INDIVIDUAL BEHAVIOUR AND INVESTMENT DECISIONS OF VILLAGE SAVINGS AND LOAN ASSOCIATIONS IN SAMBURU COUNTY

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD MASTER OF BUSINESS ADMINISTRATION DEGREE OF UNIVERSITY OF NAIROBI

2021

DECLARATION

This is my original work which has not been submitted for an award of a certificate or degree in any other learning institution

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This research project has been submitted for examination with my approval as the university supervisor appointed by the University of Nairobi.

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ACKNOWLEDGEMENT

I wish to sincerely express my deepest gratitude to my Supervisor Dr Herick Ondigo for his immense support, encouragement, and guidance during the development of the research problem and the project in general. Special thanks to the University of Nairobi lecturers for their wonderful support and encouragement during my study at the institution.

DEDICATION

I wish to dedicate this project to my family with much love and thanks, for their perseverance, understanding and support during the period of my study. Thank you for always encouraging and supporting me.

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ABBREVIATIONS AND ACRONYMS

CMA: Capital Market Authority

GDP: Gross National Product

OVTR: One Village Transformed Report

SMEs: Small and Medium Sized Enterprise

VSALs: Village Savings and Loans

ABSTRACT

Individual behavioral factors are emerging interest in the field of finance and investment and represent the irrational behavior of investors in regard to psychological and social factors. Initially, Investors tended to mainly focus on the market and monetary analysis encountered with lots of alteration and analytical faults. But recently, individual behaviours have been put into consideration alongside factors comprising finances for the purpose of making prudent resolutions which can aid them in getting the most from their investments' returns. This research work is aimed at establishing the relationship between individual behavior on investments decisions in Village Savings and Loans Associations (VSALs) Groups in Samburu County. The following are the specific objectives that guided the study in order to find out the effect of representativeness on investment choices in the Village Savings and Loans Associations Groups, establishing the effect of sticking to an investment resolution in the Village Savings and Loans Associations Groups; assessing effects of overconfidence on a decision of investing in the VSLAs Groups; evaluation of herd behavior effects on a decision of investment in the VSLAs Groups. The study targeted 66 individual investments in Samburu County. There were 54 out of the targeted 66 respondents who completed and returned questionnaires which represents 81.81% of the total number of respondents. A structured questionnaire was used as an instrument during the collection of data. In the analysis of data inferential and descriptive statistics were employed. Descriptive statistics took the form of percentages mean, frequencies and standard deviations whereas regression models, analyzing by means of correlation comprised inferential statistics to examine the correlation of variables under study. Results of data analysis were in the form of pie charts and tables with frequencies. This investigation found out that individual behavioural factors that is the representativeness, anchoring, overconfidence, and herd behaviour have been considered by the investment groups in their investment decisions, for it is observed that investors tend to use their skills, knowledge, intuitions, representation in making their investment decisions. The study further found out that psychological and emotional factors play a bigger part in making the investment in regard to quantitative models. The study recommends that investors should not isolate the financial and investment analysis models but incorporate both the individual behavioural factors and the financial models in making investments decisions. The final recommendations were that another related research be conducted to investigate how the aversion ambiguity and innumeracy factors effect on the investment decisions and to conduct a study using longitudinal time frame design and to use other forms of data collection methods rather than the use of questionnaires

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Today, there is a paradigm shift within the investment world resulting from increased competition, rapid advancement in information and telecommunication and the forces of globalization. For an investor striving to remain competitive in such environment, individual behavioral factors are pertinent (Farooq & Sajid, 2015). These behavioral factors emanate from the behavioral finance which base on psychology to clearly understand how cognitive errors and emotions affect the behavior of investors. Unlike in the past when investors relied on financial information, analysis and valuation methods to maximize on their returns, psychological factors today have grown in shaping the decision-making processes of investors (Lowies, Hall &Cloete, 2015).

The prospect theory, heuristic theory and the theory of behavioural finance informed this study. According to the prospect theory, the value and belief systems of investors are shaped by subjective decision-making. The theory argues that investors' decision-making process is shaped by some state of mind which include aversion of losses, aversion of regret and mental accounting (Kahneman & Tversky, 1979). The heuristic theory on the other hand postulates that there exist rules of thumb that ease the ability of investors to decide on what and where to invest under environments with strong uncertainties and complexities. However, although these rules of rules of thumb are essential in demanding situations where there is limited time, they result into misleading decisions (Ritter, 2003). The theory of behavioural finance uses scientific principles

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to understand how emotional, cognitive, social and human factors shape the ability of investors to make decisions (Lintner, 1998).

Investment decisions determine the overall value and profitability of an investment. Several factors affect investment decisions the level of risks and possible returns. Village savings and loan association groups (VSALS) popularly known as chamas in one or the other are required to make investment decisions. However, the challenge with most Investors in VSALS groups is their inability to read and interpret financial information. Given that most of these investors have no background information in finance; this limits their ability to comprehend key issues in investment including the risk return profiles (Lowies, Hall & Cloete, 2013). As such, most of them are forced to rely on the services of investment companies and brokers who take them through the whole process of investing in the desired projects in the village. These investment companies and brokers in most cases rely on financial analysis and tools in making investment decisions for their clients. It is however argued that the economic condition informing investment decision is not only shaped by the financial information but the psychological factors too. This thus formed the basis of the current study.

1.1.1 Individual Behavioral Factors

Individual behavioral factors can be defined as the psychological attributes that form the basis of decision-making process. Osmond, Adebayo, Adesiyan and Moronke (2013) defined individual behavioral factors in terms of psychological biases that investors have when making decisions. The individual behavioral factors were developed on the theory of behavioral finance. This theory strives to link psychological factors and emotional responses with economic and personal

conditions. Individual behavioral factors are made up of both emotional and cognitive factors. Example of emotional factors include endowment, loss and regret aversion, mental accounting and herding behavior. On the other hand, cognitive behavior include overconfidence, hindsight biases and gamblers fallacy. Individual behavioral factors are used to explain the irrational behavior of investors.

Gournaris and Prout (2009) identified the behavioral factors affecting investment decisions to include the herd behavior, overconfidence, representativeness, belief perseverance and anchoring. Herd behavior describes how shareholders consider and follow decisions of other investors in making their own investment decisions (Waweru et al., 2008). Herd behavior further explains how people are influenced by their social environment. Humans are deeply social and depend on others for survival, thus they tend to copy what other people are practicing especially within their social circle (Akbar et al., 2016). According to Gounaris & Prout (2009), people tend to associate themselves with people that they are familiar with in making decisions even when the facts predict otherwise.

The representativeness bias occurs because investors tend to bank on the historical price of the properties in a particular area, growth of the market and the development trend when making a decision (Johnson et al., 2002). On the other hand, overconfident investors believe the outcome of their investments will result to higher returns than what it actually is; thus, they tend to invest more hence lowering their expected outcome (Odean, 1998). Furthermore, overconfidence drives investors to overestimate the outcome of a venture and underestimate the risk elements that might affect the venture growth and stability (Johnson et al., 2002). Specifically, Doukas and Petmezas (2005) find that investors tend to be confident due to the successful acquisition of the investment that results to successive returns.

The belief perseverance entails those individuals tend to rely on the formed opinion for a very long time which makes them to be skeptical and at times leads to misinterpretation (Brown & Reilly, 2009). Anchoring occurs when individuals put so much weight on the current experiences and events and assume that the trend will be consistent as per the prevailing rates. This act of using anchors by investors enforces price similarity among investors (Shiller, 2000). Individuals who focus on anchoring are always biased when they are asked to estimate on their investment for, they tend to begin with a random then adjust moving away from the random, often experienced with a lot of insufficient outcome (Brown & Reilly, 2009).

1.1.2 Investment Decisions

An investment is anticipation of returns or profits after putting money into a particular project (Thangamani, 2014). From economic point of view, an investment can be defined as an increase in capital stock that include materials used in the production process for valuable products that can be purchased by customers thus maximizing the wealth of shareholders. From the finance school of thought, investment occurs when money is spent on purchase of assets, such as financial assets and securities that including shares and bonds that maximize the wealth of shareholders.

