THE RELATIONSHIP BETWEEN MONETARY ATTITUDES AND INVESTMENT BEHAVIOUR AMONG TEACHERS IN SWAZILAND

BY

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REG. NUMBER: D63/84584/2016

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER, 2017

DECLARATION

I certify that this research project is my original work and has not been submitted elsewhere for examination, award of a degree or publication.

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This research project has been submitted for examination with my approval as the University Supervisor

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AKNOWLEDGEMENTS

My most sincere gratitude to the following: God, for having generously granted me life and the ability to pursue this project; the Association of Commonwealth Universities (ACU) and the University of Swaziland, for funding my studies and granting me study leave, respectively; the department of Finance and Accounting, School of Business, at the University of Nairobi, for granting me admission and availing their staff to assist me; Dr Iraya, for facilitating my admission as coordinator for the MSc Program; and the chairman of the department, Dr Mwangi, for assisting me whenever necessary. I am especially indebted to Dr Ondigo, my supervisor, who not only guided me in the most professional way possible, but also sacrificed his own spare time to review my work and the coordinators in the different schools surveyed, for ensuring that I attained a high response rate within the shortest possible period of time.

I am also grateful to my mother, for assessing the questionnaire for clarity and availing her car during the data collection period; my sister's family, for always checking up on me to confirm that I was coping well in a foreign country; and my brother's family, for following up on my personal affairs in Swaziland.

I am also thankful to the wonderful people of Kenya for welcoming me with warmth and generally making me feel truly at home. Mr Archer Arina at the Ministry of Education in Kenya, for facilitating the granting of my scholarship. The group of classmates who created a WhatsApp group (Emaswati) in my honour. Tacey, Mazera and Jeannette for practically becoming my family in Kenya.

DEDICATION

To my mother, RT, for being a reliable guide in all seasons.

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LIST OF ABBREVATIONS

AIH - Absolute Income Hypothesis

ANOVA- Analysis of Variance

FSRA- Swaziland Financial Services Regulatory Authority

GDP- Gross Domestic Product

GNI- Gross National Income

IDA- International Developmental Assistance

LCH- Life Cycle Hypothesis

MAS- Money Attitude Scale

MIS- Money Importance Scale

PIH- Permanent Income Hypothesis

SA- South Africa

SACCO- Savings and Credit Co-operative Organisation

SPSS- Statistical Package for the Social Sciences

USA- United States of America

US$- United States Dollar

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ABSTRACT

Despite its above average GNI per capita among sub-Saharan Africa nations, the rate of savings in Swaziland is below the average for the region. Savings theories allude to a favourable association between income and savings. The obtaining situation in Swaziland contradicts these theories. There has been no scientific enquiry undertaken to understand the possible cause(s) for this deviation. Studies conducted elsewhere on the same phenomenon, suggest that money attitude is a contributor to its occurrence. This study was conducted to determine if money attitudes are related to the investment behaviours of teachers in Swaziland. Teachers were selected because their standardised salaries ensure that income can be predominantly held constant. Investment other than savings behaviour was selected because it offers more insight on individual saving habits. The study population consisted of the 16 918 primary and high school teachers in Swaziland. The stratified and cluster sampling methods was utilised to guarantee that all geographical regions in Swaziland were represented, and to ensure efficiency, respectively. Questionnaires were administered to a sample of 304 educators. Descriptive and inferential measurements were generated from the data. A key finding from the descriptive statistics is that 40% of teachers were unable to save money on a recurrent basis. F and t-tests were applied to ascertain the significance of identified associations between the variables of interest. Correlation results indicated the following: The ability to save money is associated with the value importance of money and skills at handling money factors; engagement in business ventures is associated with knowledge of financial affairs, comfort in taking financial risks, skills at handling money, and the use of money as a source of status and power factors; investment in long term interest bearing instruments is associated with the value importance of money, personal involvement with money, knowledge of financial affairs, and comfort in taking financial risks factors; and the frequency of drawdowns from investments is negatively correlated with the money as a source of status and power, comfort in taking financial risks and the value importance of money factors. Regression results indicated that: skills at handling money is a significant predictor of the likelihood for teachers to save; knowledge of financial affairs is a significant predictor of the likelihood for a teacher to engage in a business venture or invest in long term interest bearing instruments; whilst using money as a source of status and power increases the likelihood for a teacher to make frequent drawdowns from investments. All relationships were significant at the 0.01 level and the predictor variables explained less than 5% of the variation in each case. A key recommendation from the study is that financial education must be offered at high school level to all students, in order to improve their money handling skills and knowledge of financial affairs.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The fact that individuals' orientation towards savings varies is well accepted and is conceivably well captured in Aesop's Fables (McFarland, Marconi, Utkus, and Pension Research Council of the University of Pennsylvania, 2003) where an ant works incessantly to gather corn for the winter, while a grasshopper chases a life of leisure. Marshall (1920) clarified this fable when he stated that, some individuals attach a nearly similar value to a benefit, regardless of whether it accrues immediately or at some future date. However, he notes that individuals who limit themselves to the present, lack patience and self-control, discount a benefit that is not imminent excessively. A Nielsen (2016) survey indicated that savings rates as a percentage of income were highest in the Asia-Pacific region at 61%, followed by North America at 45%. Middle East-Africa, Europe and Latin America followed at 38%, 36% and 30%, respectively. Their findings also indicated that investment rates were higher in the Asia-Pacific region with a rate of 37% of income, followed by North America at 16%. Latin America, Middle East- Africa and Europe followed at 10%, 9% and 6% respectively. Ghana, Kenya and Nigeria were the only African countries included in the survey.

Dovi (2008) noted that the savings rate in the African region south of the Sahara desert was the lowest amongst world regions classified as developing. Aggregate national savings in the region were approximately 18% of GDP in 2005 which contrasted unfavorably with the 26% in Southern Asia and close to 43% in Pacific and East- Asian countries. Davoodi (2008) estimated the domestic savings rate in Swaziland to be about 8% of GDP.

There are several reasons why a low savings rate should be of concern to society. At country level, Uygur (2011) observed that economic data comparison among countries, more so for emerging

economies, showed that a favourable relationship exists between savings, investments & growth. Uygur (2011) further noted that low domestic savings increase dependence on foreign financing, which increases a country's external current account deficit, and endangers growth sustainability. Such observations find credence in Swaziland. The economic growth rate (GDP) in Swaziland has been lower than the average for countries in sub-Saharan Africa. Fakudze et al. (2012) noted that the growth rate between 2001 and 2011 averaged 2.3% per year in Swaziland. During the same period the average for sub-Saharan Africa was 5.8% per annum. The Swaziland Minister for Finance (2017) stated that growth for 2016 was estimated to have contracted by 0.6% .The average growth rate was 1.6% in Southern Africa, during the same period. This reflects that Swaziland's growth rate continues to be less than the average rate for the region. This is in agreement with the findings by Uygur (2011) on the association between growth and savings.

At household level, studies have recognized the benefits of savings for individuals. Step Change Debt Charity (2014) recognized that having accessible savings has the following benefits: assists families to avoid debt; results in more financial inclusion; improves employment prospects; results in better healthcare options; and improves children's life prospects. Increasing savings has been found to contribute towards increased labour market participation, prevention of marital breakdown and improvements in health (McKay and Kempson, 2003). Searle and Köppe (2014) found that increasing savings levels by lower income families lessens poverty rates and teenagers from families with superior levels of saving experience improvements in academic performance, resulting in the attainment of superior occupation and earnings prospects in the longer-term. The problems associated with low saving rates are more pronounced in Swaziland. Finmark Trust (2011) found that 80.5% of the Swazi population were of the view that their financial situation was not ideal and 78.1% found dealing with financial matters to be stressful. Although 66% stated

that they were able to save, it was observed that such savings were short term in nature and mainly just for meeting recurrent day to day expenses. Fakudze et al. (2012) observed that the unemployment rate in Swaziland was 30% and the poverty rate stood at 63%. Fakudze et al. (2012) further observed that in 2010, 29% of the population lacked food security. These are issues that have been found to be prevalent in households with poor saving habits.

Theories on savings behaviour indicate that savings are positively correlated with income; an increase in income leads to higher savings. These theories, however, do not seem to hold in Swaziland's case. Swaziland is categorised as a lower- middle income country and is the only sub-Saharan country that doesn't qualify for IDA in that classification. This is due to the fact that it's GNI per capita of US$ 3 154.75 in 2015 is greater than the qualification threshold of US$ 1 185 (World Bank, 2017). The savings rate in Swaziland, regardless of the higher income, is however much lower than the sub-Saharan Africa average. This, therefore, indicates that another factor, other than income, is hindering savings in Swaziland. It is also worthwhile to consider that this trend has also been observed in SA, which is a higher-middle income country. Dovi (2008) observed that in 2006, the savings rate in SA was 13% of GDP compared to 26.7% in the 1980s. Some scholars have attributed this trend to the highly developed financial markets in SA which enable borrowings for individuals, an entitlement mentality, and the high image consciousness of the SA population (Du Plessis, 2008). The last two factors indicate that attitudes or views on money and its uses have contributed to the decline in savings.

1.1.1 Monetary Attitudes

Money attitude refers one's conscious and unconscious perceptions or views about money. This refers to the thoughts that cross an individual's mind when he reflects on his monetary condition

and the emotions that are evoked by such thoughts. Lown and Ju (1992) concluded that people's views and emotions about money are assimilated into their day to day activities and, as a result, provoke behaviour in delicate ways. Klontz and Klontz (2009) conjectured that monetary characters, defined as money principles individuals hold, are: established at infancy; frequently inherited by different generations in families; not consciously held; influenced by context; and a variable that significantly influences an individual's economic behaviour.

Psychologists have developed scales to measure people's attitudes towards money. The development of the money attitude scales is based on three broad aspects of money psychology. The three broad categories are: Security which is evidenced by cheerfulness, sureness, relaxation when money is deemed to be sufficient, and the opposite, glumness, anxiety and unhappiness when it is deemed to be inadequate; Retention which includes ungenerousness, greediness and extreme character attributes; and Prestige-Power, which constitutes such characteristics as standing in society, prominence, pre-eminence and achievement (Yamauchi and Templer, 1982; Furnham, 1984; and Mitchell and Mickel, 1998). These classifications are not mutually exclusive and certain variables among the classes are highly correlated. The conceptualisation of these broad categories is based on studies conducted by several scholars on the needs that people use money to address, consciously or unconsciously. The categories are effectively a classification of the results obtained in different studies that attempted to assess the different money utility dimensions. The following studies were particularly significant in the conceptualisation of the categories: Abraham (1917/1965) observed that money can be used to deal with nervousness arising from separation issues. He opined that the presence of money provides a sense of security and its absence leads to hopelessness and vulnerability feelings; Fenichel (1938) held that the determination towards getting wealthy originates from the desire to be an important figure in society originating from

childhood ambitions of being invincible; Adler (1964) opined that the desire to hold more cash originates from dissatisfaction with being a subordinate to another person or institution; and Murray (1938) held that monetary behaviour mirrors needs for success, attainment and acknowledgement.

There are three well developed scales that were formulated in an attempt to capture these broad categories of money outlooks (Yamauchi and Templer, 1982; Furnham, 1984; and Mitchell and Mickel, 1998). In developing these scales, statements/variables which were deemed to be representative of the broad money attitude categories were generated. Factor analysis was then used to analyse the responses to these statements. Factor analysis is an arithmetic tool used to describe variability amongst perceived, associated variables, in terms of fewer unidentified variables, referred to as factors. Factor analysis groups together items that are representative of a single variable, based on the responses to the statements. This can be interpreted to mean that factor analysis groups together variables that are in reality a subset of one parent variable, referred to as a factor. Some of the factors identified in the studies referred to above are restricted to items in only one category whereas others cut across all three categories. The fact that a factor can capture items from more than one category supports the notion that the categories are not mutually exclusive. The Mitchell and Mickel (1998) Money Importance Scale (MIS) is more relevant to this study, since most of the factors generated, are closely linked to investment behaviours. The scale consists of seven factors.

1.1.2 Investment Behaviour

Ananthapadhmanabha (2012) defines investment behaviour as the inclination by an investor towards selecting a specific investment option. Nofsinger and Richard (2002) were of the view

that for individuals, investment behavior refers to the analysis of choices individuals undertake when purchasing securities for their account. Savings refers to the share of disposable earnings retained (not consumed). Investing is the act of allocating money that has been saved among various avenues, with a view of earning returns in excess of the amount allocated. The type of financial products available in the financial markets nowadays, which are the result of competition, have blurred the difference between investments and savings. An analysis of investment behaviour offers more insight than limiting study to savings behaviour. The investment behaviour of individuals reveal how they allocate surplus funds (savings) at their disposal among different investment avenues. Investment behaviour can therefore be defined as the processes of saving money, deciding where it will be invested and all other pertinent acts in relation to the investment. Investigating investment behaviours offers insight on the saving habits of individuals and their motives.

The assessment of investment behaviour of individuals is best analyzed by tracking the various phases in the investment process. These are: setting aside money from periodic income or borrowing money for investment purposes; sourcing information on the various investment avenues available; selecting investment avenues; monitoring investment performance; and the timing of withdrawals from investments.

