

This section presents the research findings on the gender differences in investing decisions. Both descriptive and regression analysis are used.

The study sought to establish the extent to which gender differences contribute in determining gender financial behavior. The findings indicated that majority of the respondents as shown by 66.7 percent specified that gender differences contribute in determining gender financial behavior to a great extent, another 21.0 percent of the respondents indicated to a very great extent, whereas 12.3 percent of the respondents indicated to a moderate extent. These findings depict that gender differences do contribute in determining gender financial behavior to a great extent.

Table 4.1: Extent to Which Gender Differences Contribute to Investing Decisions

<table>
<thead>
<tr>
<th>Extent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Great extent</td>
<td>17</td>
<td>21.0</td>
</tr>
<tr>
<td>Great extent</td>
<td>54</td>
<td>66.7</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>10</td>
<td>12.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The study additionally sought to determine the respondent’s level of agreement with some statements that are related to gender differences in investing decisions.

On investment preferences and risk differences, the study findings revealed that majority of the respondents agreed that women are less willing to take financial risks as compared to men, as shown by a mean of 1.901, women adopt a risk aversive strategy regardless of their occupation, experience and level of expertise, as shown by a mean of 1.926, women investors prefer more certainty and lower returns as a trade-off during investment decisions, as shown by a mean of 2.000 and that women choose to invest in stocks and personal businesses less often and in low amounts than men but they choose to invest more often and in high amounts in low-risk, lower return assets, the certificates of deposit and homes, as shown by a mean of 2.012.
On influence of overconfidence in investment decisions, majority of the respondents agreed that increase or decrease in overconfidence is dependent upon the complexity of the task at hand and the perceived accompanying uncertainty, as shown by a mean of 1.926, women with lower inclination towards overconfidence in investment decisions usually display an increased risk aversion compared with men, as shown by a mean of 2.037, men are more prone to overconfidence than women, especially in male-dominated fields such as finance, as shown by a mean of 2.062 and that as knowledge increase men become more risk averse while women take up more risk thus narrowing the overconfidence gap, as shown by a mean of 2.111.

On self-attribution bias and self-efficacy factors, majority of the respondents agreed that men generally evaluate their intelligence as being higher than women’s, as shown by a mean of 1.938, both men and women significantly underestimated their own self efficacy and generally women are less confident, as shown by a mean of 1.963, men and women espouse success and failures differently, as shown by a mean of 2.025; and that Men perceive that their initial knowledge of an assignment is much higher than women, as shown by a mean of 2.074.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment Preferences and Risk Differences</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women are less willing to take financial risks as compared to men.</td>
<td>22</td>
<td>49</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1.901</td>
<td>0.473</td>
</tr>
<tr>
<td>Women choose to invest in stocks and personal businesses less often and in low amounts than men but they choose to invest more often and in high amounts in low-risk, lower return assets, the certificates of deposit and homes.</td>
<td>22</td>
<td>45</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>2.012</td>
<td>0.401</td>
</tr>
<tr>
<td>Women adopt a risk aversive strategy regardless of their occupation, experience and level of</td>
<td>20</td>
<td>51</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1.926</td>
<td>0.496</td>
</tr>
</tbody>
</table>
Women investors prefer more certainty and lower returns as a trade-off during investment decisions.

**Influence of Overconfidence in Investment Decisions**

<table>
<thead>
<tr>
<th></th>
<th>19</th>
<th>49</th>
<th>9</th>
<th>2</th>
<th>2.000</th>
<th>0.462</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men are more prone to overconfidence than women, especially in male-dominated fields such as finance.</td>
<td>22</td>
<td>44</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>2.062</td>
</tr>
<tr>
<td>As knowledge increase men become more risk averse while women take up more risk thus narrowing the overconfidence gap</td>
<td>21</td>
<td>43</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>2.111</td>
</tr>
<tr>
<td>Increase or decrease in overconfidence is dependent upon the complexity of the task at hand and the perceived accompanying uncertainty</td>
<td>20</td>
<td>51</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1.926</td>
</tr>
<tr>
<td>Women with lower inclination towards overconfidence in investment decisions usually display an increased risk aversion compared with men.</td>
<td>19</td>
<td>48</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>2.037</td>
</tr>
</tbody>
</table>

**Self-Attribution Bias and Self-Efficacy Factors**

<table>
<thead>
<tr>
<th></th>
<th>21</th>
<th>45</th>
<th>7</th>
<th>4</th>
<th>4</th>
<th>2.074</th>
<th>0.390</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men perceive that their initial knowledge of an assignment is much higher than women.</td>
<td>20</td>
<td>49</td>
<td>9</td>
<td>3</td>
<td>0</td>
<td>1.938</td>
<td>0.476</td>
</tr>
<tr>
<td>Men generally evaluate their intelligence as being higher than women’s</td>
<td>19</td>
<td>52</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1.963</td>
<td>0.502</td>
</tr>
<tr>
<td>Both men and women significantly underestimated their own self efficacy and generally women are less confident.</td>
<td>19</td>
<td>48</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>2.025</td>
<td>0.444</td>
</tr>
</tbody>
</table>

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table, the value of adjusted R squared was 0.651 which indicates that there was variation of 65.1 percent on investing decisions due to gender differences, at 95 percent confidence interval. This shows that 65.1 percent changes in investing decision could be accounted for by gender differences. R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.823.