Investment decisions entail choice made by investors with regard to the buying and selling projects and securities. Sound investment decisions determine the overall value derived from investments which help in achieving financial goals. Investment decisions that are hurriedly made may result into greater financial loss to an investor which limits the ability to attain financial goals. As a way of maximizing returns, investment decisions are paramount among investors. To undertake investment decisions, investors fundamentally analyze the investments

in terms of the risks, possible returns, the time horizon, liquidity and the general state of the economy (Nyamute, Lishenga & Oloko, 2015).

Investment decisions are made by either individual or institutional investors. Factors like profiles of investments, the time period as well as the initial amount being spent on investments determine variances between institutional investors and individual investors. Institutional investors include body corporates and companies including mutual funds, commercial banks, and insurance companies (Onsomu, 2014). Institutional investors have an advantage over individual investors because of their ability to access professional management on their investments unlike individual investors who in most cases lack the financial skills and knowledge thus relying on services of investment companies and brokers. As such, their investment decisions are managed by third parties (investment institutions and fund managers) who are rational thus strictly rely on financial models thus failing to account for market anomalies (Sharma & Vasakarla, 2013).

1.1.3 Individual Behavioral Factors and Investment Decisions

Investors are seen as irrational people as per the behavioral finance perspective; their feelings, mood and emotions influence their decisions (Kimeu, Anyango & Rotich, 2016). A study to determine a link between behavioral biases and investment decisions on NSE was conducted by Athur (2019). The study results showed representativeness, herd instincts together with cognitive dissonance, which are some of the behavioural factors, significantly influencing the ability of investors to decide on their investments. Other behavioral factors like risk and loss aversion have no significant effect on ability of investors to decide on their investments.

A study by Kengatharan (2017) focused on investors in stock Exchange in Colombia revealed that heuristics, herding, prospect, and market are significant factors influencing investment

decisions among individuals. With specific focus on Tehran Stock, Gholizadeh, Shakerinia and Sabet (2013) revealed that investors' investment decisions were significantly and directly affected by individual behavioral factors. Sharma and Vasakarla (2013) established that overconfidence as a behavioral factor does not significantly influence investment decisions. Bashir, Amir and Geri (2013) revealed that psychological factors affect investment decisions differently.

1.1.4 Samburu County village savings and loan associations (VSALs)

VSALs comprise of between 20-30 people who come together with a purpose of making savings, taking small loans from those saving and foster wealth creation and distribution through investing in projects especially in Small and Medium Size Enterprises (SMEs) projects (ROK, 2014). The VSALs was first piloted between 1999 and 2004 in Bondo and Gatanga as a table banking system for women empowerment projects and basing on success-stories from the pilot projects, the Government of Kenya in 2005, resolved to officially launched VSALs to reinforce its commitment to the women's economic empowerment agenda, since according to CARE International report (2019), 94% of Kenya VSALs members are women.

The Village Savings and Loans Associations is becoming one on the growing income-generating and investment platform in Samburu County due to the drought that has been more frequent and severe in the area, like others in Northern Kenya. This led to the scarcity of water, loss of pasture and loss of livestock, which was their main source of finances, thus the villagers in Samburu County opted on other revenue generating platform in order to improve their livelihood and build resilience to climate extremes (One Village Transformed Report, 2019). Thus, villages started to organize themselves in groups through the efforts of World Concern and, One Village

Transformed and Joyful Women Organization established the Village Savings and Loan Associations in order to make savings, take loans and invest in projects

However, Hugh (2012) notes that there was no clear way how investors in this groups make their investment decisions in particular, since most of the members of these VSALs group had no background information in finance; this limits their ability to comprehend key issues in investment including the risk return profiles of the projects their have invested in. As such, most of them are forced to rely on the services of investment companies and brokers who take them through the whole process of investing in the desired projects in the village, but they are very expensive to hire. Hence for the members in these groups have resolved on psychological factors to make investment decisions (Kariuki and Ngugi, 2019). Therefore, there is need to identify the possible effects behavioural factors of individuals on investment choices in Village Savings and Loans Associations in Samburu County, Kenya.

1.2 Research Problem

For maximization of wealth of shareholders, appropriate and sound investment decisions is essential to investors. Investors are normally guided by the traditional and behavioral schools of thought in making investment decisions. While traditional finance relies more on detailed analysis of financial information, behavioral factors are influenced by the cognitive and psychological factors. Behavioral factors are emerging in the field of finance and represent the irrational behavior of investors. Investors tend to mainly focus on market and monetary examination that is prone to alteration and faults. Behavioral dynamics or factors attempt to

distinguish the use of feelings and mental factors of investors in making of investment decisions (Subrahmanyam, 2007).

Village Savings and Loan Association group members are interested to invest in projects that will improve in their livelihood and contribute to wealth-creation. Most of the individuals have opted for the VSALs since they do not have easy access to formal and conventional financial services and in most cases require collateral for credit accessibility. The individuals in this groups are majorly women who they tend to invest in income generating projects who transact at a personal level or even as a group. The key challenge with most individual on these groups is that they lack adequate information on proper determination of risks of the projects (Iroham, Ogunba and Oloyede, 2014). The condition is made worse since some of these investors do not have background training in finance theories and knowledge. As such, they end up relying on services professional services from investment brokers and investment managers. It is however argued that investment decisions are affected by both monetary information and behavioral factors (Fromlet, 2011).

Several studies have been done to link individual behavioral factors and investment decisions in different contexts. On a global perspective, Anumand Ameer (2017) sought to determine a link between individual behavioral factors and investment decisions. A positive relationship was established between individual behavioral factors and the ability of investors to make investment decisions. This study was however done in Pakistan limiting the applicability of the findings in the Kenyan context. In Nigeria, Usman (2018) sought to determine how mental preconceptions influenced property market investment decision making. The investigation revealed that anchoring bias, overconfidence, narrow framing has significant influence on investment

decisions. In Ghana, Donkor, Akohene and Acheampong (2016) investigated how behavioral factors influenced investment decisions among commercial banks. The study revealed that anchoring, overconfidence, and herd behavior are key behavioral factors influencing investment decision making among bankers. These studies however were done in other countries that are more developed and not in Kenya resulting into a contextual gap.

Locally in Kenya, Onyango (2017) did a study to determine a link between behavioral biases and decisions of investment in Nairobi County's real-estate sector. The research established that some behavioral factors including representativeness, herd instincts and cognitive dissonance significantly influence the ability of investors to decide on their investments. Chami (2017) in a study to determine how behavioral finance factors affected investment performance among retail investors in Kenya revealed that inexperienced traders are more likely to seek investment advice from friends. Kemunto (2019) studied the influence of individual behavioural dynamics on the decisions of investors on listed companies on Nairobi Securities Exchange. The study established representativeness, herd behaviour, overconfidence and anchoring play a critical part in pushing investors to take on risks in securities market.

Therefore, literature has been reviewed on individual behavioral factors on investment decisions. However, some of these studies were done in other countries and not in the Kenya thus resulting into a contextual gap. The other studies focused on investment performance and not investment decisions thus resulting into conceptual gaps. The current research work sought to fill the gaps by answering the following research question; what individual behavioral factors influence investment decisions in Village Savings and Loan Associations (VSALs) in Samburu County?

1.3 Research objectives

General objective: to investigate effects of individual behavioral factors on investment decisions in Village Savings and Loan Associations (VSALs) groups in Samburu

1.3.1 Specific Objectives

i. To investigate the effect of herd behavior on the investment decisions in Village Savings and Loan Associations (VSALs) groups in Samburu County

ii. To examine the effect of representativeness on the investment decisions in Village Savings and Loan Associations (VSALs) groups in Samburu County

iii. To examine the effect of anchoring on investment decisions in Village Savings and Loan Associations (VSALs) groups in Samburu County

iv. To determine the effect of overconfidence factor on investment decisions in Village Savings and Loan Associations (VSALs) groups in Samburu County

1.4 Value of the study

This research work is important to the team involved in firm's management that governs VSALs investors in respective listed groups and investment managers, regulatory bodies like Finance Trust Fund (FTF) and scholars in future. For the management of the companies that governs and support VSALs, the study will provide valuable findings on behavioral factors likely to affect investment decisions made by the investors in the VSALs groups.