1.1.3 Monetary Attitudes and Investment Behaviour

Few studies have been undertaken on the association between monetary attitudes and financial behaviour. Furnham (1984) attributes this to the lack of rapprochement between psychology and economics. Attitude has been found to be a significant contributor to the behaviours of individuals (Foxall, 1983; and Barwise and Ehrenberg, 1985). In most of the studies identified, investment

behaviour is discussed as one of the components of financial behaviour. The available studies reveal that attitudes towards money are a substantial predictor of a man's financial astuteness and financial condition (Shim, Xiao, Barber, and Lyons, 2009). Evidence implies that money attitudes influences money behaviour and therefore contributes in the prediction of financial practices (Roberts and Jones, 2001). Muhammad, Muhammad, and Hassan (2016) note that, "money attitudes exploration is giving new insights into customer financial behaviours". Norvilitis, Szablicki, and Wilson (2003) in particular, observes such predictions in saving habits, incurrence of debt, usage of credit cards, and incurrence of unplanned expenditures.

McFarland et al. (2003) observed that participation rates in optional defined contribution pension schemes were about 90% for individuals with the most positive attitudes towards money and 62% for those with the most negative. He also found that those with the most positive attitudes had larger retirement savings and actively managed their accounts, in comparison to those in other clusters. Based on the few studies conducted on the association between monetary attitudes and financial behavior, a positive relationship can therefore be expected to exist between monetary attitudes and investment behaviour.

1.1.4 Teachers in Swaziland

The teaching profession in Swaziland offered a unique opportunity for this research. The key objective for this investigation was to ascertain whether money attitudes can explain the divergence from the expectation that savings positively associate with income. Teacher's salaries are generally standardised and as such, income can be held constant when reviewing their investment behaviours. Furthermore, the requirement that senior secondary teachers obtain a teaching degree (Swaziland Teaching Service Commission, 2017) and the fact that none of the

teacher training colleges offer degree programs, has resulted in the engagement of university graduates who hold basic bachelor's degrees in the different subject specialisations to the teaching profession. These graduates are required to complete a post graduate certificate in education qualification. This factor results in more diversity within the teaching profession. Also, although no precise statistics are provided, every year the government employs more teachers, which ensures that all working age groups are represented in the teacher population.

Schools are distributed throughout the country, ensuring that every region is adequately represented by the teaching profession. The conclusions in Klontz and Klontz (2009) that money attitudes are developed at childhood emphasises the critical role that teachers are likely to have on financial attitudes in a country, since children spend most of the day at school with their educators. The factors above have resulted in the selection of teachers for investigation.

1.2 Research Problem

Although Swaziland has the highest income per person amongst countries classified as lower-middle income states in the African region south of the Sahara desert, its savings rate is significantly less than the average for the region. Established finance theory suggests that savings are positively associated with income. This anomaly indicates that another factor, other than income, is responsible for the poor savings behaviour. Studies conducted on savings and investment behaviour in Swaziland have been descriptive in nature concerned with determining actual behaviour at a particular period (i.e. Davoodi, 2008; Finmark Trust, 2011). There is no evidence of empirical work conducted to determine the cause(s) of the low savings rate. Studies conducted elsewhere, particularly in the African continent, have focused on the influence of demographic variables on savings behaviour. Deaves, Veit, Bhandari, and Cheney (2007), for

instance, observed that disparities in money retention behavior can be attributed to dissimilarities in gender, marital status, age and salaries. There is no evidence to suggest that the demographics in Swaziland are significantly different from those in other African countries. Demographic variables cannot therefore, explicate the anomaly observed in Swaziland. Money attitudes, personality traits and group membership have also been found to influence investment behaviour (McFarland et al., 2003; Onchangwa and Memba, 2012; Wells, 1975). The influence of personality traits and group membership is likely to be reflected in the attitudes individuals hold towards money. An investigation of money attitudes is therefore likely to offer insight on these two variables as well. The study focus was therefore limited to money attitudes. McFarland et al. (2003) observed that money attitudes are a factor that significantly influences the investment behaviours of individuals. They found that positive money attitudes influence investment behaviour favourably.

Observations in studies undertaken in Swaziland, suggest that, attitudes towards money are generally negative. Fakudze et al. (2012) observed that the entrepreneurial culture in Swaziland is very weak and young people prefer to work in the public sector. He further noted that a government initiative, the Youth Enterprise Fund, which offered collateral free loans, resulted in poor repayment, indicating that the businesses were not successful. Further evidence to support the presence of poor attitudes towards money, is the failure by Swazis to take advantage of business opportunities in the country. This conclusion is based on the complaints raised by Swazis over the proliferation of businesses owned by Asians in their country. Dlamini (2016) reports that concerned Swazis, appearing before a parliamentary portfolio committee, were of the view that Asians have taken over the economic life in Swaziland. The concern amongst Swazis is predominantly on the Asians operating small businesses. Clearly, these opportunities have always

been there and were not taken advantage of by the Swazis. Based on these observations, there was, therefore, a strong case for the conduct of an investigation on the influence of money attitudes on investment behaviour in Swaziland. This motivated the study to investigate the association between monetary attitudes and investment behaviour. Investigation has been limited to teachers to take advantage of their standardized salaries which controls for income; and their composition, which controls for the demographic variables that have been found to influence savings behaviour. The study sought to get an answer to the question: are monetary attitudes related to the investment behaviours of teachers in Swaziland?

1.3 Research Objective

To ascertain the association between monetary attitudes and the investment behaviours of teachers in Swaziland.

1.4 Value of the Study

Researchers and academicians will realise value from this research because it validates the MIS scale. This will enable them to utilise the scale in future studies. Future researchers will also be able to rely on the findings in this study for further research in the same field. The study will assist during policy formulation by the government of Swaziland, especially on the need to introduce investment and monetary studies in schools.

Furthermore, a number of Swazi companies have started rolling out defined contribution pension arrangements to replace defined benefit schemes. This study assists in determining the interventions that may be necessary before such schemes are introduced. The study provides feedback value to the institutions offering investment products in Swaziland on the uptake of their products compared to other products in the market.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this unit, an appraisal of the existing scholarly work concerning money attitudes and investment behaviour was undertaken, to obtain guidance for the study, especially on the methodology utilised. The chapter commences with a discussion of theories underlying savings behaviour in part 2.2. Sub-section 2.3 is a discussion on the determinants of investment behaviour. In part 2.4, an analysis of empirical research undertaken on investment behaviour and the influence of monetary attitudes on financial behaviour was undertaken. In sub-section 2.5, the conceptual framework adopted in this study is discussed. The findings from this chapter are summarised in part 2.6.

2.2 Theoretical Review

A theory is a set of expectations, proposals, or acknowledged facts that attempt to provide conceivable or coherent explanations of cause-effect (causal) associations among a collection of observed phenomenon. In this section, the researcher discussed the major theories underlying savings behaviour, which are: The Absolute Income Hypothesis; The Life Cycle Hypothesis; and the Permanent Income Hypothesis.

2.2.1 Absolute Income Hypothesis

Keynes (1937 in Modigliani, 1986, 298) hypothesized on how changes in income influence savings. He opined that income is the main influence on household and countrywide savings. He argued that an individual's average inclination to save would surge as household income reached higher levels. Savings can be viewed as one of the many commodities that an individual can allocate their income towards. What sets it apart from other goods is that, it can be negative

(borrowings). This occurs in households and nations earning below a particular income level (the income breakeven point). In the Keynes model, savings are represented by the following function:

$St = \alpha + \beta Yt$

Where:

St- Savings at time t

α- Autonomous savings, which is total savings at zero income, expected to be negative, since borrowings are likely to be incurred at zero income to support consumption.

β- Constant marginal saving inclination

Yt- Income/ Gross domestic product at time t

The expectation from this model is that as income increases, average propensity to save (total savings /income) will increase. This is because autonomous savings is deemed to be less than zero at lower income levels. Given a constant marginal propensity to save, as income increases, the increase to savings is more than there average savings before the extra income. This is due to the fact that prior positive savings, resulting from increasing income, are diluted by earlier borrowings (savings at zero income level). Browning and Lusardi (1996) discussed the eight savings motives that were identified by Keynes. These are: to accumulate a resource buffer against unseen future circumstances; to cater for an anticipated deficiency in future income to meet projected needs; to receive dividends and capital gains; to enjoy a progressively increasing level of expenditure; to gain independence and the ability to have control over what an individual can do in the future; to accumulate funds in anticipation of future business prospects; to bequeath a fortune; and to satisfy pure greed.

The conclusion in the PIH do not seem to hold in Swaziland. Even though its per capita income is higher than the average sub-Saharan nation, savings are less than the regional average. However,

the discussion by Browning and Lusardi (1996) indicates that different motives exist for individual savings. Motives can be traced to attitudes. It is the contention of this study that motives and by extension, attitudes influences the occurrence and magnitude of savings. The study analyses how different attitudes towards money account for the departure from the conclusions in the PIH.

2.2.2 Life Cycle Hypothesis

Modigliani (1966) suggested the life cycle hypothesis to explain variations in investment behaviour. He opined that people are balanced agents and adjust their spending and savings behaviour by determining their lifetime requirements. The postulation of the LCH is that individuals try to maximise utility by amassing wealth in their income generation years and sustaining consumption during retirement. The LCH seeks to demonstrate that allocation to consumption at any age, depends on lifetime expected earnings and not on current earnings. An individual is expected to consume at a sensibly steady rate that approximates his projected average lifetime consumption. Savings during any given year will vary based on how income in that year differs from average life resources (Modigliani, 1986). Horioka and Wan (2007) in analysing the LCH concluded that savings will depend on the rate at which average income per person increases and how the age of the populace is structured.

A higher number of young people without income sources is expected to influence the proportion of income saved, negatively. A country with a constant population structure and earnings would not record changes in aggregate savings since the withdrawal of savings by those who leave employment would cancel off the savings of the newly employed. Mikesell and Zinzer (1973) opined that positive savings will be attained in countries experiencing population growth or increasing per capita income or the two events occurring concurrently. From the conclusion in this

theory, the study has considered whether the age distribution of the Swazi populace is responsible for the low savings. However, the average age in Swaziland estimated at 22 years, is not different from other African countries. The population has been growing steadily over the years, the effect of which, according to the LCH, would have been an increase in savings. The LCH, therefore, does not explain the poor savings habits in Swaziland in comparison with the average sub-Saharan nation. The study has partially addressed the deficiency of the LCH in explaining savings behaviour.

2.2.3 Friedman's Permanent Income Hypothesis

The PIH is similar in most respects to the LCH with key difference being the supposition that an individual's existence is indeterminately long (Modigliani, 1986 in Du Plessis, 2008, 21). A simplified savings function under the PIH is as follows:

$St = \alpha + \beta 1YPt + \beta 2YTt$

Where:

St- Savings at time t

α- Autonomous savings, which is total savings at zero income expected to be negative since borrowings are likely to be incurred to support consumption.

YPt- Perpetual earnings in year t

YTt- Temporary earnings in year t

β1& β2- Perpetual marginal inclination to save for perpetual and temporary earnings, respectively.

These binary types of income have been described as follows: Miksell and Zinser (1973) define perpetual income as the income expected to be earned over a planning period; Muradoglu and Taskin (1996) define it in terms of continuous amount consumed sustainably for life based on the

current capital levels; and Samuelson and Nordhaus (1995) define temporary income as the difference between current and perpetual income caused by temporary influences such as unexpected gains and losses.

Individuals are assumed to save the transitory income. Houthakker (1961) observed, in support of the PIH, that individuals do not make any savings from employment income in most countries. Williamson (1968) observed huge differences between savings from employment and non-employment income in Asia. Harjes and Ricci (2005) noted that an impermanent increase in current earnings predominantly lead to extra savings whilst a lasting increase results in additional consumption for both the LCH and PIH. The PIH cannot be used to justify the poor saving habits in Swaziland. Swaziland has been experiencing declining GDP growth. Expectation would have been for individuals to revise downward their permanent income estimates. The recent increases in salaries in recent years in Swaziland, would have been viewed as temporary by Swazis, resulting in more savings. This has not been the case and the study sought to find out why.

2.3 Determinants of Investment Behaviour

The collection of empirical studies undertaken on investment behaviour reveal that three main factors, other than income, have an influence on it. These are: social influences; demographic influences; and money attitudes.

2.3.1 Social Factors

Class membership (Myers and Mount, 1973), cultural surroundings, the different groups of people an individual interacts with (Onchangwa and Memba, 2012; Wells, 1975; and Aduda, Oduor, and Onwonga, 2012) and personality traits (Krech, Crutchfield, and Ballachey, 1962) can be classified as social factors that influence an individual's investment decisions and behaviours.

2.3.2 Demographic Factors

Age, education level and income have been found to be positively correlated with savings behaviour. Differences in savings behaviour have also been found between the different genders and different marital statuses (Zaimah et al., 2013; and Chakraborty and Digal, 2011).