**Table 4.3: Model Summary**
<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.823a</td>
<td>.677</td>
<td>.651</td>
<td>2.011</td>
</tr>
</tbody>
</table>

From the ANOVA statistics above, the study established the regression model had a significance level of 1.4 percent which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5 percent. The calculated value was greater than the critical value (4.103>1.647) an indication that gender differences significantly influence investment decision. The significance value was less than 0.05 indicating that the model was significant.

**Table 4.4: Analysis of Variance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>0.571</td>
<td>1</td>
<td>0.571</td>
<td>4.103</td>
<td>.014b</td>
</tr>
<tr>
<td>Residual</td>
<td>10.994</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.565</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The established regression equation was

\[ Y = 0.469 - 0.577 X_1 \]

From the above regression equation, it was revealed that holding gender differences to a constant zero, investment behavior would stand at 0.469. A unit increase in gender differences would lead to decrease in investment decision in Safaricom limited by a factor of 0.577.

**Table 4.5: Model Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.469</td>
<td>.388</td>
<td></td>
<td>4.423</td>
</tr>
<tr>
<td>Gender Differences</td>
<td>-.577</td>
<td>.020</td>
<td>.276</td>
<td>-5.730</td>
</tr>
</tbody>
</table>

38
4.4 Financial Socialization in Investing Decisions

This section presents the research findings on contribution of financial socialization in determining gender financial behavior. Both descriptive and regression analysis are used.

The study sought to establish the extent to which financial socialization contribute in determining gender financial behavior. From the study findings, majority of the respondents as shown by 61.7 percent indicated that financial socialization contribute in determining gender financial behavior to a great extent, 25.9 percent of the respondents indicated to a very great extent, whereas 12.3 percent of the respondents indicated to a moderate extent. These findings depict that financial socialization does contribute in determining gender financial behavior to a great extent.

Table 4.6: Extent to Which Financial Socialization Contribute to Investing Decisions

<table>
<thead>
<tr>
<th>Extent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Great extent</td>
<td>21</td>
<td>25.9</td>
</tr>
<tr>
<td>Great extent</td>
<td>50</td>
<td>61.7</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>10</td>
<td>12.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The study further sought to determine from the respondents their level of agreement with the some stated statements relating to financial socialization in investing decisions.

On social learning and financial social learning theory, the study findings revealed that majority of the respondents agreed that Children more often than not, imitate and role play their parents’ behaviors when they are with their peers, as shown by a mean of 1.864, financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior, as shown by a mean of 1.951, socially stereotyped gender roles have an impact on behavioral differences in males and females as shown by a mean of 2.074 and that parents expect their older children to be financially independent, as shown by a mean of 2.099.
On Agents of Financial Socialization, majority of the respondents agreed that Parents who are more cautious as money managers are better in socializing their children into avoiding unnecessary debt, as shown by a mean of 1.963; The family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life, as shown by a mean of 1.938; Parents’ inability to provide warmth and comfort during difficult financial periods results in the development of financial worry in childhood, as shown by a mean of 2.025; and that Family, peer group, mass media, culture and institutions, are the agents of financial socialization, as shown by a mean of 2.074.

On Biological Determinism versus Socialization in Predicting Behavior, majority of the respondents agreed that Socialization plays a significant role in amplifying the differences between the boys and girls, as shown by a mean of 1.975; With training and support, individuals can strengthen cognitive and behavioral skills across the gender divide, as shown by a mean of 2.049; People are motivated and gain higher self-esteem through participating in identified groups, as shown by a mean of 2.086; and that At a young age, boys tend to be more active and aggressive than girls, and fare better than girls in tests of spatial, navigational, and mathematical abilities, as shown by a mean of 2.198.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Learning and Financial Social Learning Theory</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents expect their older children to be financially independent</td>
<td>20</td>
<td>46</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>2.099</td>
<td>0.400</td>
</tr>
<tr>
<td>Financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior</td>
<td>19</td>
<td>49</td>
<td>11</td>
<td>2</td>
<td>0</td>
<td>1.951</td>
<td>0.483</td>
</tr>
<tr>
<td>Children more often than not, imitate and role plays their parents’ behaviors when they are with their peers.</td>
<td>21</td>
<td>52</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>1.864</td>
<td>0.520</td>
</tr>
<tr>
<td>Socially stereotyped gender roles have an impact on behavioral differences in males and females</td>
<td>17</td>
<td>48</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>2.074</td>
<td>0.445</td>
</tr>
</tbody>
</table>