With regard to VSALs investors, the study will inform them of the need to rely on both behavioral and traditional finance theories in their investment decisions. Regulatory bodies of VSALs support organization such as One Village Transformed (OVT) and Joyful Women Organization (JOYWO) play an important role in formulation of rules and regulation that govern a given industry. The study will inform this support organizations in formulation of policies and regulations that support behavioral factors that will drive effective decision-making ability.

The research will complement the current literature and theories of behavioral finance together with their influence on investment decisions. This would support further similar investigations and how it influences the ability of investors to make investment decisions. By capitalizing on limitations of the study, future scholars will establish areas for further studies to grow the body of literature on behavioral factors and investment decisions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The section entails review of writings on individual behavioural finance, making decisions on investment. The theoretical framework is made known, upon which behavioural finance is based, the literature on the behavioural finance, decision-making and the link between individual behavioural finance and decision making. The empirical studies were also provided alongside the conceptual framework linking the individual behavioural factors and decision-making.

2.2 Theoretical Review

A theoretical review focuses on the relevant theories that the study is anchored towards. The research was led by three theories; the Prospect theory, the Heuristic theory and theory of behavioural finance as discussed below.

2.2.1 Prospect Theory

It was formulated by Kahneman et al. (1979). The theory concentrates on the role in making of decisions in environments that are so uncertain. The theory argues that based on the context, individuals will display several risk preferences; risk aversion or risk seeking based on their framing of the decision. The theory argues that people base on the possibility of losses as well as gains rather than the final outcomes as they make decisions. An approach of problem-solving or making decisions are employed during evaluation of potential losses by investors.

The theory shows differences in two phases of making choices among investors; framing and evaluation phases. The theory further suggests uncertainty and risks are taken care of during decision making process. The theory argues that investors are not risk averse on a consistent basis but in gains they avert risk and in losses, they take risks. This theory focuses on how the value systems influence subjective decision making among investors. The theory is significant to the research in question because its focus is on some state of mind among investors including disposition effect which affects the decision-making ability. The two major issues of the theory are regret and loss aversion.

2.2.2 Heuristic Theory

The theory was formulated by Kahneman and Tversky (1979) that defined heuristics as a rule of thumb that helps in making of decisions and solving of problems in situations where available information is not complete. These rules ease the decision-making process especially in environments characterized by uncertainty and complexity (Ritter, 2003). These rules are important particularly where one is to decide in a limited timeframe. The theory emphasized on three key heuristics that can be used for general purpose; representativeness, anchoring and adjustment.

Representativeness is viewed in terms of how an activity relates with its actual population. With anchoring is viewed as an individual leverages on some values to estimate some outcomes while alteration prejudice suggests that investors take in new information through basically twisted lens. According to Latter, Waweru et al. (2008) incorporated the overconfidence as well as gambler's fallacy in this theory. Analysts and investors are usually overconfident in areas that they are well versed and experienced. The theory is applicable in this research work because it

showcases the interpretation of the information is essential in making the investment decisions depending with the investor's deposition of information, risk-level and desired outcome of their investment.

2.2.3 The Theory of Behavioral Finance

This theory emerged in Late 1970s by pioneers including Kahneman and Tversky's. The theory emerged to address challenges of the rational theory of finance that focused on rational behavior of investors. The theory strives to address anomalies in the markets of finance, which cannot be solved in the old finance theory. The theory represents the irrational behavior of investors in their decisions. The theory uses cognitive psychology to determine how investors make investment decisions.

Rather than relying on all information to make investment decisions, investors only select a portion of relevant information to be used in making decisions. Several authors have used this to explain investment decisions of investors. For instance, Sharma and Vasakarla (2013) studied how overconfidence may influence the investment decision and revealed insignificant effect. Chaffai and Medhioub (2014) in a study to link behavioral factors and performance in Tunisian context noted that herding and overconfidence are critical in shaping decision-making ability. The model is appropriate in this research work since it shows the way irrational behavior of investors is important in making investment decisions especially in the psychological aspect.

2.3 Determinants of Investment Decisions among VSALs Groups

Behavioral factors resulted from behavioral finance emerged to address limitations of the traditional theory of finance. It emerged from the realization that apart from the financial information, the irrational and cognitive behaviors of investors inform their decisions-making.

Behavioral factors including heuristics and prospect factors simply the process of investment decision among investors in an extremely complicated and uncertain environment (Kafayat, 2014).

All investments decisions involve risks in one way or another. The magnitude of risk involved in the project influences the investment decision made by investors. Highly risky investments require careful planning since investors stand a significant loss in the event of failure. Highly risky projects are usually undertaken by investors with a high-risk taking behavior. Risk averse investors only undertake projects with calculated level of risk. In general, the greater the risk in the project, the higher the returns that investors stand to gain in the event that the projects turn out successful (Ramzi, 2013).

Investments cover certain time horizons based on the length of the projects. Investors could be looking for investments undertaken with a short-term horizon while others may invest in projects over a long-term horizon. For instance, some investment like real SMES businesses and commercial papers take a short time to mature compared to other investment such as real estates and corporate bonds. This describes the time horizon that determines the overall investment decisions (Alwathainani, 2012).

2.4 Empirical Review

Behavioural finance has drawn interest of several researchers both globally and locally, from which interesting insights have been established concerning individual behavioural factors and decision making as discussed in this section.

Globally, Kishore (2004) examined how investment boom is affected by behavioural. The study which was conducted in Australia by the use of the Australian Bureau of Statistics reports (2004)

through a descriptive survey analysis established that investors acted irrationally based on purely speculation about the market trend. The study further observed a particular trend of prices which was consistent with all other investors, and this was attributed to the trend of the herd mentality. The study concluded that the intuitions have a major influence in the investment decisions of the private and institution investors.

Kangatharan et al, (2014) studied how performance and investment decisions affects behavioural factors, for Colombo Stock Exchange with the study using sample of 128 investors. The investigation employed a cross-sectional design to establish a trend of stock market investors. The study used questionnaires administered to investors to collect data. The data was analyzed, and a conclusion was arrived at that, investment decisions were made as a result of herding heuristics, and prospect and market factors.

Iroham, Ogunba and Oloyede (2014) studied on how principal heuristics has an effect on Accuracy of Property Valuation in Nigeria. Descriptive design study was employed to carry out the study in which the researcher administered cross-sectional questionnaires to 159 Estates Surveying and Valuation firms in Lagos, Metropolis. The study also administered other questionnaires in Abuja and Port Harcourt, which were 29 and 30 questionnaires respectively. The T-test of 95% confidence value was used to ensure the accuracy and reliability of the values of the study. The study concluded that heuristic behaviours through representative are not accurate as compared to current market information.

Akbar et al. (2016) studied the factors influencing investors in making of decisions of the stock market in Islamabad. The study used a descriptive survey through the use of a questionnaire of 253 individual investors at Islamabad stock exchange. The study concluded that investors are making irrational decisions not basing on the market information and financial analysis but through intuitions and psychological confidence about the stock market.

Alquraan, Alqisie and Shorafa (2016) sought to determine how behavioral finance factors influence investment decisions. A correlation design was adopted that helped in testing of the hypothesis. The study established that Loss Averse, Overconfidence, and Risk Perception significantly influence ability of investors to make investment decisions. However, the demographic factors (experience, income, education, age, and sex) do not influence investmen decisions significantly except education. Chetankumar and Hiral (2018) examined how behavioral factors and their ability to shape and inform the ability of investors to decide. Retail investors were targeted, and information was primarily obtained. It was noted that behavioral factors shape the decision-making ability of investors.