2.3.3 Money Attitudes

Financial literacy and attitudes towards risk have been found to be positively correlated with investments into risky asset classes (Aydemir, 2015). Positive attitudes towards money have been found to be favorably associated with investment behaviour (McFarland et al., 2003). The level of image consciousness in society has been found to be negatively associated with savings (Du Plessis, 2008)

2.4 Empirical Review

There is limited scholarly work undertaken on the influence of money attitudes on financial behaviour. Gbadamosi and Joubert (2005) observed that the use of the money ethics scale had not been identified in any prior studies in Africa. Our empirical review with regards to the influence of money beliefs has included studies analysing related financial behaviours to investment behaviour generally, due to the very few studies addressing investment behaviour specifically. We have not identified any such studies in Africa. The researcher has also reviewed studies focusing on the influence of other factors on investment behaviour conducted internationally and in Africa.

2.4.1 International Evidence

McFarland et al. (2003) drawing on the money attitude scales, developed an attitudinal segmentation of defined contribution retirement plan participants and eligible non participants in the USA. The survey responses were analyzed using cluster analysis. Five distinct groups were

identified, ranging from those with the most positive attitudes to those with the most negative attitudes towards money. Findings indicated that that optional defined contribution pension plan participation rates ranged from 90% for those with the most positive attitudes towards money to 62% for those with the most negative. The size of retirement savings and frequency with which investments were monitored was positively associated with money attitudes.

Durvasula and Lysonski (2010) utilised the Money Attitude Scale (MAS) to evaluate the impact of money attitudes on Materialism (measured using six item measure recommended by Richins in 1987 as discussed in Richins, 1992) and achievement vanity (determined through the utilisation of Netemeyer, Burton, and Lichtenstein's 1995 vanity scale). A confirmatory factor analysis was applied to scrutinize the psychometric features of the variables. Their findings were that materialism is influenced by the anxiety and power-prestige factors, however, the mistrust factor had no influence. Worth noting is that the security factor for money attitudes was excluded because the authors felt it was not relevant in studying the financial habits of young adults.

Krech et al. (1962) noted that individuals' characteristics have an impact on their investment views and choices. Myers and Mount (1973) noted that investment behaviour is significantly influenced by class membership. Wells (1975) found that an individual's social environment and the diverse groups of individuals he/she interacts with has a huge influence on his perceptions, thinking and beliefs about different forms of investments. He further observed that investment habits are driven by the niche cluster which an individual belongs or aspires to associate with. Chakraborty and Digal (2011) found that Chi-square test results indicated that savings objectives were dependent on occupation, age and income.

Zaimah et al. (2013) identified four aspects that were interconnected in the assessment of economic behaviour. These were: planning; cash flow management; savings and usage of credit cards. Statistical tests such as t test and ANOVA were used for the analysis of variations in mean values across factors such as level of education, age, monthly earnings and financial knowledge level. Their results indicated that respondents had a significant mean score on all four financial behaviour dimensions. Findings indicated that respondents who were above 45 years had superior savings behaviour. They also observed that respondents with good financial behaviour were more likely to save their income.

Aren and Aydemir (2015) implemented a stepwise regression analysis to investigate the correlation between investment avenue choices and certain other variables. Using correlation analysis they found that there are three variables that have a relationship with foreign currency investment: Basic financial literacy, advanced financial literacy; and risk criterion. Regressing foreign currency preference with the three variables above indicated a significant relationship for advanced financial literacy and risk criterion. It was therefore concluded that lower risk preference and a lower level of financial literacy increase bias towards trading foreign currency. Two variables were found to be related with investing in bank term deposits. Corporate data criterion and gender. Corporate data refers to an individual's tendency to rely on firms published financial statements as a basis for investment decisions. Regression analysis results indicated a negative relationship between the corporate data criterion and investment in bank deposits. Women were found to prefer the bank deposit alternative more than men. Two variables were found to be related with bonds: Education; and the risk criterion. Regression analysis results indicated that advancement in education levels and increasing risk appetites is associated with higher bond demands. Equity was found to be associated with gender, advanced financial literacy, repay

criterion and risk criterion. Regression analysis results indicated that men preferred equity more than women, individual's preference for equity increase with an increase in their financial literacy level, increased risk appetite and willingness to accept delayed returns on investments (liquidity).

2.4.2 Local Evidence

Du Plessis (2008) observed that savings by individuals in SA are impacted undesirably by an ambitious culture which encourages consumption and that this is strengthened by the easy access to credit in SA, made possible by its advanced financial sector. Du Plessis (2008) further argued that policies implemented by the government on wealth distribution through grants, contribute to a habit of reliance on the state and a decrease in household savings. Onchangwa and Memba (2012) found that joining a savings and credit co-operative union (SACCO) favourably impacted the savings culture of individuals.

Aduda et al. (2012) found evidence of herding behaviour in the Nairobi stock exchange. A greater proportion of respondents indicated that they based their trading activity based on the popular opinion at the time and advice from friends. Chipote and Tsegaye (2014) found that between 1990 and 2011, contrary to established theory, household earnings were adversely associated with savings. A favourable association between savings and the degree of inflation, real interest rate and number of dependents was established for the same time period. Ocran (2014) using a logit regression model found that the propensity to hold risky assets differs substantially among individuals of different educational level and marital status. He also determined that employment wage income levels are important in explaining the likelihood for ownership of a unit trust or equity. To a limited extent, race was found to be a factor influencing the ownership of risky financial assets.

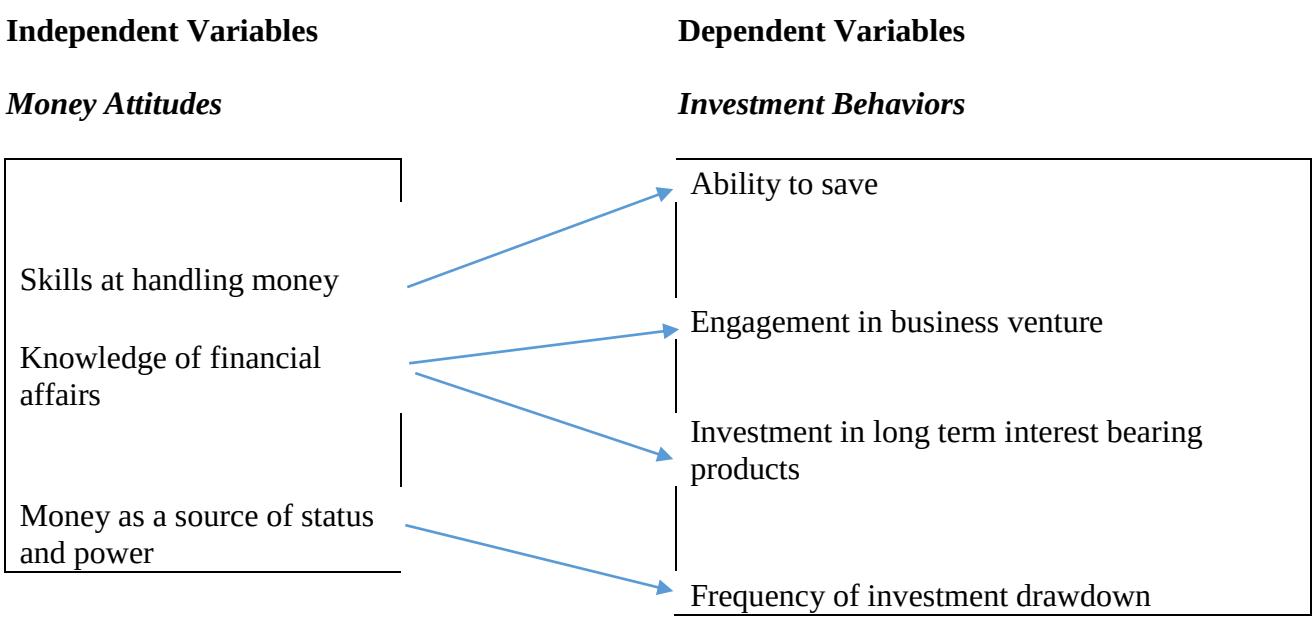
2.5 Conceptual Framework

The independent variable, money attitudes was measured using the MIS. This scale consists of seven factors, which, in the view of the researcher, exhaustively measure the attitudes that influence an individual's investment decisions. The factors can be briefly defined as follows: value importance of money measuring the degree at which an individual values money above everything else; personal involvement with money measuring the degree at which an individual keeps track of his financial affairs; time spent thinking about financial affairs measuring the degree at which an individual mediates on his financial state and devises strategies to improve it; knowledge of financial affairs measuring the degree at which an individual understands and follows current developments in the financial markets and financial jargon; comfort in taking financial risks which measures individual's risk appetite; skills at handling money which measures the success individuals enjoy in their money management practices; and money as a source of status and power which measures the degree at which an individual uses money to measure success and failure, that is, keeping score.

The dependant variable, which is investment behaviour, was measured using the following dimensions: investment risk taking behaviour as reflected by current investment choices; ability to engage in a business venture; amount of money set aside from periodic income or borrowed funds for business purposes; ability to save income; amount set aside periodically for savings; monitoring of investment performance; frequency of drawdowns from investments or withdrawals made before maturity of investments; and the source of information for making investment decisions.

The following predictor-dependent variable relationships were identified in the study: skills at handling money is a statistically substantial predictor of the likelihood for teachers to save; knowledge of financial affairs is a significant predictor of the likelihood for a teacher to engage in a business venture or invest in long term interest bearing instruments; whilst using a money as a source of status and power increases the likelihood for a teacher to make a drawdown from investments. These relationships have been illustrated in Figure 2.1 below:

Figure 2.1 Conceptual Framework



Source: Researcher

2.6 Summary of the Literature Review

The three theories reviewed indicate that savings are directly correlated with income. These theories did not explain the obtaining situation in Swaziland. Evidence of a similar anomaly is found by Chipote and Tsegaye (2014), when they observed that, in South Africa, between 1990 and 2011, contrary to established theory, household earnings were adversely associated with savings. The study on money attitudes has provided some insight on the possible cause for this anomaly. McFarland et al. (2003) found that the differences in investment behaviours among

individuals can be traced to differences in money attitudes. The study was conducted in the USA and the validity of its findings had never been tested in Africa. This has been addressed in the current study. Krech et al. (1962) found that differences in investment behaviour can be traced to personality variations, Wells (1975) found that behaviours could be traced to class membership and groups which individuals interact with. This was similar to the findings by Onchangwa and Memba (2012) indicating that joining a SACCO leads to a positive change in savings habits. These studies did not explain the attributes that are held by different personality types or that develop as a result of interactions with certain groups that lead to different or changed investment behaviours. This has been addressed by the present study on money attitudes.

Du Plessis (2008) observed that contrary to expectations based on established economic thought, savings rate in South Africa are low. He attributed this to the presence of a materialistic culture which encourages consumption which is further invigorated by the easy credit access made possible by the level of advancement of the financial sector in SA. Du Plessis (2008) further noted that government policies of wealth sharing through grants contribute to a habit of reliance and a decrease in household savings. His study employed the Delphi technique and findings were not empirically tested. The study addresses that shortfall. Ocran (2014), Zaimah et al. (2013), Chakraborty and Digal (2011) found that investment behaviour is influenced by demographic variables. They however did not explain why. The study on money attitudes has revealed the possible reasons for the differences. Aydemir (2015) observed that attitudes towards risk and financial knowledge are positively correlated with investments in risky asset classes. These variables are part of the MIS. Limiting analysis to these two factors only is not exhaustive enough to provide a complete assessment of individuals and their investment behaviours. The current study has addressed that shortfall.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The study strategy that has been applied and a description of the population of interest has been discussed in this section. The section also covers a description of the sampling method applied and how data was analysed.

3.2 Research Design

The research implemented a survey research strategy. Bryman and Bell (2007) define a survey research project as one that entails the gathering of data (Qualitative or quantitative), predominantly through the use of questionnaires or interviews, from more than one individual during the same time period, in relation to two or more variables, which are to be reviewed to assess their association patterns. This design was found to be suitable for the purposes of the study since the objective was to establish the attitudes of teachers towards money and how it relates to their investment behaviour.

3.3 Target Population

The population of interest in this investigation were primary and high school teachers in Swaziland. The Swaziland teaching service commission website indicates that there are 4 358 high school teachers and 12 560 primary school teachers in Swaziland. This gives a total of 16 918 teachers as of January 2017. The teachers are stationed in schools spread throughout Swaziland's four geographic regions. The distribution of the schools is as follows:

Table 3.1 Schools by Region

Region	Primary schools	Secondary schools	High schools		Total
Hhohho	161	10	55		226
Lubombo	123	10	45		178
Manzini	164	6	55		225
Shiselweni	146	6	49		201
Total	594	32	204		830

Source: School Lists retrieved from http://www.imbalifoundation.org/gfx /schools_lists_by_pay_code_2011.pdf (10/04/2017)

3.4 Sampling Design

The cluster sampling method was applied in this study. Each set of community schools (Primary and high school) was treated as a separate cluster. All teachers in a selected school were included as part of the sample. Stratified sampling was used to assure adequate representation by region. Two communities having a primary and high school were selected in each region resulting in a total sample of 16 schools. The sample in this study was 304 teachers based on an estimate of 19 teachers per school.

3.5 Data Collection

The research utilised primary data. Data was obtained directly from respondents through the use of a structured questionnaire. Section one was designed to ascertain the demographic features of the respondents. In section two respondents were required to respond to the 28 questions covering the 7 factors in the MIS. Respondents were required to respond on the degree to which each item on the five point Likert scale described their views. Section three covered the eight items

representative of investment behaviour. Respondents were required to select the options that reflected their investment behaviours. The drop and pick method was applied in collecting the data.