Table 4.7: Statements Relating to Financial Socialization in Investing Decisions
Family, peer group, mass media, culture and institutions, are the agents of financial socialization. The family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life. Parents who are more cautious as money managers are better in socializing their children into avoiding unnecessary debt. Parents’ inability to provide warmth and comfort during difficult financial periods results in the development of financial worry in childhood.

**Biological Determinism versus Socialization in Predicting Behavior**

At a young age, boys tend to be more active and aggressive than girls, and fare better than girls in tests of spatial, navigational, and mathematical abilities. Socialization plays a significant role in amplifying the differences between the boys and girls. With training and support, individuals can strengthen cognitive and behavioral skills across the gender divide. People are motivated and gain higher self-esteem through participating in identified groups.

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table, the value of adjusted R squared was 0.655 which indicates that there was variation of 65.5 percent on investing decisions due to financial socialization, at 95 percent confidence interval. This shows that 65.5 percent changes in investing decision could be accounted for by financial socialization. R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.822.

### Table 4.8: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.822</td>
<td>.676</td>
<td>.655</td>
<td>2.535</td>
</tr>
</tbody>
</table>
From the ANOVA statistics above, the study established the regression model had a significance level of 1.2 percent which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5 percent. The calculated value was greater than the critical value (6.563>1.647) an indication that financial socialization significantly influence investment decision. The significance value was less than 0.05 indicating that the model was significant.

Table 4.9: Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>1.142</td>
<td>1</td>
<td>1.142</td>
<td>6.563</td>
<td>.012</td>
</tr>
<tr>
<td>Residual</td>
<td>9.434</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.576</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The established regression equation was

\[ Y = 0.819 + 423 X_1 \]

From the above regression equation, it was revealed that holding financial socialization to a constant zero, investment behavior would stand at 0.819. A unit increase in financial socialization would lead to increase in investment decision in Safaricom limited by a factor of 0.423.

Table 4.3: Model Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.819</td>
<td>.341</td>
<td>4.193</td>
<td>.008</td>
</tr>
<tr>
<td>Financial Socialization</td>
<td>.423</td>
<td>.022</td>
<td>.236</td>
<td>.012</td>
</tr>
</tbody>
</table>
4.5 Gender Differences in Financial Literacy

In this section, the study presents the research findings on gender difference in financial literacy. Both descriptive and regression analysis are used.

The study sought to establish the extent to which gender differences in financial literacy contribute in determining gender financial behavior. From the study findings, majority of the respondents as shown by 58.0 percent indicated that gender differences in financial literacy contribute in determining gender financial behavior to a great extent, 23.5 percent of the respondents indicated to a moderate extent, whereas 18.5 percent of the respondents indicated to a very great extent. These findings depict that gender differences in financial literacy do contribute in determining gender financial behavior to a great extent.

Table 4.4: Extent to Which Gender Differences in Financial Literacy Contribute to Investing Decisions

<table>
<thead>
<tr>
<th>Extent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Great extent</td>
<td>15</td>
<td>18.5</td>
</tr>
<tr>
<td>Great extent</td>
<td>47</td>
<td>58.0</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>19</td>
<td>23.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The study further sought to determine from the respondents their level of agreement with the some stated statements relating to gender differences in financial literacy.

On gender and financial literacy, the study findings revealed that majority of the respondents agreed that When resources are in women’s hands, they are more likely spent on improving family well-being, particularly that of children, as shown by a mean of 1.988, women are less likely than men to give themselves a failing grade for their personal finance knowledge, as shown by a mean of 1.963, women are relatively less financially skilled than men along several dimensions though country-specific context varies, as shown by a mean of 1.975 and that financial literacy can be impacted by individual traits such as cognitive ability, personality type and preferences, as shown by a mean of 2.222.
On gender differences in financial behavior and strategies, majority of the respondents agreed that Gender differences in the ability to make ends meet and in saving, are partially related to differences in socio-economic differences across men and women, as shown by a mean of 1.926; When times are tough and individuals are trying to make ends meet, women preferred to reduce their spending by cutting down on costs of non-essentials while, men prefer looking for extra money, as shown by a mean of 1.951; Women are significantly more likely than men to report that they keep a close watch on their financial affairs, as shown by a mean of 2.049; and that Women sometimes outperform men in some certain domains, as shown by a mean of 2.148.