Locally, Obong'o, Nyakundi and Vitali (2016) examined how behavioral factors influence performance of the real estate sector in Kisii. After analyzing the collected data, findings showed that, behavioral factors and ability of real estate entities to perform are positively correlated. Chami (2017) looked at how factors of behavior affect choices of investment among Nairobi's retail investors. It concentrated on determining: the behavioral factors, to link the identified behavioral factors and investment decisions. It adopted a causal research design. A total of 98 respondents were sampled out and out of the questionnaires distributed to these respondents, 86 of them were completely filled up. The results revealed that education had a key part in choosing

investments. The study established, market fundamentals largely helped investors to make investment decisions.

Antony (2017) studied the effect of psychological factors on real estate development in Nairobi. Descriptive statistic method was used in the research, with a sample of 40 institutional real-estate investors considered. The investigation concluded that psychological factors such as too much confidence, frame dependence, representativeness, mental accounting and herd behaviour are major contributors in making investment decisions. Onyango (2018) used a sample of 40 Nairobi real-estate investors to investigate how real-estate performance is affected by behavioural factors. The investigation adopted a correlational research design and data were collected using survey questionnaire. The findings showed high correlation between behavioural factors and growth of real-estate; and that 73.3% of real-estate performance is predicted by behavioural factors.

Kimeu (2016) studied relationships between behavioural factors and choices of investment on NSE investors as at the end of third quarter of 2015 using 80 people as respondents. Closed ended questionnaires were used to collect primary data. Data was analyzed and interpretation done using descriptive and inferential statistics. Study finding showed that investment choices on NSE are affected by behavioural factors of investors like herd behaviour and prospects.

2.5 Conceptual framework

It provides linkage between the independent variables and the variable which is dependent in a research study (Kombo& Tromp, 2009). It provides a clear understanding of subsequent interrelation between choices of investment and behavioural factors of individuals as discussed in the empirical and theoretical review. The conceptual model (Figure 2.1) brings out the

interdependency between the individual behavioural finance and investment decisions that investors make.

Figure 2.1: Conceptual model

Independent variables

Dependent variable

Representativeness
- Classifying actions as typical representative of well-known class.

Anchoring
- Putting too much weight on the current experiences.

Investment Decisions

- Village Projects Growth Rate

Overconfidence
- Overestimating the outcome of the decision

Herd Behaviour
- Reliance on other investors
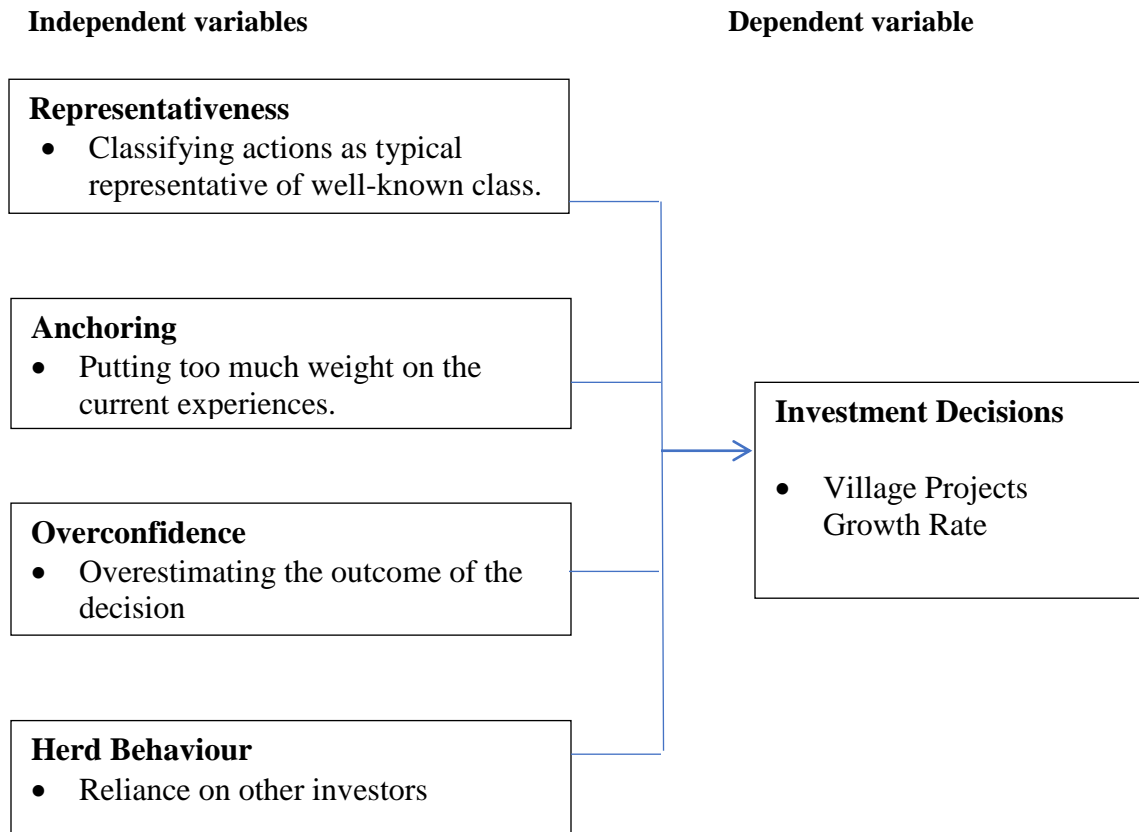
Source: Researcher (2021)

2.6 Summary of the Literature Review

Behavioural factors involves the conduct of financial practitioners being influenced by psychology (De Bondt, 2004). The literature review gives us insights on behavioural biases and information processing errors that influence individual investors' decisions. The literature review has discussed biases such as representativeness, belief perseverance, anchoring bias, overconfidence and herd behavior. Furthermore, it has discussed notions of the theory of prospect aversion of regret, mental accounting and aversion of loss. From the literature review, it can be concluded that emotions and cognitive biases influence decision making in investments. As argued by Glaeser (2013), "Buyers do not seem rational, but, thoughtfully partial investors working with simple heuristic simulations instead of an all-inclusive overall equilibrium outline."

Various Studies have been performed to analyze how the process of making decisions about investments is affected by behavioural factors. However, many of these researches were on stock market exchange. Furthermore, no study has been conducted on the village savings and loan associations with regard to the investigator's best knowledge, on their individual behavioural factors on decision-making process of investors in these groups. Furthermore, from the aforementioned studies, little local literature has been produced to give insights on the behavioural factors in the village savings and loan associations in Samburu County. This called for research to be done to establish if there is a consistent pattern of behavioural factors stirring investment decisions made by investors in the village savings and loan associations in Samburu

County and also the degree to which these behavioural factors influence their decisions to make investments. The aforementioned are gaps that this research work sought to cover.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains the research design, the target population as well as the methods of determining the sample size. The chapter also has the methods of collecting data, procedure of the research, analysis of data and findings/results' information presentation. The technical procedure appropriate to the audience and spelling the design of research, methods of data collection and the various tools used for data analysis constitute a research methodology (Dawson, 2009).

3.2 Research design

It is an overall structure providing a framework of the way research will take place. Benard (2017) says a research design is any study' blue print since it provides the techniques to employ in collecting and analysis of data then communicate findings. This research was qualitative, that is, a descriptive design applied. The descriptive design allows information reception and explanation on the way investment choices will be made by VSALs investors through inquiries in for of questions on attitude and personal perceptions. (Bryman & Bell, 2015).

3.3 The target population

A population is the whole list or number of people, animals, items or events on which the research is done and the researcher has interest in (Patten & Newhart, 2017). The population is made up of group of similar events, individuals or items. Research work that has the right population and sample size used, will make the research findings believable. This study targeted

85 investors who are majorly women in the VSALs groups in Samburu county and therefore sanctioned and recognized by the JOYWSA Board of Samburu County (2020)

3.4 Sample design

In this study, a sample size of 66 was selected as a represantation of the whole population being studied. Krejcie & Morgan (1970) pre-established table of sample sizes for varying sizes of the population was used to arrive at the figure. Simple random sampling technique is used in picking the said sample size. In this case, in the formation of a sample, all members of the population investigated have an equal chance to be picked (Sekaran, 2003). Accurate representation of the population will be assured through simple random sampling.