3.5.1 Data Validity and Reliability Test

Data validity refers to the integrity of measurement apparatuses, the degree at which an instrument quantifies what it is designed to quantify. Data entered on SPSS was screened for reasonability through SPSS data cleaning mechanisms to ensure that invalid data could be identified and corrected. The MIS scale has been used in previous studies and as such reliance has been placed on the findings in those studies to conclude that the scale is valid. For the investment behaviours, the researcher consulted with academicians from the University of Nairobi to confirm that the tools identified indeed measure investment behaviours. Reliability is the degree to which an evaluation tool gives stable and sound results. Cronbach's Alpha, a statistical quantification of internal consistency was employed to determine the reliability of the money measurement scale. A high score reflected a higher degree of reliability.

3.6 Data Analysis

Responses from returned questionnaires were edited, coded and analysed using SPSS (version 21). Frequency tables were used to analyse demographic properties. Respondents' means and standard deviations were ascertained for the factors that make up the MIS. The respondents' investment behaviours were illustrated using frequency tables and diagrams. Correlation analysis was undertaken to identify the significant relationships amongst the variables in the study and identified relationships formed the basis for performing the regression analysis.

3.6.1 Analytical Model

The following regression model was used to determine predictor-dependent relationships in the study: $Y1 = \alpha + \beta 1X1 + \varepsilon$; $Y2 = \alpha + \beta 2X2 + \varepsilon$; $Y3 = \alpha + \beta 3X2 + \varepsilon$ and $Y4 = \alpha + \beta 4X3 + \varepsilon$;

Where:

Y1- Likelihood to save money periodically

Y2- Likelihood to engage in a business venture

Y3- Likelihood to invest in a long interest bearing investment product

Y4- Likelihood to make a drawdown against investments before maturity

α - Constant Term

X1 – Skills at handling money

X2 – Knowledge of financial affairs

X3 – Money as a source of power

β 1-4 – Regression coefficients

ε – Error term

3.6.2 Test of Significance

The relationships between predictor and dependant variables were tested using the F and t test statistics. The null hypothesis was that there was no correlation between the following variables: skills at handling money, knowledge of financial affairs, money as a source of status and power factors with the likelihood to save money periodically, likelihood to engage in a business venture or likelihood to invest in a long term interest products and the likelihood to drawdown from investments before maturity, respectively. The p value of the F and t tests were used to measure statistical significance. Where p values were very small (<0.05), a conclusion was reached that sufficient statistical evidence had been obtained to support the alternate hypothesis.

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

In this section, the validity and reliability of measurement instruments used has been assessed, descriptive statistics generated from the data gathered and the relationship among variables determined using correlation and regression analysis. A discussion of the results obtained concludes the chapter.

4.2 Response Rate

A response rate of 74% was achieved. 225 responses were received from a target of 304. Mugenda and Mugenda (2003) states that a response rate above 70% can be classified as excellent. The rate achieved meets the excellence criterion. Data was therefore, deemed to be adequate for analysis. Details on the response rates are illustrated in table 4.1 below:

Table 4.1 Response Rate

Issued questionnaires	Frequency	Percent (%)
Returned	225	74%
Not returned	79	26%
Distributed	304	100%

Source: Survey Data, 2017

4.3 Data Validity and Reliability

Two set of scales were used in this study, the MIS and investment behavior scale. These scales were subjected to rigorous review by Finance academicians at the University of Nairobi. Furthermore, questionnaires were reviewed with a sample of respondents to confirm whether

statements were clear. Data entered on SPSS was screened, reviewed for reasonability on a case by case basis and unreasonable data eliminated. The MIS was adapted from the MIS developed by Mitchel et al. (1998). It has the following dimensions: value importance of money (α= 0.71); personal involvement with money (α= 0.83); time spent thinking about financial affairs (α= 0.70); knowledge of financial affairs (α= 0.78); comfort in taking financial risks (α= 0.77); skills at handling money (α= 0.75); and money as a source of status and power (α= 0.77). This instrument has been used in a number of previous studies and has been found to be both valid and reliable. The researcher further tested the scale for reliability by analysing the responses in the present study, and determined the following reliability results, based on the dimensions above: value importance of money (α=0.66); personal involvement with money (α= 0.68); time spent thinking about financial affairs (α= 0.46); knowledge of financial affairs (α= 0.74); comfort in taking financial risks (α=0.61); skills at handling money (α= 0.58) and money as a source of status and power (α= 0.65). These results indicated that two dimensions of the scale in its original form were below the threshold of 0.60 for reliability.

The researcher performed a correlation analysis, first within factors, removing those variables with insignificant correlation to others, in a bid to improve reliability. Factors where improvements were not realised were omitted from the study. Variables forming part of the eliminated factors that were found to have significant correlations with retained factors were added to the retained factors to improve their reliability. For the 'skills at handling money' factor, the variable 'my stop orders never bounce' was removed and two variables added from the 'time spent thinking about financial affairs' factor, which are: 'I have explicit plans for how I can make more money' and 'I try to be aware of financial details like bank fees or interest charges'. To the 'personal involvement with money' factor, the variable 'I can tell you how much debt I have' was added from the 'time

spent thinking about financial affairs' factor. The outcome from this exercise was the elimination of one factor from the original MIS. The six retained factors and their Cronbach's alpha values are illustrated in table 4.2 below:

Table 4.2 Reliability Coefficients: Money Importance Scale

Factor	Cronbach's Alpha	Number of items
Value importance of money	0.66	4
Personal involvement with money	0.68	5
Knowledge of financial affairs	0.74	6
Comfort in taking financial risks	0.61	2
Skills at handling money	0.64	7
Money as a source of power and status	0.65	4

Source: Survey Data, 2017

The knowledge of financial affairs factor had the highest reliability (α= 0.74) whilst the comfort in taking financial risks had the lowest reliability level (α= 0.61). Personal involvement with money (α= 0.68), value importance of money (α= 0.66), money as a source of status and power (α= 0.65) and skills at handling money (α= 0.64) complete the revised MIS. With the exception of the 'time spent thinking about financial affairs' factor, all factors in the original scale were retained.

An exploratory factor analysis was undertaken for the investment behavior variables to determine if variables could be included in a single measure (construct validity) since this scale was researcher developed. The results as detailed in table 4.3 below were obtained:

Table 4.3 Exploratory Factor Analysis Results for Investment Behaviours

	Component				
Investment behaviour	**1**	**2**	**3**	**4**	**5**
Ability to save money periodically	.096	.678	.367	.109	-.195
Engagement in a business venture	.024	-.074	.147	.639	.240
Current account	.258	-.177	-.049	-.404	.080
Frequency of drawdowns from short term	.829	-.036	-.224	.089	.147
Frequency of drawdowns from long term	.805	-.095	.058	.184	.130
Money Market -Low interest	.192	.160	-.154	.543	-.017
Money Market- High interest	-.362	.084	.529	.077	.494
Long term interest bearing	.086	.768	.321	.071	-.001
Equity & Forex trading	.226	-.256	.530	.225	-.509
Amount invested in business venture(s)	-.169	-.474	.302	.286	.363
Riskiness of business venture	-.222	.286	-.402	.235	-.334
Investment monitoring frequency	-.327	-.090	-.525	.516	-.035
On what basis do you mostly make investment decisions	.068	.497	-.340	-.105	.560

Source: Survey Data, 2017

The results above indicate that five distinct factors/dimensions could be deduced from the variables used to measure investment behaviours. One measure of investment behaviour is therefore not appropriate. Frequency of drawdowns from both short and long term investments load highly on factor 1. This factor was labelled as 'frequency of drawdowns' factor. The ability to save money and investment in long term interest bearing products load highly on factor 2. Only the guaranteed future value investment product was selected by respondents under long term interest bearing products. This product requires periodic deposits, therefore, factor 2 was labelled as the 'ability and willingness to save money periodically'. However since the scales for measuring these two variables are different, a decision was taken to analyse each variable separately. Money Market-High interest, Equity and Forex instruments load highly on factor 3. This factor was labelled as

'investment in high return instruments' factor. However, since very few respondents invested in equity and forex instruments, the variables were analysed separately. Engagement in a business venture, ownership of a money market- low interest account and investment monitoring frequency load highly in factor 4. Money market-low interest products consist of savings and fixed deposit accounts. Due to the different scales used to measure these variables, they were analysed separately. The basis for monitoring investment decisions is the only variable loading highly in factor 5, therefore, it was also analysed separately.

Variables that had a loading of less than 0.5 in any of the factors were also analysed separately. Frequency of drawdowns was therefore, the only factor in the money behaviour scale retained. All other variables were measured and analysed separately. Its Cronbach's alpha of 0.71 is above the threshold of 0.60 and it was therefore deemed to be a reliable measure.

4.4 Descriptive Statistics

The respondents' demographic properties have been analysed using frequency tables to ascertain if they assure adequate representation within demographic classes. Statistics for monetary attitudes such as mean, standard deviation, maximum and minimum values have also been presented in this sub- section. Graphs and pie charts have been utilised to determine the prevalence of investment behaviours among respondents.

4.4.1 Demographic Details

Informed by findings in previous studies, the research was designed to ensure adequate representation within the demographic variables found to have an influence on investment behavior. Teachers were selected because their composition enables such coverage. Data on the gender, age, highest qualification held, marital status and number of dependants supported by the

respondents was gathered to determine if equitable representation within demographic classes had been attained. Data on the school teaching level and region of employment was also collected for information purposes and to assess whether study covered all the geographic regions in Swaziland, respectively.

4.4.1.1 Gender

Table 4.4 below illustrates the composition of respondents in terms of gender:

Table 4.4 Respondents Gender

Gender	Frequency	Percent	Cumulative percent
Male	87	38.7	38.7
Female	138	61.3	100
Total	225	100	

Source: Survey Data, 2017

Females made up the majority of respondents at 61% with males make up the remaining 39%. Traditionally the teaching profession has been associated with female staff and the results confirmed the expectation that females would be the majority. The results indicate sufficient representation for both genders.

4.4.1.2 Age

The respondents' age distribution is illustrated in table 4.5 below:

Table 4.5 Age Distribution of Respondents

Age group	Frequency	Percent	Cumulative Percent
20-30 Years	48	21.3	21.3
31-40 Years	102	45.3	66.7
41-50 Years	50	22.2	88.9
51-60 Years	25	11.1	100.0
Total	225	100.0	

Source: Survey Data, 2017

The 31-40 years age cluster represented the highest proportion of respondents' at 45.3%, followed by the 41-50 years age group at 22.2%. The 20-30 year age group had the third largest number of respondents at 21.3% whilst the 51-60 years age group had the lowest at 11.1%. This statistic was deemed to be representative of the demographics in the teaching profession and each age group had a sufficient representation.

4.4.1.3 Qualification

The distribution of the respondent's qualifications is demonstrated in table 4.6 below:

Table 4.6 Qualifications of Respondents

Qualification type	Frequency	Percent	Cumulative Percent
O' Level certificate	6	2.7	2.7
Teacher's certificate	14	6.2	8.9
Diploma	82	36.4	45.3
Bachelor's Degree	115	51.1	96.5
Master's degree	7	3.1	99.6
Unspecified	1	0.4	100.0
Total	225	100	

Source: Survey Data, 2017

The majority of respondents (51.1%) held a bachelor's degree. They were followed by diploma holders at 36.4%. Holders of teacher's certificates, master's degrees and o' level certificates followed at 6.2%, 3.1% and 2.7% respectively. Only one respondent omitted his qualification from the responses. The results were deemed to sufficiently represent the spread of qualifications in the teaching profession in Swaziland and each qualification was adequately represented.

4.4.1.4 Region

The distribution of respondents in terms of the four geographical regions in Swaziland is demonstrated in table 4.7 below:

Table 4.7 Distribution of Respondents by Region

Region	Frequency	Percent	Cumulative Percent
Hhohho	44	19.6	19.6
Manzini	63	28.0	47.6
Lubombo	62	27.6	75.1
Shiselweni	56	24.9	100.0
Total	225	100.0	

Source: Survey Data, 2017

The Manzini and Lubombo region contributed the highest number of respondents at 28% and 27.6% respectively. Shiselweni and Hhohho followed at 24.9% and 19.6% respectively. All regions were adequately represented, making it possible to generalise the results to the entire country.

4.4.1.5 School Level

The school level at which respondents were deployed is illustrated in table 4.8 below:

Table 4.8 School Level at which Respondents are Deployed

School level	Frequency	Percent	Cumulative Percent
Primary	97	43.1	43.1
High School	128	56.9	100.0
Total	225	100.0	

Source: Survey Data, 2017

The majority of respondents were deployed in high schools. During collection of data, it was noted that high schools employ more teachers than primary schools. The use of the cluster sampling

method resulted in more responses from high school respondents. Job types/levels have not been identified as a predictor variable for investment behaviour in previous studies. This outcome was therefore not expected to distort results in anyway.