On gender differences in access to entrepreneurship and to finance, majority of the respondents agreed that The percent of women entrepreneurs is higher in countries where the general income per capita is small and where women have no other option for making a living and lower in countries where the general income per capita is high, as shown by a mean of 1.901, in setting up business, women generally start on a smaller scale compared to men, as shown by a mean of 1.914, the number of women entrepreneurs has grown radically in recent years, women’s entrepreneurship potential has only started to materialize but is still lower than that of men, as shown by a mean of 1.951 and that women have more difficulties in accessing salaried employment on an equal basis with men, as shown by a mean of 2.025.

Table 4.5: Statements Relating To Gender Differences in Financial Literacy

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender and Financial Literacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial literacy can be impacted by individual traits such as cognitive ability, personality type and preferences</td>
<td>16</td>
<td>48</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>2.222</td>
<td>0.419</td>
</tr>
<tr>
<td>Women are relatively less financially skilled than men along several dimensions though country-specific context varies</td>
<td>19</td>
<td>49</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>1.975</td>
<td>0.471</td>
</tr>
<tr>
<td>When resources are in women’s hands, they</td>
<td>22</td>
<td>47</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1.988</td>
<td>0.430</td>
</tr>
</tbody>
</table>
are more likely spent on improving family well-being, particularly that of children

<table>
<thead>
<tr>
<th>Gender differences in financial behavior and strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women sometimes outperform men in some certain domains.</td>
</tr>
<tr>
<td>Gender differences in the ability to make ends meet and in saving, are partially related to differences in socio-economic differences across men and women</td>
</tr>
<tr>
<td>Women are significantly more likely than men to report that they keep a close watch on their financial affairs</td>
</tr>
<tr>
<td>When times are tough and individuals are trying to make ends meet, women preferred to reduce their spending by cutting down on costs of non-essentials while, men prefer looking for extra money.</td>
</tr>
</tbody>
</table>

Gender Differences in Access to Entrepreneurship and to Finance

| The number of women entrepreneurs has grown radically in recent years, women’s entrepreneurship potential has only started to materialize but is still lower than that of men | 25 | 44 | 5 | 5 | 2 | 1.951 | 0.395 |
| Women have more difficulties in accessing salaried employment on an equal basis with men. | 18 | 49 | 9 | 4 | 1 | 2.025 | 0.460 |
| In setting up business, women generally start on a smaller scale compared to men | 24 | 48 | 4 | 2 | 3 | 1.914 | 0.454 |
| The percent of women entrepreneurs is higher in countries where the general income per capita is small and where women have no other option for making a living and lower in countries where the general income per capita is high | 22 | 49 | 7 | 2 | 1 | 1.901 | 0.473 |

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table, the value of adjusted R squared was 0.631 which indicates that there was
variation of 63.1 percent on investing decisions due to gender differences in financial literacy, at 95 percent confidence interval. This shows that 63.1 percent changes in investing decision could be accounted for by gender differences in financial literacy. R is the correlation coefficient which shows the relationship between the study variables. From the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.791.

Table 4.6: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.791&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.626</td>
<td>.631</td>
<td>2.004</td>
</tr>
</tbody>
</table>

From the ANOVA statistics above, the study established the regression model had a significance level of 0.7 percent which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5 percent. The calculated value was greater than the critical value (3.547>1.647) an indication that gender differences in financial literacy significantly influence investment decision. The significance value was less than 0.05 indicating that the model was significant.

Table 4.7: Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1.042</td>
<td>1</td>
<td>2.142</td>
<td>3.547</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>9.403</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10.445</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The established regression equation was

\[ Y = 0.701 – 0.553 X_1 \]

From the above regression equation, it was revealed that holding gender differences in financial literacy to a constant zero, investment behavior would stand at 0.701. A unit
increase in gender differences in financial literacy would lead to decrease in investment decision in Safaricom limited by a factor of 0.553.

Table 4.8: Model Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.701</td>
<td>.311</td>
<td>4.123</td>
<td>.019</td>
</tr>
<tr>
<td>Gender Differences in Financial Literacy</td>
<td>-.553</td>
<td>.027</td>
<td>.216</td>
<td>-4.704</td>
</tr>
</tbody>
</table>

4.6 Chapter Summary

In the chapter, results of the survey were presented and from the findings, gender differences were found to negatively affect investment decision among employees of Safaricom Limited to a great extent. The findings have also revealed that financial socialization positively affects investment decision in Safaricom limited to a great extent. The findings have further revealed that gender differences in financial literacy has negative influence on investment decision in Safaricom Limited to a great extent. The next chapter then covers summary, conclusions and recommendations of the study.
CHAPTER FIVE

5.0 CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presented the discussion of key data findings, the conclusions drawn therein and some recommendations from the study. The conclusions and recommendations drawn from the findings were mainly focused on addressing the objective of the study. The researcher had intended to determine if there are any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees.