3.5 Data collection

Primary data that was collected using structured questionnaires was used. Use of primary data gave the investigator freedom and control on the manner information collection is done and the freedom to focus on specific behavioural factors in line with needed information on the VSALs in Samburu. The researcher had a full and precise knowledge and understanding of matters that relate to factors of behavior pertaining to making of decision with regard to investments.

3.6 Data Analysis

Data collected on behavioural factors was coded because it was qualitative. Coding was by the use of numerical scales used in making responses on the questionnaire. Data can easily be transformed into quantitative form and employ quantitative data analysis methods. Adoption of descriptive measures of data analysis enabled the researcher use measures like central tendency, dispersion, mean and standard deviation.

In testing the relationship between independent variables (overconfidence, anchoring, herd behavior and representativeness) and dependent variable of investment decision multi-linear regression equation model is employed. The equation generated was in the form below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \acute{\varepsilon}$$

Where **Y** = Investment Decisions in VSALs, β_0 = Constant i.e. the value of Y when X=0, X_1 = representativeness, X_2 = Anchoring, X_3 = Overconfidence and X_4 = Herd Behaviour whereas β_1, β_2, β_3 and β_4 was the coefficient of determination and ε was the error term. This was supported by the operationalization of finding of the research.

3.6.1 Test of significance

Study variables were evaluated by examining the limit of agreement with respondents with the Likert scale queries beneath every variable in the questionnaire. The setup of the questionnaire forms was designed to guarantee that each variable was obviously recognized in the section and questions. Respondents were told to mark their level of agreement with each statement on how the individual behavioural factors affect investment decisions in the VSALs groups.

Variance analysis (ANOVA) used to test the power of the model used; ANOVA table gotten and significance value

R^2, which is the coefficient of determination measured extent of variation in investment choices and was clarified by the different individual behavioural factors. To test whether there was a significant relationship between variables, an F-statistic was calculated at 95% confidence level

3.7 Data validity and reliability

A constructive validity test was used to make sure collected data was of true size and revealed the hypothetical implication of the conception (Martyn, 2019). Hunter and Schmidt (2009) said a constructive validity test is the degree to which the assessment measures and what the investigator desires it to measure.

Reliability is extent to which results will have consistency of data in case duplication is done by the investigator or other researchers (Mugenda and Mugenda, 2003). A consistency test on the research was done in order to warranty correctness with which the tool measures the traits of individual behavioural factors it was stipulated to measure.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

The analyzed results are detailed in this section. The examination of the results was done using means, standard deviations as well as regression analysis that formed part of the inferential statistics; and the insights from the analysis therefore provided the best pointer to relevant conclusions or even commendation on the individual behavioral factors on investors' decisions.

4.2 Descriptive Statistics

The data was analyzed by the use of percentages and frequencies as detailed below.

4.2.1 Response rate

All the sixty six (66) questionnaire forms were circulated and 54 were returned as fully filed resulting into 81.8% response rate. This was supported by Sekaran and Bougie (2016) who said that sufficient response rates should be at least 70%. Consider Table 4.1.

Table 4.1: Response rate

	Frequency	Percentage
Response	54	81.8
Non-Response	12	18.2
Total	**66**	**100**

4.2.2 Demographic Data

The time of respondents' investment in the village saving and loan association was being investigated here; Table 4.2 below gives the details

Table 4.1: Respondents' Investment Experience at Village Savings and Loan Associations Groups

Period	N	%
5-8 years	4	7.41
9-12 years	22	40.74
Over 12 years	28	51.85
Total	**54**	**100**

Source: Researcher (2021)

According to the findings, most of the respondents (51.85%) had invested at Village Savings and Loan Associations groups for over 12 years while 40.74 % and 7.41% of the respondents had invested from nine to twelve years and from five to eight years respectively. This showed that majority of respondents had invested for a relatively long period thus had lived long enough to understand the influence of individual behavioural factors on investors decisions in the village savings and loan associations groups that the researcher was investigating. Figure 4.2 below further shows the findings on the period the investors had invested at Village savings and loans association groups

Figure 4.1: Investors Experience at VSLAs

INVESTORS EXPERIENCE AT VSLAs

4, 7%
28, 52%
22, 41%

■ 5-8 years ■ 9-12 years ■ Over 12 years
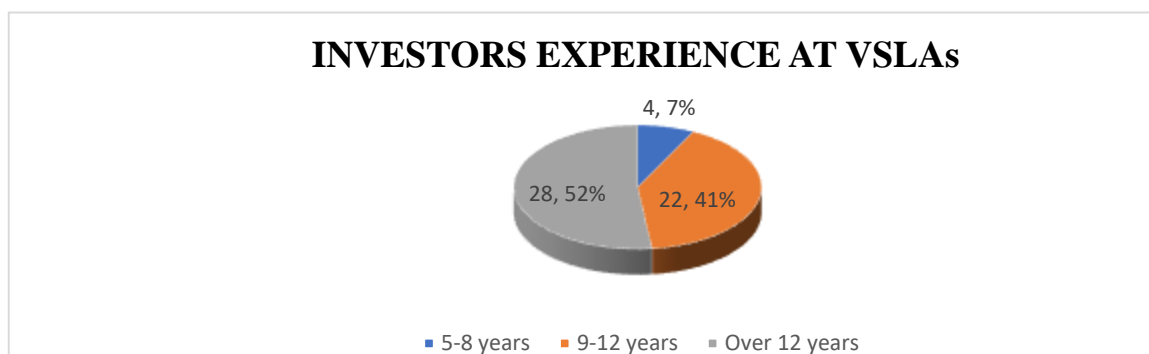
4.3 Individual behavioural characteristics

Inquiry was made to respondents to find out if their present investment choices were inclined to previous historical happenings in order to understand the use of behavioural influences by the individual investors at VSALs in coming up with investment choices. Table 4.3 demonstrations the outcomes from the respondents:

Table 4.2: present investment choices were influenced by previous historical events

Replies	Frequency	%age
Yes	47	87.04
Somehow	6	11.11
No	1	1.85
Total	54	100

Source: Researcher (2021)

The results above show 87.04% of the respondents agreed that their present investment choices in the village savings and loan associations groups are inclined to previous historical happenings; 11.11% of the respondents have somehow been pushed by the previous historical actions on their present investment choices whereas the least of the respondents which translates to (1.85%) do not have past historical proceedings impelling their current investment choices. This shows that most respondents depend on their previous historical proceedings in making the present investment choices. Figure 4.3 below further shows the findings on the past historical events that swayed the respondents' investment choices at Village Savings and Loan Associations groups.

Figure 4.2: present investment decisions of respondents were affected by previous historical happenings

Present investment choices of respondents were affected by previous events

2%

11

87
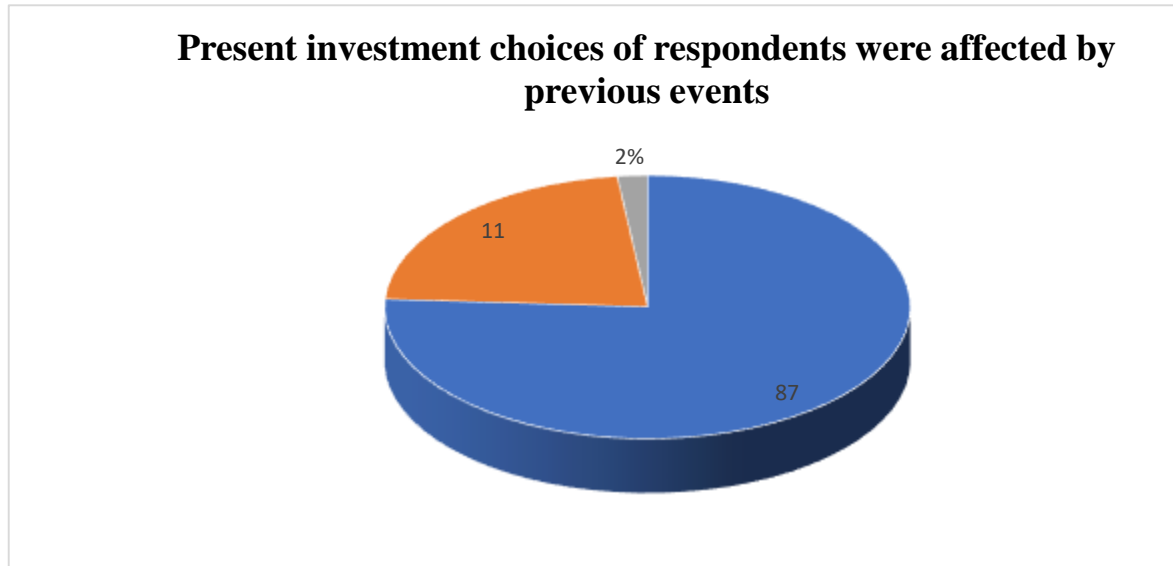
Source: Researcher (2021)