4.4.1.6 Marital Status

Table 4.9 below reflects the marital status of respondents:

Table 4.9 Marital Status of Respondents

Status	Frequency	Percent	Cumulative Percent
Single	76	33.8	33.8
Married	131	58.2	92.0
Divorced	2	0.9	92.9
Widowed	13	5.8	98.7
Unspecified	3	1.3	100.0
Total	225	100.0	

Source: Survey Data, 2017

The majority of respondents were married (58.2%). The next large group was for single respondents at 33.8%. Widowed and divorced respondents were the fewest at 5.8% and 0.9 % respectively. 3 respondents did not specify their marital status. The marital status spread was deemed reflective of the current situation in Swaziland and all classes were sufficiently represented for the purposes of the study.

4.4.1.7 Number of Dependents

The distribution of respondents in terms of the number of dependants that they were responsible for is demonstrated in table 4.10 below:

Table 4.10 Dependents

Number of dependants	Frequency	Percent	Cumulative Percent
No dependants	4	1.8	1.8
One	23	10.2	12.0
Two	37	16.4	28.4
Three	46	20.4	48.9
Four	37	16.4	65.3
Five	46	20.4	85.8
More than 5	32	14.2	100.0
Total	225	100.0	

Source: Survey Data, 2017

20.4% of respondents indicated that they had 5 dependants and a similar proportion had 3. 16.4% of respondents indicated that they had 4 dependants and a similar percentage of respondents had 2. 14.2 % indicated that they had more than 5 dependants whilst 10.2 % had only 1. 4 respondents indicated that they have no dependants. The distribution of respondents in terms of number of dependents was not skewed towards any particular number. This controlled for the effect of dependents on savings behavior as identified in other studies.

The results in this section indicate that the study expectation that the teaching profession would ensure adequate representation within all demographic classes was met. This therefore ensured that results would not be influenced by skews within demographic classes. An analysis of the variables of interest has been conducted in the next sections.

4.4.2 Money Attitudes

The money attitudes of the respondents have been summarised in table 4.11 below:

Table 4.11 Money Attitudes Descriptive Statistics

Money attitudes	N	Minimum	Maximum	Mean	Std. Deviation
Value importance of money	211	1.00	5.00	4.0000	.68400
Personal involvement with money	217	1.20	5.00	3.8230	.61465
Knowledge of financial affairs	215	1.17	4.83	2.9891	.70334
Comfort in taking financial risks	220	1.00	5.00	3.3205	.88920
Skills at handling money	218	1.86	5.00	3.4889	.55989
Money as a source of status and power	219	1.00	4.00	2.3402	.69163

N- Number of respondents

Source: Survey Data, 2017

The money attitude scales ranged from 1 to 5, with 1 indicating the most negative attitudes towards money and 5 indicating the most positive. 3 was a point of uncertainty. Values of or below 2 indicate negative attitudes whereas values of or above 4 indicate positive attitudes. The value importance of money factor had the most favourable outcome amongst respondents. A mean of 4 indicates that respondents generally believed that money is important. The personal involvement with money factor was predominantly positive since the mean score of 3.8230 was above the mid – point 3 and close to 4.The knowledge of financial affairs factor was slightly negative since the mean score of 2.9891 was less than the mid-point of 3.The comfort in taking financial risks factor was marginally positive with a mean score of 3.3205. The skills at handling money factor was marginally positive with a mean score of 3.4889.The money as a source of status and power factor

was predominantly negative with a mean score of 2.3402. The results, therefore, indicated that respondents valued money, they were predominantly active in monitoring their financial affairs, their knowledge of financial affairs was slightly wanting, were slightly comfortable with taking financial risks, slightly skilled in handling money and mainly did not believe in using money to measure the success and status of an individual in society.

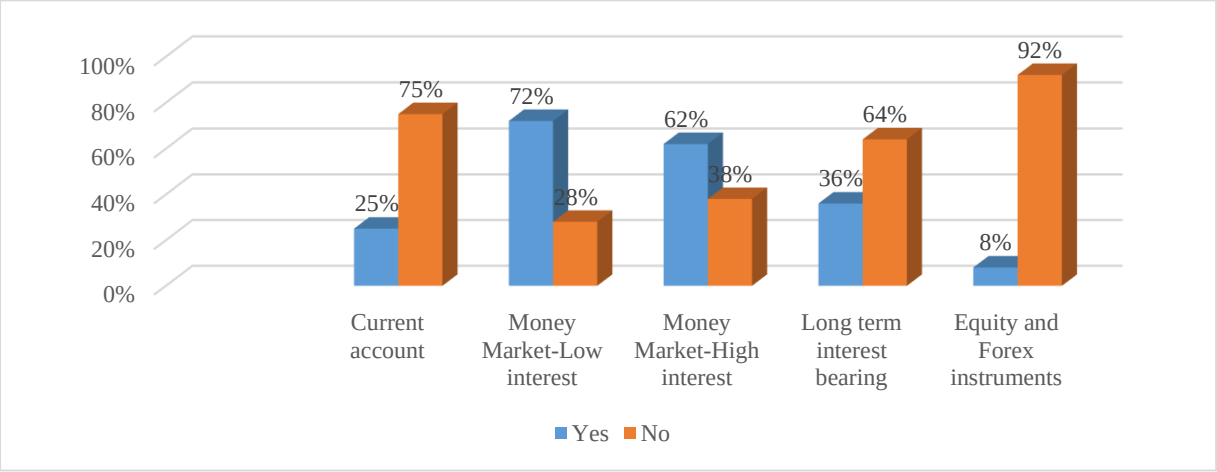
4.4.3 Investment Behaviours

In this section, the investment behaviours of respondents was analysed in terms of: investment avenue choices; engagement in business ventures; money set aside for business ventures; type of business venture engaged in; ability to save; money set aside for savings periodically; frequency with which investments were monitored, frequency at which drawdowns were made from investments; and respondents' source of information for investment decisions.

4.4.3.1 Investment Avenues

The percentage of respondents that held investments in each of the different investment classes is demonstrated in figure 4.1 below:

Figure 4.1 Investment Avenue Choices



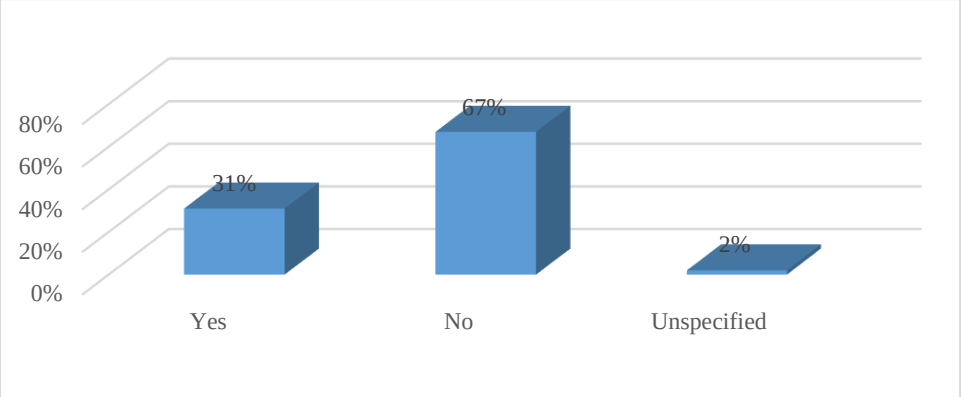
Source: Survey Data, 2017

Equity and Forex instruments had the least proportion of respondents investing in them at 8%. This was followed by savings using current accounts at 25%. Money market-low interest which consists of savings account and fixed deposits had the highest number of participants at 72%, followed by money market – high interest at 62%. Investments avenues in money market- high interest consist of treasury bills, money market unit trusts and credit co-operatives schemes. Investments in long term-interest bearing instruments was the third most popular avenue with 36% of respondents investing in guaranteed future value investment products.

4.4.3.2 Engagement in Business Ventures

Figure 4.2 below reflects responses to the question on whether respondents were engaged in business ventures:

Figure 4.2 Engagement in Business Ventures

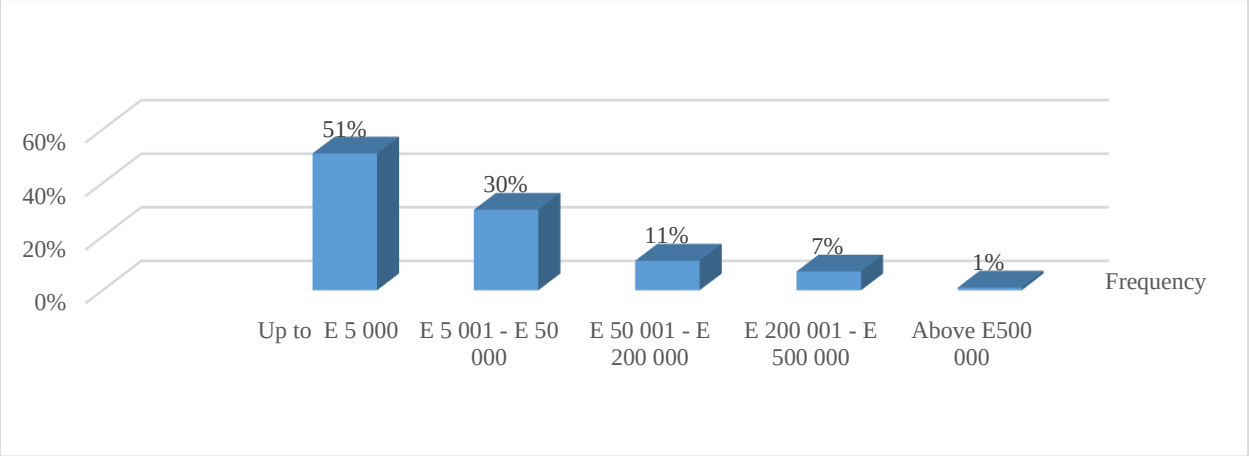


Source: Survey Data, 2017

Responses indicated that only 31% of teachers were engaged in some kind of business venture. 67% were not. 2% of respondents did not respond to this question.

The study further determined the amounts committed in private business by those respondents who indicated that they were engaged in business ventures. The results of that exercise are reflected in Figure 4.3 below:

Figure 4.3 Amounts Invested in Business Ventures

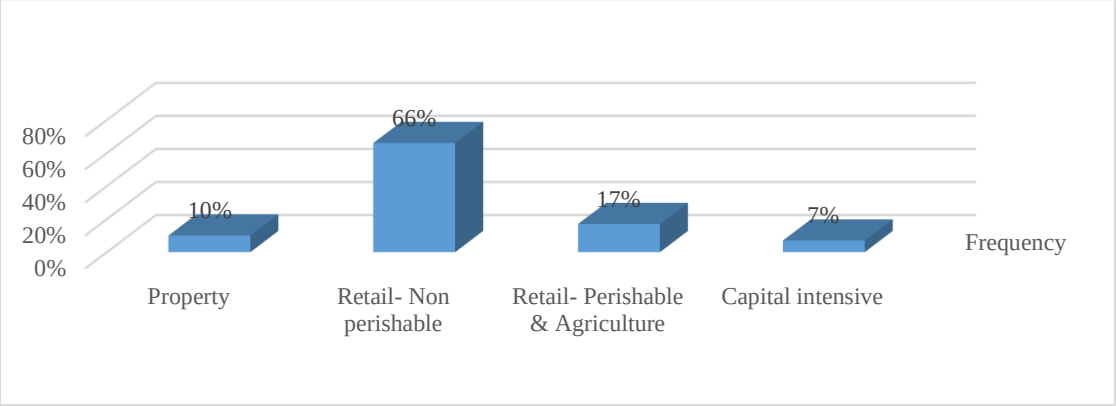


Source: Survey Data, 2017

Most of the respondents (51%) engaged in business ventures committed less than E 5 000 towards such ventures. This was followed by those who had committed between E 5001 and E 50 000 at 30%. 11% invested between E 50 001 and E 200 000 whilst 7% committed between E 200 001 and E 500 000. Only 1% invested more than E 500 000.

The study also established the type of businesses owned by those respondents who indicated that they were engaged in a business venture. The findings from that exercise are reflected in Figure 4.4 below:

Figure 4.4 Type of Business Venture Operated



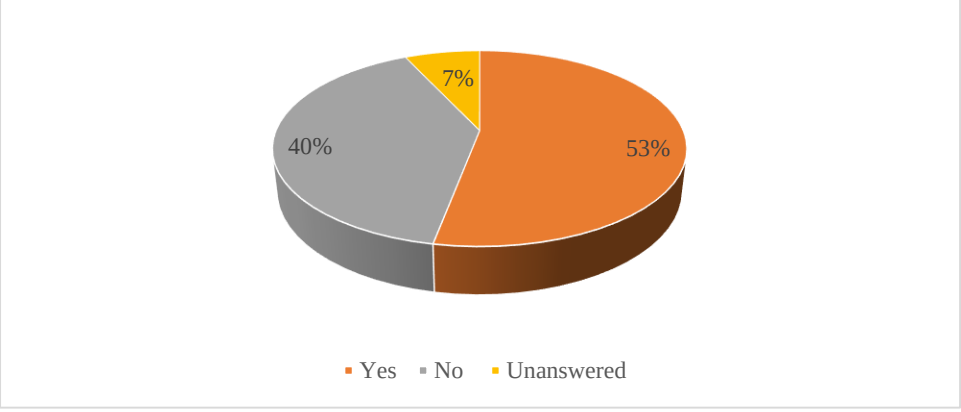
Source: Survey Data, 2017

A majority of the respondents (66%) engaged in business ventures operated businesses in the retail-non-perishable products segment. This was followed by perishable products- retail and agriculture segment at 17%. Property and capital intensive industries (e.g. construction) followed at 10% and 7% respectively.