5.2 Summary

The general objective of this study was to determine if there are any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees. The study was steered by the following research questions;

i. Are there gender differences in investing decisions?

ii. Does financial socialization contribute in determining gender financial behavior?

iii. Do gender differences exist in financial literacy?

The research problem was studied through by the application of a descriptive research design. The target population for this study was 4500 employees of Safaricom limited. The sample size of the study was 94 employee of Safaricom limited. Survey questionnaire was utilized for data collection. The questionnaire was carefully designed and tested with a few members of the population for further improvements. This study collected primary and this data was analyzed using descriptive and inferential statistics. The response rate of the study was 86.2 percent and this response rate deemed satisfactory to make conclusions for the study.

The study sought to establish the extent to which gender differences contribute in determining gender financial behavior. From the research findings, the study established that gender difference does contribute in determining gender financial behavior to a great extent.
The study further revealed that there is a negative relationship between gender differences and investing decision among employees of Safaricom Limited.

The study also sought to establish the extent to which financial socialization contributes in determining gender financial behavior. From the research findings, the study established that financial socialization does contribute in determining gender financial behavior to a great extent. The study further revealed that there is a positive relationship between financial socialization and investing decision in Safaricom Limited.

Finally, the study sought to establish the extent to which gender differences in financial literacy contribute in determining gender financial behavior. From the research findings, the study established that gender differences in financial literacy do contribute in determining gender financial behavior to a great extent. The study further revealed that there is a negative relationship between gender differences in financial literacy and investing decision in among employees of Safaricom Limited.

5.3 Discussions

5.3.1 Gender Differences in Investing Decisions

The study established that gender differences do contribute in determining investment behavior to a great extent. The study further revealed that on investment preferences and risk differences, the study findings revealed that Women are less willing to take financial risks as compared to men, Women adopt a risk aversive strategy regardless of their occupation, experience and level of expertise, Women investors prefer more certainty and lower returns as a trade-off during investment decisions, and that Women choose to invest in stocks and personal businesses less often and in low amounts than men but they choose to invest more often and in high amounts in low-risk, lower return assets, the certificates of deposit and homes. These findings were found to concur with the findings of Jianakoplos & Bernasek (1989) who in their survey they established more than half of women were not willing to take any financial risks as compared to less than half of men. Charness & Gneezy (2007) also found out that when making long-term investment decisions like pension funds, the conservative strategy of women was observed to be more pronounced, as compared to that of men.
On influence of overconfidence in investment decisions, the study revealed that increase or decrease in overconfidence is dependent upon the complexity of the task at hand and the perceived accompanying uncertainty. Women with lower inclination towards overconfidence in investment decisions usually display an increased risk aversion compared with men. Men are more prone to overconfidence than women, especially in male-dominated fields such as finance, and that as knowledge increases men become more risk averse while women take up more risk thus narrowing the overconfidence gap. These findings were found to be consistent with the findings of Estes & Hosseini (1988) who found out those women had considerably lower confidence in an investment assignment than men. Similarly, the findings concur with Dittrich, Guth, and Maciejovsky (2001) who found out that increase or decrease in overconfidence is dependent upon the complexity of the task at hand and the perceived accompanying uncertainty. They asserted that overconfidence increases with the complexity of the task and overconfidence decreases when the perceived uncertainty is high.

On self-attribution bias and self-efficacy factors, the study revealed that men generally evaluate their intelligence as being higher than women’s. Both men and women significantly underestimated their own self-efficacy and generally women are less confident. Men and women espouse success and failures differently, and that men perceive that their initial knowledge of an assignment is much higher than women. The findings are congruent with those of Gysler, et al. (2002) who found out that men perceived that their initial knowledge of an assignment was much higher than that of women. Similarly, the findings concurred with those of Endres, Chowdhury and Alam (2008) who asserted that men’s self-efficacy was substantially higher than that of women. They further found out that both men and women significantly underestimated their own self-efficacy and generally women tend to be less confident.

5.3.2 Financial Socialization in Investing Decisions

The study established that financial socialization does contribute in determining gender financial behavior to a great extent. On Social Learning and Financial Social Learning Theory, the study findings revealed that children more often than not, imitate and role play
their parents’ behaviors when they are with their peers. Financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior. Socially stereotyped gender roles have an impact on behavioral differences in males and females and that Parents expect their older children to be financially independent. These findings were found to concur with the findings of Danes and Hira (1987) who asserted that parents may expect their older children to be financially independent but they found out that they have little financial knowledge to draw upon. They further found out that financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior in people at a very early age. Similarly, the findings concurred with those of Bandura (1977), who argued that children more often that not, imitate and role play their parents’ behaviors when they are with their peers.