The respondents were enquired to describe the well-being of their venture at Village Savings and Loan Associations groups for the last 4 years. Table 4.4 represents their replies:

Table 4.3: Performance of Investments at VSALs for the Last 4 Years

Answers	Frequency	%age
Excellent	9	16.67
Good	34	62.96
Fair	11	20.37
Total	54	100

Source: Researcher (2021)

According to the findings in table 4.4, (62.96%) respondents have had a good performance of their undertakings at VSALs for the past 4 years. The results reveal again that 20.37% had fair performance on their ventures at village savings and loan associations groups whereas outstanding performance was detected at 16.67%. The findings evidently show that most of the respondents had a comparatively good performance from their investments in VSALs groups in the last 4 years. Figure 4.4 below further shows the outcomes on the explanation of respondents' performance for the last 4 years.

Figure 4.3: Performance for past 4 Years

Last 4 years' Investment performance description
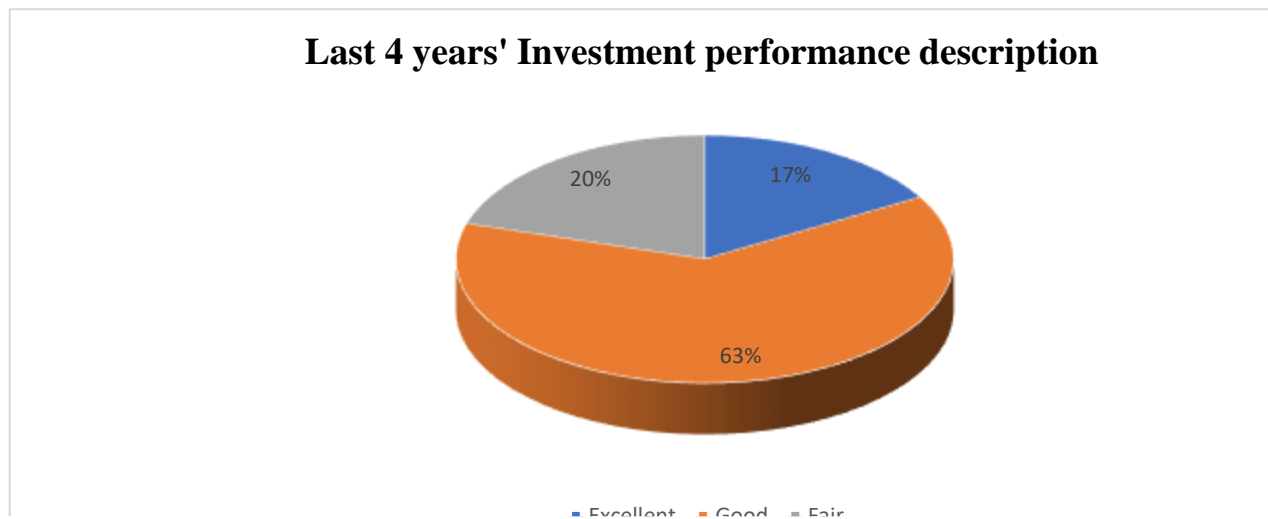
Source: Investigator/researcher (2021)

The respondents were also enquired if they access investment professionals before investing in VSALs. The table 4.5 shows the descriptive figures of their responses.

Table 4.4: investments expert consultation

Responses	Frequency	%age
Yes	51	94.44
No	3	5.56
Total	54	100

Source: Researcher (2021)

The findings above put forward that most of the respondents (94.44%) normally consulted investment professionals before making choices regarding investments. However, 5.56% indicated that they do not consult investment specialists before making investment decisions on at Village Savings and Loan Associations groups. The findings certainly show that most of the respondents regularly consult investments professionals before making investments decisions in the groups. Figure 4.5 below further display the findings on the talk with the investment experts before making investment choices.

Figure 4.4: investment experts' consultation
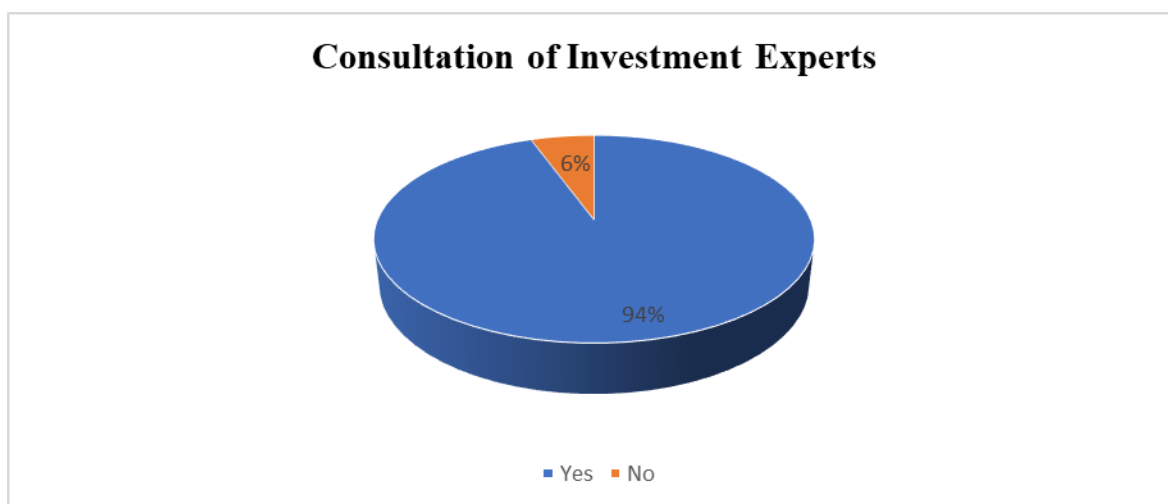
Source: Researcher (2021)

There were questions asked to respondents about how they assess their choices of investment. Below are their responses (descriptive statistics):

Table 4.5: Investment choices' evaluation

Responses	Frequency	%age
Standard financial models' usage	29	53.70
Use of intuitions	25	46.30
Total	54	100

Source: Researcher (2021)

The results below show that there is a comparative equilibrium of the assessment of the choices of investment by use of finance models that are standard and intuitions usage, although majority respondents (53.70%) displayed intuitions usage during choice of investment appraisal. Moreover, 46.30% exhibited usage of standard finance models take a major role when evaluating the investments to take on. Diagram 4.6 discloses outcomes on the evaluation of choices of investment using standard finance models and intuitions.

Figure 4.5: investment choices' evaluation

INVESTMENT DECISIONS' EVALUATION
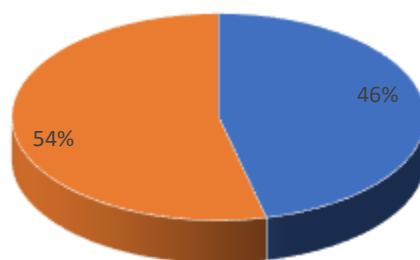
■ Use of Standard Finance Models   ■ Bv Intuitions

Source: Researcher (2021)

The respondents were questioned on how they assess their performance of choice of investment based on the earnings. The table below displays the descriptive statistics of respondents' replies.