4.4.3.3 Periodic Savings

The study also sought to determine if respondents were able to commit funds to savings from their periodic income. Figure 4.5 below reflects the findings:

Figure 4.5 Saving Ability of Respondents

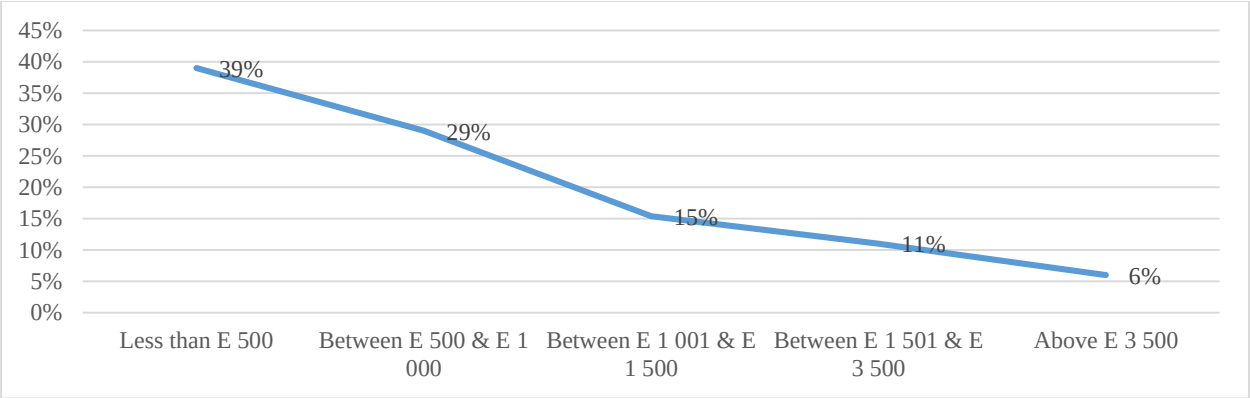


Source: Survey Data, 2017

More than half of the respondents (53%) indicated that they were able to save money on a continuous periodic basis. 40% stated that they were not able to save. 7% of respondents were not willing to state if they are able to save or not.

The amount that respondents (the 53% that were able to save) were able to set aside periodically for savings was also established. This is reflected in Figure 4.6 below:

Figure 4.6 Monthly Savings



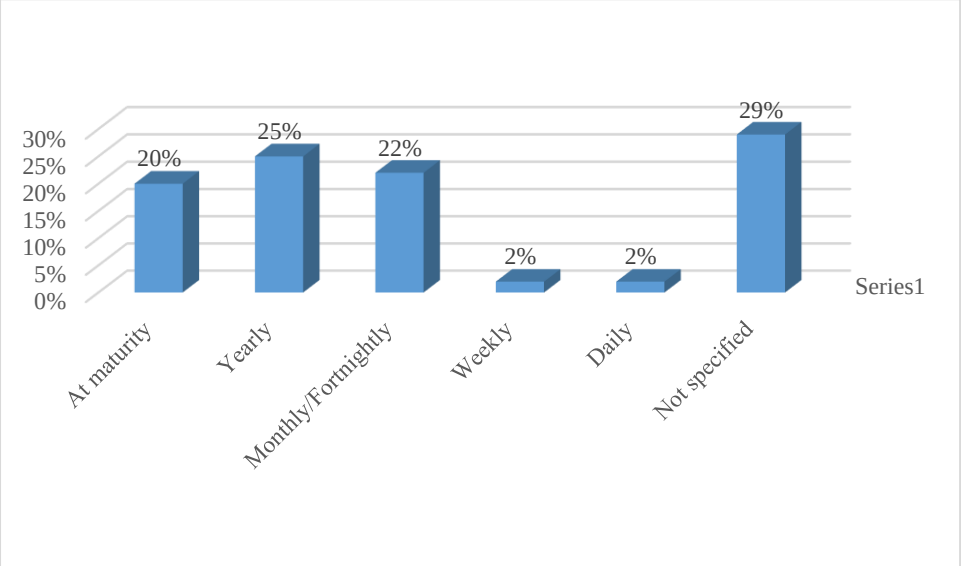
Source: Survey Data, 2017

39% of respondents able to save periodically, saved less than E 500 monthly. Respondents saving between E 500 & E 1 000 were 29 % of the savings population. Monthly savings amounts between E 1001 & E 1 500, E 1 501 & E 3 500 and above E 3 500 were attained by 15%, 11% and 6% of the savings population respectively.

4.4.3.4 Frequency for Monitoring Investments

The frequency with which respondents monitored their investments is reflected in figure 4.7 below:

Figure 4.7 Investment Monitoring Frequency



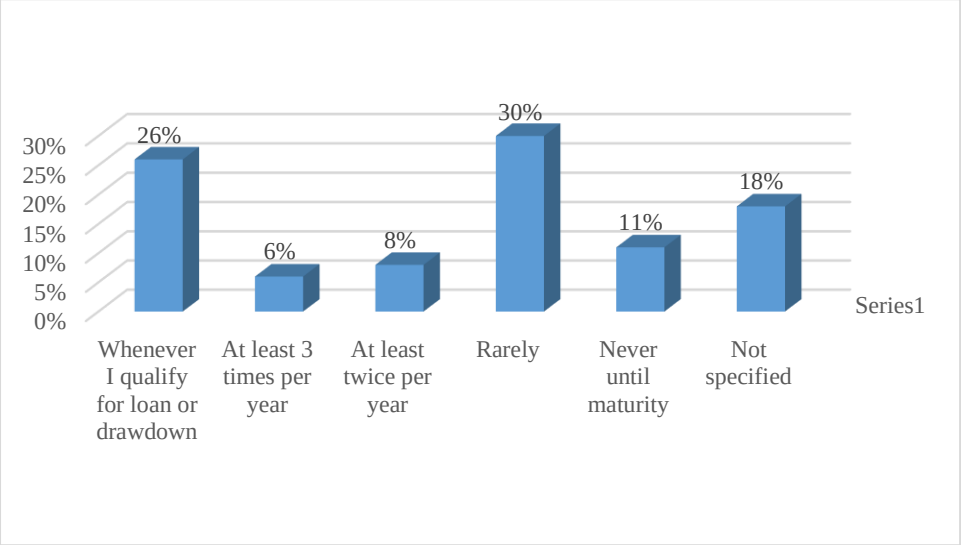
Source: Survey Data, 2017

25% of respondents indicated that they monitored their investment yearly, 22% on a monthly basis whilst 20% stated that they only checked on investments at maturity. Weekly and daily monitoring of investments was undertaken by an equal proportion (2%) of respondents. 29% of respondents did not specify the frequency with which they monitor investments. This is an indicator of the proportion of respondents that do not hold any savings accounts.

4.4.3.5 Frequency of Short Term Drawdowns

The frequency with which respondents' drawdown or borrow against their short term investments is detailed in figure 4.8 below:

Figure 4.8 Frequency of Short Term Drawdowns



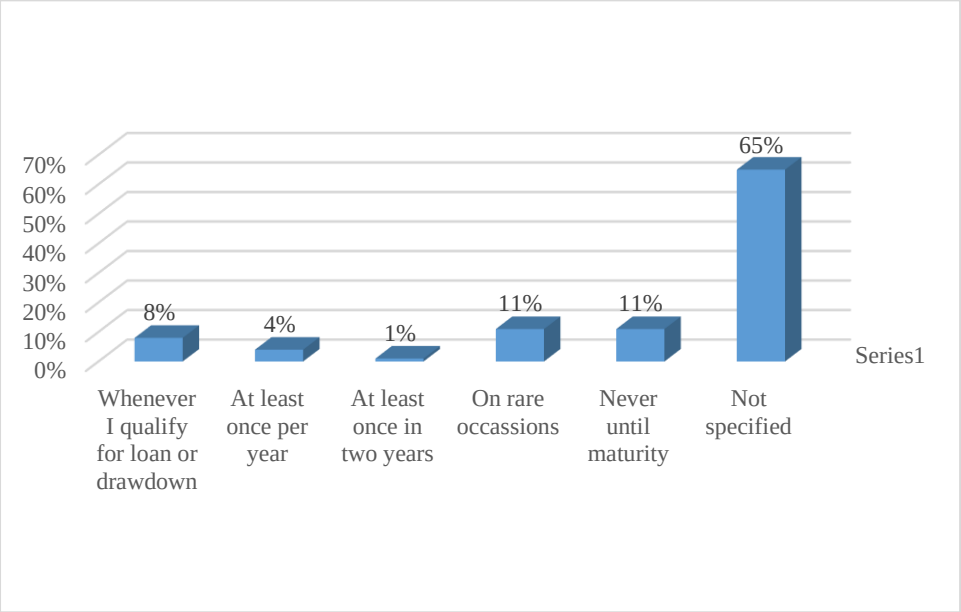
Source: Survey Data, 2017

30% of respondents indicated that they rarely drawdown from their short term investments whilst 26% indicate that they drawdown at the earliest possible opportunity. 11% indicated that they never make any withdrawals or borrow against short term investments until maturity. 6% indicated that they drawdown or borrow against investments at least three times per year, whilst 8% indicated that they do it twice. 18% of respondents did not respond to the question.

4.4.3.6 Frequency of Long Term Drawdowns

The frequency with which respondents' drawdown or borrow against their long term investments is detailed in figure 4.9 below:

Figure 4.9 Frequency of Long Term Drawdowns



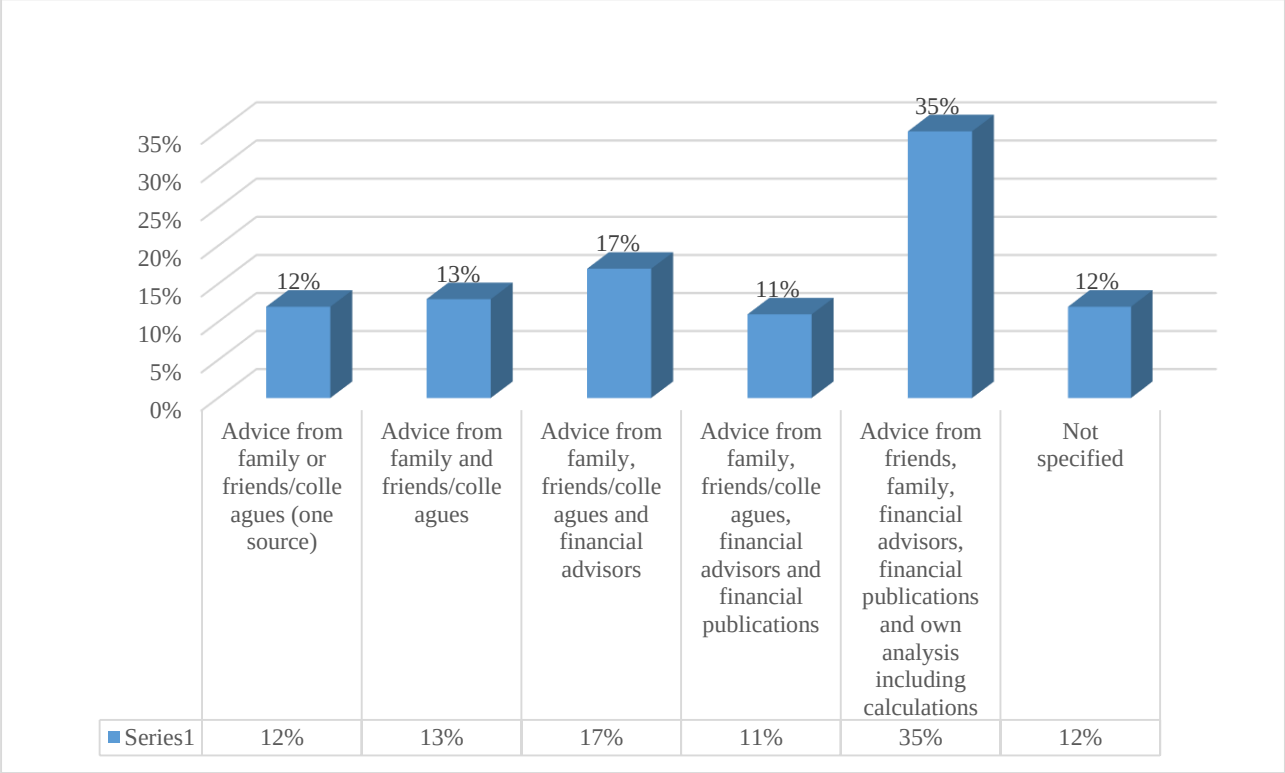
Source: Survey Data, 2017

65% of the population did not answer the question on long term investment drawdown frequency. A majority of them (64%) are those who do not own any long term investment instruments. 11% of respondents indicated that they never drawdown from long term investments until maturity. A similar proportion (11%) indicated that they rarely drawdown their long term investments. 8% indicated that they drawdown whenever they qualify and less than 5% indicated that they drawdown either once a year or once in two years.