On Agents of Financial Socialization, the study revealed that Parents who are more cautious as money managers are better in socializing their children into avoiding unnecessary debt. The family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life, Parents’ inability to provide warmth and comfort during difficult financial periods results in the development of financial worry in childhood, and that Family, peer group, mass media, culture and institutions, are the agents of financial socialization. These findings were found to be consistent with the findings of Keranne & Hogg (2010) who posited that the family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life as children transit into young adults and finally into adults. Jinhee Kim and Swarn Chatterjee (2013) also argued that parents’ inability to provide warmth and comfort during difficult financial periods could also result in the development of financial worry in childhood and consequently foster reluctance in young adulthood to seek financial and emotional support during times of crisis.

On Biological Determinism versus Socialization in Predicting Behavior, then study revealed that Socialization plays a significant role in amplifying the differences between the boys and girls. With training and support, individuals can strengthen cognitive and behavioral skills across the gender divide, People are motivated and gain higher self-esteem through participating in identified groups, and that At a young age, boys tend to be more active and aggressive than girls, and fare better than girls in tests of spatial, navigational, and
mathematical abilities. These findings are consistent with those of Berenbaum (2002) who argued that boys tend toward more active and aggressive play than girls, and fare better than girls in tests of spatial, navigational, and mathematical abilities, and pointed out that socialization plays a significant role in amplifying the differences. Similarly, the findings concur with those of Taifel & Turner (1986) who stated that people through participating in identified groups are motivated and gain higher self-esteem.

5.3.3 Gender Differences in Financial Literacy
The study established that a gender difference in financial literacy does contribute in determining gender financial behavior to a great extent. On Gender and Financial Literacy, the study findings revealed that When resources are in women’s hands, they are more likely spent on improving family well-being, particularly that of children, Women are less likely than men to give themselves a failing grade for their personal finance knowledge, Women are relatively less financially skilled than men along several dimensions though country-specific context varies, and that Financial literacy can be impacted by individual traits such as cognitive ability, personality type and preferences. These findings were found to concur with the findings of OECD (2013) that financial literacy would be impacted by individual traits such as cognitive ability, personality type, and preferences. Similarly, Hung and Brown (2012) acknowledged that gender differences in financial literacy do exist; they suggest that women are shown to be relatively less financially skilled than men along several dimensions though they recognize that country-specific context varies. National Foundation for Credit Counseling (2011) also stated that women are significantly less likely than men to give themselves a failing grade for their personal finance knowledge.

On Gender differences in financial behavior and strategies, the study revealed that Gender differences in the ability to make ends meet and in saving, are partially related to differences in socio-economic differences across men and women, When times are tough and individuals are trying to make ends meet, women preferred to reduce their spending by cutting down on costs of non-essentials while, men prefer looking for extra money, Women are significantly more likely than men to report that they keep a close watch on their financial affairs, and that Women sometimes outperform men in some certain domains. These findings were found to
be consistent with the findings of Hung and Brown (2012) who contend that in addition to gender differences in financial knowledge and attitudes, men and women also display a set of different financial behaviors and strategies. They further argued that women are not always outperformed by men in all domains: for instance they are more likely than men to have a budget and to keep track of their finances. Similarly, the findings concurred with OECD (2013) which found out that when times are tough and individuals are trying to make ends meet, women preferred to reduce their spending by cutting down on costs of non-essentials. On the other end, men were found to prefer looking for extra money.

On Gender Differences in Access to Entrepreneurship and to Finance, the study revealed that The percent of women entrepreneurs is higher in countries where the general income per capita is small and where women have no other option for making a living and lower in countries where the general income per capita is high, In setting up business, women generally start on a smaller scale compared to men, The number of women entrepreneurs has grown radically in recent years, women’s entrepreneurship potential has only started to materialize but is still lower than that of men, and that Women have more difficulties in accessing salaried employment on an equal basis with men. These findings are in agreement with those of Weiler and Bernasek (2001) who observed that as much as women entrepreneurs were increasing radically in recent years, their potential has only started to materialize but is still rank lower than men. IFC (2011) also identified that in setting up business, it was found out that women generally start on a smaller scale compared to men and confine themselves in a limited range of sectors that more often than not require low capital intensity.