Table 4.6 : Rating of Investment Decisions Based on Returns

Responses	Frequency	%age
Excellent	31	57.41
Good	18	33.33
Moderate	5	9.26
Total	**54**	**100**

Source: Researcher (2021)

The results in the above table 4.7, (57.41%) respondents showed exceptional performance based on the earnings from their investment in Village Savings and Loan Association groups, whereas 33.33% showcased good performance with regard to earnings on their investments and comparatively low respondent percentage (9.26%) indicated a moderate performance on the proceeds of their choice of investment at VSALs. Figure 4.7 point out the findings on the rating

of the performance of the investments at the Village Savings and Loan Associations groups based on earnings.

Figure 4.6: Returns' based performance
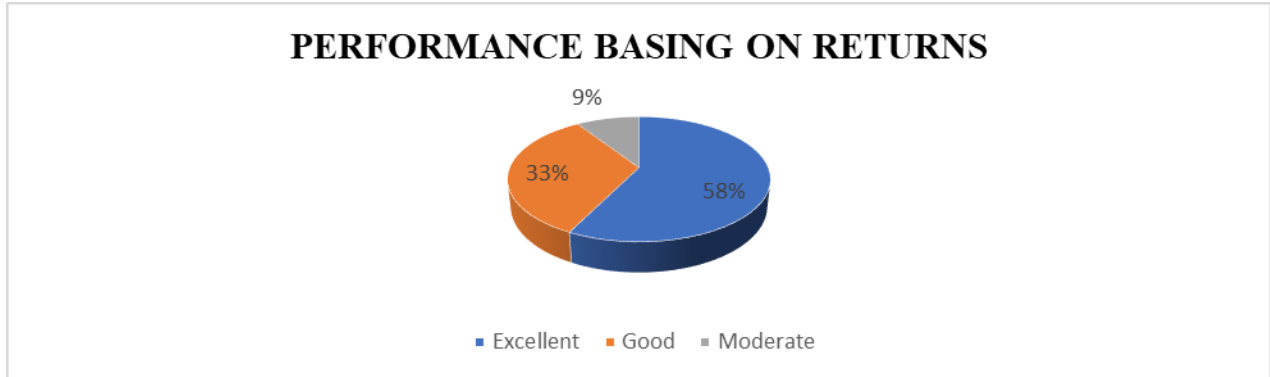
Source: Researcher (2021)

Inquiry was made to respondents if they make consultations with investment and financial analysts concerning knowhow and skills they possess in investment at Village Savings and Loan Associations groups. The below table displays the descriptive figures of responses.

Table4.7: Financial & Investment Analysts consultation Basing on Investment Experience

Responses	Frequency	%age
Yes	24	44.44
No	30	55.56
Total	54	100

Source: Researcher (2021)

The results in table 4.8, (55.56%) respondents showed that the more they possessed skill and expertise in their investment at VSALs the lesser they made consultations with financial and

investment analysts, whereas 44.44% still consulted the investment and finacial analysts regarding the skills and expertise in the investment at Village Savings and Loans Associations groups. The figure below reveal the results on the consultation of financial and investment analysts with regard to skills and expertise in investment the real estate.

Figure 4.7: Financial and Investment Analysts consultation Basing on the expertise and skills on investment

Investment and financial analysts consultation with regard to investment skills and expertise

44%

56%

■ Yes ■ No
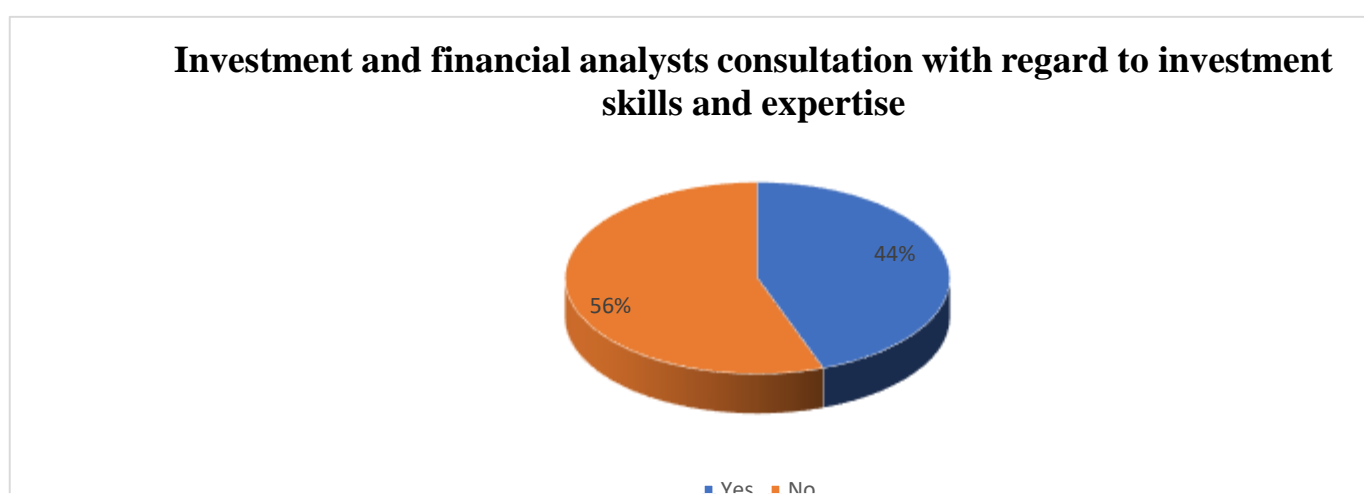
Source: Researcher (2021)

4.3.2 Individual Behavioural Factors

The investigator wanted to know how respondents put individual behavioural factors into play on their choice of investment. As seen on table 4.9, the participants basically agree that individual behavioural factors influenced their making of choice with regard to investment, and this is in line with Barberis & Thaler (2003) who said that investors consider behavioural factors together with the financial aspects in order to make objective choices vital in maximizing return on investment.

Table 4.8: Individual Behavioural Factors (descriptive statistics)

Individual Behavioural factors.	Mean	std dev.
Herd behavior	3.90	.634
When there are chances to invest in others investment(s), to what degree will your choices to invest be influenced by other investors' decisions?		
Anchoring		
To what level do you take into consideration making reference to the purchase price while making investment choices about the property to invest in?	3.91	.901
Overconfidence		
When deciding the type of investment to embark on, how many times do you take into account your knowledge and skills more importance?	3.92	.542
To what scope do you rely on your knowledge and skills to help you achieve better than other investors?		
	3.81	.601
Representativeness		
How frequent do you make use of performance index i.e profits of investment in one specific area to forecast the performance of investment?	3.86	.654

Source: Investigator/researcher (2021)

Basing on the results, it is obvious that the respondents principally agree that behavioural factors have been assimilated in the making of investment choices. Studies have revealed that, from the 4 (four) behavioural factors, Anchoring, herd behaviour and overconfidence have been largely

integrated in the choice of investment. This matches Waweru et al, (2009) observation that investors are likely to be swayed by other investors and knowledge and skills they retain on the associated investment. Anchoring and representativeness also follow suit on the behavioural factors that impact on the investors' making of choices. This is in sharp disparity to Winchester et al (2011) argument that investors find it a difficult process in deciding the long-term investments for purposes such as scarce financial resources, lack of ability to control their finances and discrepancy of information.

4.3.3 Individual Behavioral Factors' Effects on Decisions of Investors at Village Savings and Loan Associations Groups

The researcher sought to understand respondents' take on the way individual behavioral factors had affected decisions of investors on VSALs. Below is a table showing descriptive statistics of responses obtained.