4.4.3.7 Investment Advice Source

Figure 4.10 below reflects the distribution of respondents in terms of the number of sources they use for making investment decisions:

Figure 4.10 Information Source for Investment Decisions



Source: Survey Data, 2017

A majority of respondents (35%) indicated that they utilise information from all sources including performing own computations in making investment decisions. 17% indicated that they use three sources, 13% indicated that they use two sources, 11% used four sources whilst 12% used only one source. 12% of respondents did not respond to the question.

4.5 Correlation Analysis

The level of association between the predictor variables (monetary attitudes) and dependant variables (investment behaviours) was determined. The findings are illustrated in table 4.12 below:

Table 4.12 Pearson's Correlation Coefficient's Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.Value importance of money	1																		
2.Personal involvement with money	.404**	1																	
3.Knowledge of financial affairs	.149*	.464**	1																
4.Comfort in taking financial risks	.130	.048	.228**	1															
5.Skills at handling money	.273**	.587**	.569**	.088	1														
6.Money as a source of power and status	.165*	.087	.202**	.273**	.167*	1													
7.Ability to save money periodically	.198**	.057	.097	.026	.208**	.066	1												
8.Engagement in any business venture	.014	.016	.206**	.138*	.137*	.147*	.088	1											
9.Current account	-.103	.006	.128	.034	-.001	.090	.031	.183**	1										
10.Money Market -Low interest	-.008	.030	.074	.055	.023	.096	.138*	.023	-.116	1									
11.Money Market- High interest	.126	-.065	.032	.044	-.033	.010	.149*	.008	-.023	.082	1								
12.Long term interest bearing	.185**	.150*	.197**	.165*	.131	.096	.357**	.160*	-.003	.062	.136*	1							
13.Equity & Forex trading	.012	.036	.148*	-.034	.023	.039	.109	.220**	.079	.036	.012	.059	1						
14.Amount invested in business venture(s)	.135	.123	.156	.221	.222	-.088	-.112	.096	.015	.000	.221	-.029	.137	1					
15.Riskiness of business venture	-.079	.171	.223	-.039	.082	-.145	.018	-.036	-.103	.135	-.103	.120	-.075	-.057	1				
16.Monthly savings	-.077	-.042	-.039	.064	.063	.024	.c	.152	-.036	-.026	.000	.029	.152	.209	-.186	1			
17.Frequency for monitoring investments	-.100	.004	-.030	-.007	.098	-.034	.011	.289**	-.042	.092	-.220**	-.144	.001	.039	.207	.091	1		
18.Drawdown frequency	-.156*	-.032	-.086	-.152*	.065	-.200**	.152*	.101	.053	-.036	-.160*	-.026	.109	.041	-.084	.025	.027	1	
19.Information source for investment decisions	.020	.060	.131	-.002	.072	-.016	.054	.075	-.085	.076	.004	.161*	-.096	-.090	.073	.095	-.066	.033	1

**- Correlation is significant at the 0.01 level (2 tailed)
* - Correlation is significant at the 0.05 level (2 tailed)

Source: Research Findings, 2017

Table 4.12 reflects that only four investment behavior variables were correlated with monetary attitude factors at either the 0.01 or 0.05 significance level. These are: the ability to save; engagement in business ventures; the decision to invest in long term interest bearing products; and the frequency of drawdowns from investments. The ability to save was associated with the value importance of money (R= 0.198) and skills at handling money (R= 0.208) factors at the 0.01 level. Engagement in a business venture was associated with the knowledge of financial affairs (R= 0.206) factor at the 0.01 level and the comfort in taking financial risks (R=0.138), skills at handling money (R=0.137) and money as a source of status and power (R=0.147) factors at the 0.05 level. Investment in long term interest bearing investment products had a statistically significant association with the value importance of money (R = 0.185) and knowledge of financial affairs (0.197) factors at the 0.01 level. It also had an association with the personal involvement with money (R= 0.150) and comfort in taking financial risks (R= 0.165) factors at the 0.05 level. The frequency for the drawdown of investments was negatively associated with the money as a source of status and power (-0.200) factor at the 0.01 level and the value importance of money (R= -0.156) and comfort at taking financial risks (R= -0.152) factors at the 0.05 level.

Furthermore, findings indicated significant correlations of the value importance of money and personal involvement with money factors with the other money importance factors. These variables generally have high mean scores amongst respondents and cannot significantly explain the low saving rate in Swaziland. In order to deal with multicollinerarity amongst the independent variables, these two factors were omitted from the regression analysis of an investment behaviour, if a factor, with which they were significantly correlated, was found to be significantly associated with the same investment behavior.

4.6 Regression Analyses and Hypotheses Testing

The following panel data regression models were applied to ascertain the change in each of the four investment behaviours associated with money attitudes as a result of a unit change in the identified predictor variables. These are: The expected increase in the likelihood for a respondent to save as a result of a unit change in the skills at handling money factor score; the expected increase in the likelihood for a respondent to engage in a business venture as a result of unit increases in the knowledge of financial affairs factor score, comfort in taking financial risks factor score, skills at handling money factor score and money as a source of status and power factor score. This was revised to include the knowledge of financial affairs factor only because the t values of the other factors' coefficients were beyond the threshold since the p values were greater than 0.05; the expected increase in the likelihood for a respondent to invest in long term interest bearing investment products as a result of unit increases in the knowledge of financial affairs factor score and comfort in taking financial risks factor score. This was revised to include the knowledge of financial affairs factor only because the t value for the comfort in taking financial risks coefficient was beyond the threshold since its p value was greater than 0.05; and the increase in the frequency of drawdowns as a result of unit increases in the value of importance of money factor score, comfort in taking financial risks factor score and the use of money as a source of status and power factor score. This was revised to include the use of money as a source of power and status factor only because the t values for the other factors' coefficients were beyond the threshold since the p values were greater than 0.05.

Coefficients of determination and ANOVA results were generated. The ANOVA results indicated whether significant differences existed between the mean scores of the independent and dependent variables. The coefficient of determination results showed the strength of the association.

4.6.1 Expected Increase in the Likelihood for a Respondent to Save Money Periodically

The results for the expected increase in the likelihood for a respondent to save money periodically as a result of a unit change in the skills at handling money factor score are illustrated below:

Table 4.13 Model of Good Fit – Likelihood to Save Money Periodically

R	R Square	Adjusted R Square	Std. Error of the Estimate
.208[a]	.043	.039	.4865

a- Predictor: (Constant) , money handling skills
b- Dependant variable: Ability to save

Source: Research Findings, 2017

The adjusted r squared of 0.039 indicated that money handling skills explain 4% in the variability of a respondents' ability to save.

Table 4.14 Analysis of Variance – Likelihood to Save Money Periodically

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.181	1	2.181	9.214	.003
Residual	48.044	203	.237		
Total	50.224	204			

Source: Research Findings, 2017

The ANOVA results indicated that significant differences existed in the mean scores of the independent and dependent variable at the 0.01 level. This therefore supports the hypothesis that a relationship exists between the ability to save money and the skills at handling money factor.

Table 4.15 Regression Coefficient Results- Likelihood to Save Money Periodically

Predictors	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	.929	.214		4.344	.000
Skills at handling money	.183	.060	.208	3.035	.003

Source: Research Findings, 2017

Using the following model;

$Y1 = \alpha + \beta 1X1 + \varepsilon$, the determined regression model is: Y1 (ability to save) = 0.929 + 0.183 (skills at handling money) + ε. The t statistic indicated that the relationship between skills at handling money and the ability to save money is significant at the 0.01 level.

4.6.2 Expected Increase in the Likelihood for a Respondent to engage in a Business Venture

The results for the expected increase in the likelihood for a respondent to engage in a business venture as a result of a unit change in the knowledge of financial affairs factor score are illustrated below:

Table 4.16- Model of Good Fit – Likelihood to engage in a Business Venture

R	R Square	Adjusted R Square	Std. Error of the Estimate
.206a	.042	.038	.4577

a- Predictor: (Constant), Knowledge of financial affairs and comfort in taking financial risks.
b- Dependant variable: Likelihood to engage in business venture

Source: Research Findings, 2017

The adjusted r squared of 0.038 indicates that knowledge of financial affairs factor explains 4% in the variability of a respondent's likelihood to engage in a business venture.

Table 4.17 Analysis of Variance – Likelihood to engage in a Business Venture

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.939	1	1.939	9.255	.003
Residual	43.786	209	.210		

Source: Research Findings, 2017

The ANOVA results indicate that significant differences existed in the mean scores of the independent and dependent variable at the 0.01 level. This therefore supports the hypothesis that the likelihood to engage in a business venture has a significant relationship with the knowledge of financial affairs factor.

Table 4.18 Regression Coefficient Results- Likelihood to engage in a Business Venture

	Unstandardized Coefficients		Standardized Coefficients		
Predictors	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	.912	.137		6.667	.000
Knowledge of financial affairs	.136	.045	.206	3.042	.003

Source: Research Findings, 2017

Using the following model;

$Y2 = \alpha + \beta 2X2 + \varepsilon$, the determined regression model is: Y2 (likelihood to engage in a business venture) = 0.912 + 0.136 (knowledge of financial affairs) + ε. The t statistic indicated that the relationship between the knowledge of financial affairs and the likelihood to invest in a business venture is significant at the 0.01 level.

4.6.3 Expected Increase in the Likelihood for Investing in Long Term Interest Bearing Products

The results for the expected increase in the likelihood for investing in long term interest bearing products as a result of unit change in the knowledge of financial affairs factor score are illustrated below:

Table 4.19- Model of Good Fit – Likelihood to Invest in Long Term Interest Bearing Products

R	R Square	Adjusted R Square	Std. Error of the Estimate
.197[a]	.039	.034	.47484

a- Predictor: (Constant), Knowledge of financial affairs, comfort in taking financial risks.
b- Dependant variable: Likelihood to engage in long term interest bearing products

Source: Research Findings, 2017

The adjusted r squared of 0.034 indicates that knowledge of financial affairs explains 3% of the variability in a respondents' likelihood to invest in long term interest bearing products.

Table 4.20 Analysis of Variance – Likelihood to Invest in Long Term Interest Bearing Products

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.947	1	1.947	8.636	.004
Residual	48.025	213	.225		
Total	49.972	214			

Source: Research Findings, 2017

The ANOVA results indicated that significant differences existed in the mean scores of the independent and dependent variables at the 0.01 level. This therefore supports the hypothesis that the likelihood to invest in long term interest bearing products has a significant relationship with the knowledge of financial affairs factor.

Table 4.21 Regression Coefficient Results- Likelihood to Invest in Long Term Interest Bearing Products

	Unstandardized Coefficients		Standardized Coefficients		
Predictors	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	-.038	.142		-.268	.789
Knowledge of financial affairs	.136	.046	.197	2.939	.004

Source: Research Findings, 2017

Using the following model;

$Y3 = \alpha + \beta 3X2 + \varepsilon$, the determined regression model is: Y3 (likelihood to invest in long term interest bearing products) = -0.038 + 0.136 (knowledge of financial affairs) + ε. The t statistic indicated that the relationship between the knowledge of financial affairs and the likelihood to invest in a business venture is significant at the 0.01 level.

4.6.4 Expected Increase in the Likelihood for Making a Drawdown against Investments

The results for the expected increase in the likelihood for making a drawdown against investments as a result of unit change in the use of money as a source of status and power factor score are presented below:

Table 4.22- Model of Good Fit – Likelihood for Investment Drawdown

R	R Square	Adjusted R Square	Std. Error of the Estimate
.200a	.040	.034	1.29597

a- Predictor: (Constant), value importance of money, money as a source of status and power.
b- Dependant variable: Likelihood for increase in investment drawdown

Source: Research Findings, 2017

The adjusted r squared of 0.034 indicates that the use of money as a source of status and status explains 3% of the variability in the respondents' likelihood to make a drawdown against investments.

Table 4.23 Analysis of Variance – Likelihood for Investment Drawdown

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	12.226	1	12.226	7.279	.008b
Residual	293.918	175	1.680		
Total	306.144	176			

Source: Research Findings, 2017

The ANOVA results indicated that significant differences existed in the mean scores of the independent and dependent variables at the 0.01 level. This therefore supports the hypothesis that the likelihood for making a drawdown against investments has a significant relationship with the money as a source of status and power factor.

Table 4.24 Regression Coefficient Results- Likelihood for Investment Drawdown

	Unstandardized Coefficients		Standardized Coefficients		
Predictors	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	4.078	.348		11.730	.000
Money as a source of status and power	-.383	.142	-.200	-2.698	.008

Source: Research Findings, 2017

Using the following model;

$Y4 = \alpha + \beta 4X3 + \varepsilon$, the determined regression model is: Y4 (likelihood to drawdown investments) = 4.078 + - 0.383 (Money as a source of status and power) + ε. The t statistic indicated that the

relationship between money as a source of power and status and the likelihood to drawdown from investment is significant at the 0.01 level.

4.7 Interpretation of the Findings

Skills at handling money was found to be a statistically significant predictor of the likelihood for an individual to save money periodically. However it only predicted 4% of the variation. This suggests that acquiring money handling skills results in more savings. This is particularly significant in the context of Swazi teachers, considering that 40% indicated that they were unable to save money periodically. Knowledge of financial affairs has been found to be a significant predictor for the likelihood to engage in a business venture and investing money in long term investment products. It predicted 4% and 3% of the variation amongst respondents for these behavioural traits, respectively. Acquiring more knowledge of financial affairs would therefore be beneficial for Swazi teachers. This is particularly relevant considering that the mean score for the knowledge of financial affairs factor was found to lean more on the negative side of the scale (Less than 3) for Swazi teachers.