5.4 Conclusion

5.4.1 Gender Differences in Investing Decisions

The study established that gender differences do contribute in determining investment behavior to a great extent. The study further established that gender differences were a significant factor and negatively affecting investment decision. The study therefore concludes that increased gender differences affect investment decisions.
5.4.2 Financial Socialization in Investing Decisions
The study established that financial socialization influences investment decisions among employees of Safaricom Limited to a great extent. Financial socialization was found to be a significant variable and positively affects investment decision among employees of Safaricom Limited. The study therefore concludes that increase in financial socialization enhances investment decisions.

5.4.3 Gender Differences in Financial Literacy
The study established that gender differences in financial literacy was a significant factor and negatively affects investment decision among employees of Safaricom Limited. The study draws a further conclusion that increase in gender differences in financial literacy results in a decrease in investment decision among employees of Safaricom Limited.

5.5 Recommendations
5.5.1 Recommendation for Improvement
5.5.1.1 Gender Differences in Investing Decisions
The study recommends that financial risks should be minimized in order to increase the chances of women investment since women are less willing to take financial risks as compared to men. The study further recommends that policies that increase women confidence in investment should be implemented since women with lower inclination towards overconfidence in investment decisions usually display an increased risk aversion compared with men.

5.5.1.2 Financial Socialization in Investing Decisions
There is need to promote financial socialization since it is the building block for modelling financial knowledge, financial attitudes and future financial behavior. This way, everyone in the society who has undergone adequate financial socialization will find it easier to make viable investment decisions.
5.5.1.3 Gender Differences in Financial Literacy
The study recommends that gender differences in financial literacy should be eliminated so as to improve the cases of women investment. This is because; women are less likely than men to give themselves a failing grade for their personal finance knowledge.

5.5.2 Recommendations for Further Research
The study sought to determine if there are any gender differences in investment behavior among employees in Kenya using a case of Safaricom Limited employees. The study recommends that a study should be done on the factors that are considered by the different genders in investment decision.
REFERENCES


Willows, G., & West, D. (2012). Differential Investment Performance Based on Gender - A Review of Literature. In *SAAA Western Cape Regional Conference* (pp. 72
APPENDICES

Appendix I: Introductory Letter

Dear Sir/Madam,

RE: RESEARCH STUDY

My name is Tom Musula, a student at United States International University pursuing a degree of Masters in Business Administration (MBA). In partial fulfillment of my degree requirement, I am required to conduct a research study and my topic of choice is “Gender Differences in Investment Behavior Among Employees: A Case Study of Employees of Safaricom Limited.

I would appreciate your assistance in conducting this research by way of responding to the attached questionnaire. Kindly note that any information you give will be treated with confidentiality and at no instance will it be used for any other purpose other than for this project. Your assistance will be highly appreciated. Thank you in advance.

Yours sincerely,
Tom Mukoba Musula
Mobile Number: 0722-664-738
Email: tmusula@gmail.com
Appendix II: Questionnaire

Section A: Demographics Information

1. Gender of the respondent?
   Male ( )  Female ( )

2. Indicate your Age Bracket?
   18-30 years [ ] 31 to 40 years [ ] 41 to 50 years [ ] above 50 years [ ]

3. What is your highest level of education?
   PhD [ ]  Master’s Degree [ ]  Degree [ ]  Diploma [ ]

4. How long have you worked in Safaricom Limited?
   Less than 1 year [ ]  (1-5) years [ ]  (5-10) years [ ]  (above 10 years) [ ]

5. What is your level of management?
   Top management [ ]
   Middle management [ ]
   Cadre staff [ ]

Section B: Gender Differences in Investing Decisions

6. To what extent does gender differences contribute in determining gender financial behavior?
   Very great extent ( )
   Great extent ( )
   Moderate extent ( )
   Less extent ( )
   Not at all ( )

7. Kindly indicate your level of agreement with the following statements relating to gender differences in investing decisions.
**Statements**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree (1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment Preferences and Risk Differences</strong></td>
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<tr>
<td>Women are less willing to take financial risks as compared to men.</td>
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<tr>
<td>Women choose to invest in stocks and personal businesses less often and in</td>
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<td>low amounts than men but they choose to invest more often and in high</td>
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<td>amounts in low-risk, lower return assets, the certificates of deposit and</td>
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<td>homes.</td>
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<tr>
<td>Women adopt a risk aversive strategy regardless of their occupation,</td>
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<tr>
<td>experience and level of expertise.</td>
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<td>Women investors prefer more certainty and lower returns as a trade-off</td>
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<td>during investment decisions.</td>
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<tr>
<td><strong>Influence of Overconfidence in Investment Decisions</strong></td>
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<tr>
<td>Men are more prone to overconfidence than women, especially in male-</td>
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<td>dominated fields such as finance.</td>
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<td>As knowledge increase men become more risk averse while women take up</td>
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<tr>
<td>more risk thus narrowing the overconfidence gap</td>
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<td>Increase or decrease in overconfidence is dependent upon the complexity</td>
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<td>of the task at hand and the perceived accompanying uncertainty</td>
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<tr>
<td>Women with lower inclination towards overconfidence in investment</td>
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<tr>
<td>decisions usually display an increased risk aversion compared with men</td>
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<tr>
<td><strong>Self-Attribution Bias and Self-Efficacy Factors</strong></td>
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</tbody>
</table>
Men perceive that their initial knowledge of an assignment is much higher than women.