Using money as a source of status and power has been found to negatively contribute to members' ability to maintain investments (not drawing down investments). It was found to predict 3% of the variation in the respondents' behaviour. This finding is in synch with the findings in Du Plessis (2008) where savings were found to be negatively influenced by the presence of a materialistic culture since it encourages consumption. The findings indicate that using money as a status symbol is likely to lead to more frequent withdrawals from savings.

Although certain factors were omitted from the regression models, it is worth noting that comfort in taking financial risks was significantly correlated with both investment in long term interest

bearing products and engagement in business ventures. The mean score for this factor is slightly above average and might explain, to a certain extent, why Swazis are outperformed by Asians in business ventures undertaken in Swaziland. This should, however, be reflected upon cautiously considering that this study was limited to teachers.

Also worth noting is the fact that no correlation was found between investing in high interest money market products and money attitudes. This has to be considered in the context that within this class, the credit cooperatives savings product is included. Teachers have access to their association's cooperative and it appears that joining it is not influenced by attitude. This seems to be a classic case of herding behaviour since the returns in long term interest bearing products (which was correlated with money attitudes) can be replicated by investing in this product. There were no significant correlation between money attitudes and investments in financial products other than long term interest bearing products, amount invested and type of business venture, frequency for monitoring investment performance, and sources of investment advice.

The discoveries in this research are in synch with the few other studies conducted on money approaches. These include McFarland et al. (2003) who found that people with positive attitudes towards money are likely to have superior investment behaviours. A significant finding in this study is that attitudes can negatively influence the retention of savings which is a factor not analysed by McFarland et al. (2003). The study also supports discussion in Shim et al. (2009) when he notes that available studies indicate that money attitudes are a significant contributor to individuals' financial savviness. It also supports conclusion in Norvilitis et al. (2003) who notes that money attitudes assist in the prediction of saving habits among a number of other financial practices.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this section, a summary of the study findings, a conclusion based on the results, recommendations from the findings and limitations of the study are presented.

5.2 Summary of Findings

The study findings can be divided between descriptive and inferential statistics. In the descriptive section, respondents were found to adequately represent all classifications within demographics. The factors in the MIS were found to be valid and reliable for measuring money attitudes among teachers with the exception of the 'time spent thinking about financial affairs' factor. Respondents were found to rate highly in the value importance factor of the MIS. The money as a source of status and power had the least mean value. Rating in the personal involvement with financial affairs was predominantly positive whilst skills at handling money and comfort in taking financial affairs was slightly positive. Knowledge of financial affairs rated somewhat negatively.

The preference for avenue choices for teachers were in the following descending order: money market low interest instruments; money market high interest instruments; long term interest bearing instruments; current accounts; and equity & forex instruments. 40% of teachers indicated that they were unable to save and 68% of those who saved were able to save less than E 1 000 per month. A majority (51%) of the 31% who indicated that they operated a business had invested less than E 5 000. 45% of teachers indicated that they would not monitor their investments for a period of up to a year. Only 11% indicated that they never drawdown against both short term and long term investments until maturity. 35% of respondents indicated that they use all information at their disposal for making investment decisions.

Correlation results indicated that only four investment behaviours are associated with money attitudes. Teachers' ability to save was found to be associated with the value importance of money and skills at handling money factors at the 0.01 level. Engagement in business ventures was found to be correlated with knowledge of financial affairs factor at the 0.01 level, comfort in taking financial risks, skills at handling money and money as a source of status and power factors at the 0.05 level. Investment in long term interest bearing instruments was found to be correlated with the value importance of money and the knowledge of financial affairs factors at the 0.01 level. It was also found to be correlated with the personal involvement with money and comfort in taking financial risks factors at the 0.05 level. The frequency for drawdowns from investments was found to be negatively correlated with the money as a source of status and power factor at the 0.01 level, the value importance of money and comfort in taking financial risks factors at the 0.05 level.

Due to multicollinerarity amongst the independent variables, the value importance of money and personal involvement with money were not included in the regression models. Also, high p values resulted in the exemption of certain other factors from the models. Final regression results indicated that: skills at handling money is a significant predictor for the likelihood of teachers to save; knowledge of financial affairs was found to be a significant predictor of the likelihood for a teacher to engage in a business venture or invest in long term interest bearing instruments; whilst using a money as a source of status and power was found to increase the likelihood for a teacher to drawdown their investments frequently.

5.3 Conclusion

The study objective was to determine the relationship between monetary attitudes and investment behavior. Findings indicate that there are money attitudes that explain variability in certain

investment behaviours among teachers in Swaziland. They however explain less than 5% of such variability. Other key findings are that: 40% of teachers are unable to save periodically and of those who save, 68% save less than E 1 000 monthly. This seems to confirm the findings in previous studies, indicating that the savings rate in Swaziland is low. The fact that monetary attitudes do not predict all financial behaviours and where they do, they only explain 5% of the variability indicates that there is a need for further studies on the issue. However, the study objective which was to determine the relationship between monetary attitudes and investment behaviours has been met.

5.4 Recommendations for Policy and Practice

Founded on the discoveries in the study, several recommendations are made by the researcher in relation to money attitudes and investment behaviour. First, personal finance education should be introduced in schools to improve knowledge of financial affairs and money handling skills. The University of Swaziland, has, at government's direction introduced an HIV/AIDS module at first year. This should be revised to a life skills module and cater for other issues like financial education. This could preferably be done at an earlier level as it happens in SA, where a life orientation course is offered at high school.

Employers planning on converting their pension schemes from defined benefit to defined contribution should consider conducting an assessment of the knowledge and skills at handling money factors of their employees, to determine their readiness for handling retirement funds. Interventions should be applied where deficiencies are identified.

The current legislation prohibiting the withdrawal of retirement funds should be maintained and loopholes in it that allow for the use of funds as collateral for loans, unless it is for investment

purposes, addressed. The government must consider offering tax incentives to discourage frequent withdrawals from investment accounts.

5.5 Limitations of the Study

The research was limited to members of the teaching profession and as such cannot be generalised to the entire Swazi population. The study also sought to ascertain the monetary attitudes of teachers and did not investigate the factors underlying their development.

5.6 Suggestion for Further Research

The study has found that monetary attitudes explain variability for four financial behaviours. Significantly it found that certain attitudes can even negatively influence investment behaviour. However, for those behaviours where monetary attitudes had an influence, they only explained less than 5% of the variability. There is a need for a study which will seek to ascertain the attributes of individuals with positive investment behaviours and contrast them with those engaging in negative behaviours. Factors identified can, in tandem with money attitudes, be used to develop a comprehensive model for explaining differences in investment behaviours. In relation to the money attitudes, a study should also be conducted to understand factors underlying their development. There is also a need for a study that will seek to comprehensively identify the investment behaviours of individuals, with a view of developing a comprehensive investment behaviours scale, which can be applied in all research projects.

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APPENDIX

QUESTIONAIRE

(Please tick in the box that corresponds to the response that defines you or your behaviour adequately)

SECTION A – DEMOGRAPHIC DETAILS

1) Gender

1. Male [ ] 2. Female [ ]

2) Age

1. 20-30 years [ ] 2. 31- 40 years [ ] 3. 41- 50 years [ ] 4. 51- 60 years [ ]

3) Highest qualification held

1. O-Level certificate [ ] 2. Teachers certificate [ ] 3. Diploma [ ] 4. Bachelors Degree [ ] 5. Master's degree [ ]

4) Region where place of employment is located

1. Hhohho [ ] 2. Manzini [ ] 3. Lubombo [ ] 4. Shiselweni [ ]

5) School teaching level

1. Primary [ ] 2. Secondary School [ ] 3. High School [ ]

6) Marital status

1. Single [ ] 2. Married [ ] 3. Divorced [ ] 4. Widowed [ ]

7) Number of dependents

1. One [ ] 2. Two [ ] 3. Three [ ] 4. Four [ ] 5. Five [ ] 6. Other (Please indicate in box) [ ]

SECTION B – MONEY ATTITUDES

Please tick with your agreement to the following statements:

Value importance of money	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
8) I believe that the more money you have, the happier you are.					
9) I value money very highly					
10) Money is important.					
11) I daydream about being rich.					
Personal involvement with money	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
12) I know how much money I have currently					
13) I make out a budget for my expenditures					
14) I frequently confirm that none of my monies are missing					
15) I set financial goals for myself					
Time spent thinking about financial affairs***	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
16) I have explicit plans for how I can make more money					
17) I try to be aware of financial details like bank fees or interest charges					
18) I am always on the lookout for good financial investments.					
19) I can tell you how much debt I have (e.g., car, credit card, mortgage, loans, etc.)					

Knowledge of financial affairs	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
20) I frequently use financial terms like fiscal, return on investment or cash flow.					
21) I read magazines about business or financial affairs (e.g., Business Week, Money)					
22) I am aware of the tax implications of my financial activities.					
23) I know what the stock market does each day					
24) I understand how banks make money on loans, mortgages, savings accounts, etc.					
25) I know how the values of items have increased or decreased over the past year.					
Comfort in Taking Financial Risks (CFR)	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
26) I would prefer to win big or lose big than to be conservative					
27) I am comfortable borrowing substantial sums of money for investment purposes.					
Skill at Handling Money (SHM)	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
28) My stop orders never bounce					
29) I am aware of where my money goes each month					

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
30) Whenever I have a little windfall (e.g., financial gift, small inheritance, and back- pay) I invest it rather than spend it.					
31) I use strategies to save or make money whenever I can, like having an interest-bearing account or using credit to my advantage					
32) I always make sure I have some money for emergencies					
33) I always pay up my bills on time					
Money as a Source of Power and Status (MPS)	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
34) I talk frequently about how much money I have					
35) I always try to outdo friends and family in terms of material possessions.					
36) I use money to influence others.					
37) I tell people about my financial successes					

Adapted from Mitchell et al. (1998)

SECTION C – INVESTMENT BEHAVIOURS

38) Please indicate if you save money in any of the following account types by ticking in the boxes

1. Non- interest bearing		**4. Long term interest bearing**	
i) Current account	[ ]	vii) Guaranteed future value Investment products	[ ]
2. Lower interest bearing		viii) Bonds	[ ]
ii) Savings accounts	[ ]	**5. Equity and forex trading**	
iii) Bank fixed deposits	[ ]	viii) Equity (Stock) market	[ ]
3. High interest bearing		ix) Unit trusts (equity securities)	[ ]
iv) Treasury bills	[ ]	x) Forex trading	[ ]
v) Credit co-operatives	[ ]		
vi) Unit trusts (Money market)	[ ]		

xi) Other(s) (Please specify)……

39. Are you engaged in any business venture?

1) Yes [ ]
2) No [ ]

40) If your response to 40 above was Yes, Please indicate the amount you have invested (either from personal funds or financial assistance from elsewhere) in the business venture(s) and the type of business engaged in:

Amount		Type of business(s)
1. Up to E 5 000	[ ]	……
2. E 5 001- E 50 000	[ ]	
3. E 50 001- E 200 000	[ ]	……
4. E 200 001 – E 500 000	[ ]	
5. Above E 500 000	[ ]	…….

41. Are you able to set aside money for investment purposes on a periodic basis (e.g. monthly)?

1) Yes [ ]
2) No [ ]

42) If your response to 42. Above was Yes, Please indicate the average monthly amount you set aside for investment purposes (if for a different period than monthly, please estimate the average monthly equivalent):

1. Less than E 500 [ ]
2. Between E 500 & 1 000 [ ]
3. Between E 1001 & 1 500 [ ]
4. Between E 1 501 and E 3 500 [ ]
5. More than E 3 500 [ ]

43) How frequently do you monitor the performance of your investments?

1. At maturity/when taking loans against investment [ ]
2. Yearly [ ]
3. Monthly/Fortnightly [ ]
4. Weekly [ ]
5. Daily [ ]

44) On average, how often do you drawdown or borrow against your short term, SNAT Co-operative scheme and similar investments (Products that allow you to borrow or drawdown frequently)?

1. Whenever I qualify for a drawdown or loan against investment [ ]
2. At least three (3) times per year [ ]
3. At least twice (2) per year [ ]
4. Rarely [ ]
5. Never until maturity/ planned withdrawal time when joining scheme [ ]

45) On average, how often do you drawdown (or plan to) or borrow against your long term investments excluding SNAT subscriptions and similar products (e.g. guaranteed future value investment products, bonds, equity unit trusts etc.)?

1. Whenever I qualify for a drawdown or loan against investment [ ]
2. At least once per year [ ]
3. At least once in two (2) years [ ]
4. On rare occasions [ ]
5. Never until maturity/ planned withdrawal time [ ]

46) On what basis do you mostly make investment decisions?

1. Advice from family or friends/colleagues (one source) [ ]
2. Advice from family and friends/colleagues [ ]
3. Advice from family, friends/colleagues and financial advisors [ ]
4. Advice from family, friends/colleagues, financial advisors and financial publications [ ]
5. Advice from friends, family, financial advisors, financial publications and own analysis including calculations for investment opportunity [ ]

Source: Researcher