Men generally evaluate their intelligence as being higher than women’s.

Both men and women significantly underestimated their own self efficacy and generally women are less confident.

Men and women espouse success and failures differently.

**Section C: Financial Socialization in Investing Decisions**

8. To what extent does financial socialization contribute in determining gender financial behavior?

<table>
<thead>
<tr>
<th>Very great extent</th>
<th>( )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great extent</td>
<td>( )</td>
</tr>
<tr>
<td>Moderate extent</td>
<td>( )</td>
</tr>
<tr>
<td>Less extent</td>
<td>( )</td>
</tr>
<tr>
<td>Not at all</td>
<td>( )</td>
</tr>
</tbody>
</table>

9. Kindly indicate your level of agreement with the following statements relating to financial socialization in investing decisions.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree (1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Learning and Financial Social Learning Theory</strong></td>
<td></td>
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<tr>
<td>Parents expect their older children to be financially independent</td>
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<tr>
<td>Financial socialization is the building block for modelling financial knowledge, financial attitudes and future financial behavior</td>
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<td>Children more often than not, imitate and role plays their</td>
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</table>
parents’ behaviors when they are with their peers.

Socially stereotyped gender roles have an impact on behavioral differences in males and females

**Agents of Financial Socialization**

Family, peer group, mass media, culture and institutions, are the agents of financial socialization

The family is the principal socializing agent and contributes the most influence on values, attitudes and practices throughout life

Parents who are more cautious as money managers are better in socializing their children into avoiding unnecessary debt

Parents’ inability to provide warmth and comfort during difficult financial periods results in the development of financial worry in childhood

**Biological Determinism versus Socialization in Predicting Behavior**

At a young age, boys tend to be more active and aggressive than girls, and fare better than girls in tests of spatial, navigational, and mathematical abilities.

Socialization plays a significant role in amplifying the differences between the boys and girls.

With training and support, individuals can strengthen cognitive and behavioral skills across the gender divide.

People are motivated and gain higher self-esteem through participating in identified groups.
Section D: Gender Differences in Financial Literacy

10. To what extent does Gender Differences in Financial Literacy contribute in determining gender financial behavior?

   - Very great extent (   )
   - Great extent (   )
   - Moderate extent (   )
   - Less extent (   )
   - Not at all (   )

11. Kindly indicate your level of agreement with the following statements relating to Gender Differences in Financial Literacy.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree (1)</th>
<th>Agree (2)</th>
<th>Neutral (3)</th>
<th>Disagree (4)</th>
<th>Strongly Disagree (5)</th>
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<tr>
<td><strong>Gender and Financial Literacy</strong></td>
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<td>Financial literacy can be impacted by individual traits such as cognitive</td>
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<td>ability, personality type and preferences</td>
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<td>Women are relatively less financially skilled than men along several</td>
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<td>dimensions though country-specific context varies</td>
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<td>When resources are in women’s hands, they are more likely spent on</td>
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<td>improving family well-being, particularly that of children</td>
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<td>Women are less likely than men to give themselves a failing grade for</td>
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<td>their personal finance knowledge</td>
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<tr>
<td><strong>Gender differences in financial behavior and strategies</strong></td>
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<tr>
<td>Women sometimes outperform men in some certain domains.</td>
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</tbody>
</table>
Gender differences in the ability to make ends meet and in saving, are partially related to differences in socio-economic differences across men and women.

Women are significantly more likely than men to report that they keep a close watch on their financial affairs.

When times are tough and individuals are trying to make ends meet, women preferred to reduce their spending by cutting down on costs of non-essentials while, men prefer looking for extra money.

**Gender Differences in Access to Entrepreneurship and to Finance**

The number of women entrepreneurs has grown radically in recent years, women’s entrepreneurship potential has only started to materialize but is still lower than that of men.

Women have more difficulties in accessing salaried employment on an equal basis with men.

In setting up business, women generally start on a smaller scale compared to men.

The percent of women entrepreneurs is higher in countries where the general income per capita is small and where women have no other option for making a living and lower in countries where the general income per capita is high.

Thank You