Table 4.10: Individual behavioural Factors Effects on Investors Choices in their investment at VSLAs

Statements	Mean	Std Dev.
The previous historical occasions impact on your present-day investment choices	3.82	.081
Ultimate analysis of the data from the company contributes to our choices	3.72	.912
Counsel, endorsements and forecast from expert investors	3.64	.569
Attention on widespread/popular activities regarding investment	3.56	.821
Personal intuition of the impending performance	3.52	.918

Over-reaction to variations in investment activities due to seasons	3.80	.601
Under-reaction to changes in in investment activities due to seasons	3.34	.764

Source: Researcher (2021)

According to results obtained, the participants agree that behavioural factors have influenced investor's way of making decision. For example, the previous historical events have made the investors to decide on their present choices of investment. This is in line with Ricciadi and Simon (2000) discoveries that expounded that the previous historical happenings give a trend on the investments in terms of earnings and sustainability thus impact on the grave investment choices which show a particular pattern of behaviour in the investment. According to Chavali and Mohanrag (2016) investors frequently use the behavioural factors to make essential and technical analysis on their choice of investment. An example is where investors employ their own instinct, have psychological prediction or react to the price variations, there will be no need for the investors to consult the investment analysts or financial analysts before making their choice of investment.

4.4 Regression results' discussion and presentation

The regression results are covered in this section

4.4.1 Regression analysis

This investigation was keen on examining the impact of individual behavioural factors on investment decision in the village savings and loans association groups. This was realized by use of regression as detailed in subsequent sections.

4.4.2 Model Summary

Table 4.9: Regression Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929[a]	.863	.838	.72698

a. Predictors: (Constant), representativeness, anchoring, overconfidence, herd behaviour

Source: Researcher (2021)

There is seen a strong positive correlation between values predicted by the model and actual dependent variable values as shown by the multiple R 0.929 for the regression. The R Square is 0.863, and this means that about 86.3% of the disparity in choices of investment can be described by the disparity in the degree to which they are influenced by the individual behavioural factors. These Multiple R and R Square show that individual behavioral factors impact on the investor's choices at the Village Savings and Loans Association Groups.

4.4.3 Variance analysis

The F test of significance of a regression model is used to find out if the regression model is significant and the results are given in table 4.12 below:

Table 4.10: Variance analysis

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	73.114	4	18.278	34.585	.000[b]
Residual	11.627	49	.529		
Total	84.741	53			

a. Dependent Variable: Investors Decision
b. Predictors: (Constant), representativeness, anchoring, overconfidence, herd behavioural.

Source: Researcher (2021)

Table 4.12 has an implication that the overall study model is significant (F calculated>F critical). The model was tested for significance at the 0.05 level, a significance value of 0.00 implies that, if the null hypothesis was true, the researcher would not have obtained the type of data that was gotten in this research. This means that the regression model is statistically significant, thus, individual behavioral factors influenced choices in investment in the Village Savings and Loan Association Groups.

4.4.4 Correlations

Consider   Table   4.13   for   correlation   results

Table 4.11: Correlation matrix

	Investment Decision	Representative	Anchoring	Overconfidnce	Herd Behaviour
Investors decision	1	0.31	0.24	0.18	0.31
Representative		1	0.39	0.27	0.29
Anchoring			1	0.32	0.51
Overconfidence				1	0.46
Herd Behaviour					1

Source: Researcher (2021)

Table 4.13 above reveals presence of a positive and moderate correlation between decision of investment and representative index (Pearson coefficient=0.31), there is a positive correlation between choice of investment and anchoring index (Pearson coefficient=0.24), there is a positive correlation between investment decision and overconfidence index (Pearson coefficient=0.18) and lastly a positive correlation between investors decisions and herd behaviour index (Pearson coefficient=0.31). This means that the investors' investments decisions generally, have been influenced by the modest level of anchoring, overconfidence and herd behavior.

4.4.5 Regression Coefficients

Consider Table 4.14 for significance and the beta coefficients

Table 4.12: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	4.307	1.272		3.386	.000
Representativeness	.711	.208	1.700	3.418	.002
Anchoring	.392	.123	.174	3.187	.004
Overconfidence	.457	.046	.101	9.935	.000
Herd Behaviour	.547	.269	.656	2.033	.002

a. Dependent Variable: Investors Decisions

Source: Researcher (2021)

$Y = 4.307 + 0.711X_1 + 0.392X_2 + 0.457X_3 + 0.547X_4$

where:

Y= Investment Decisions

X_1 = Representativeness

X_2 = Anchoring

X_3 = Overconfidence

X_4 = Herd Behaviour

4.5 Interpretation of Findings

The R Square is 0.863; thus 86.3% of the disparity in the decision of investment at VSALs can

be clarified by the disparity in the degree to which they are impacted by the individual behavioral

aspects. The significance value of the F-test statistic drops implies that the overall study model is good.

Representativeness (β=0.711, p<0.02) direct as well as significant effect on investment decisions at VSALs, and this infers that, for a single unit change in the representativeness index, the choice of the investment at VSALs changes by 0.711. Therefore, representativeness influences investment decisions since it provides an opportunity to the investors to use present information in the market to make decisions concerning the investment choices. Mochere et al., (2016) got representativeness to be considerably related to the performance of investments in real-estates. Subrahmanyam (2007) looked at behavioural finance in the investment decisions and saw representativeness having a positive impact on investors' choice of the investment opportunities in Europe. Riaz, & Hunjra (2015). looked at psychological factors and investment decisions in risk perceptions in investment and suggested that representativeness has positive effect on investors decisions.

Anchoring (β=0.392, p<0.04) as direct and a significant impact on investors decisions on their investment at VSALs, which means, for a single unit change in the representativeness index, the investors' choices on their investment at VSALs changes by 0.392. It also means that, for any single unit change in the anchoring behaviour index, the investment decisions are affected by 0.392. Thus, anchoring behaviour influences the investment choices as the investors make references to a given orientation point such as the investment prices. This finding is in line with Onsomu (2014) who investigated the impact of behavioural biasness on investors decisions and revealed anchoring having a positive influence on investors decisions of investment opportunities in Kenya. Obongo, Nyakundi and Vitali (2016) suggested that anchoring has positive effect on investors decisions.

Overconfidence (β=0.457, p<0.00) with a positive and significant impact on investments decisions at VSALs, implies, for any single unit change in the overconfidence index, the investment choice at VSALs varies by 0.457. Thus, overconfidence influences investors' choices because it gives investors an opportunity to include their knowledge and expertise on the specific investments when choosing the investment decisions to embark on. This finding is in line with Nyaribo (2010) in his study on the review of behavioural factors on financial models choice, and established that there is a positive and significant effect of overconfidence on the investment decisions.

Herd Behaviour (β=0.547, p<0.02) has direct as well as significant influence on investment decisions at VSALs, meaning for a unit variation in the herd behaviour, the investors choice at VSALs will varry by 0.547. Thus, herd behaviour influences investors choices because this provides investors with a chance to interpret and apply facts at their disposal in investment decision making by pursuing choices taken by other investors; or else it leads to various investment variances. This finding is in line with Osmond, Adebayo, Adesiyan, O. S., & Moronke (2013) who they revealed that herd behaviour has a significant impact on the investment choices in the property in Nigeria investment. Also, the study was in line with RamziBoussaidi (2013) who established that herd behavior is paramount to all investors in the Tunisian Stock market, thus established a positive and noteworthy impact on the investment choices by the investors in the Tunisian Stock market.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Analyzed results are summarized in this chapter. Various conclusions are provided as informed by the results. The recommendations are given besides the limiting factors and the areas which further research is required.

5.2 Summary

The study was keen to bring out an interlink between individual behavioural factors and their ability to shape the decision-making ability of investors in the Village Savings and Loans Associations groups. From the findings, it was apparent that representativeness had the strongest influence on investors' decision on the investment at the Village Savings and Loans Associations groups. It was followed by herd behavior, overconfidence and anchoring in that order. All the behavioral factors were seen to significantly predict on the investment decisions.

From the analysis, investors have put into consideration the behavioural factors in investment choices because of presence of anomalies in investment markets which cannot be fully explained by the quantitative models. Through these behavioural factors, some investors in the investment market have been able to make rational investment decisions while others make irrational decisions.

5.3 Conclusion

It is clear from the analysis that investors' choices in the market are not solely affected by monetary factors but by individual behavioural factors of the investors in the VSALs too. In particular, this research uncovered that representativeness, herd behaviour, anchoring and overconfidence are a critical in impacting on investments

decisions in the VSALs. The study ranked representativeness as the major individual behavioural factor that affects the investment decisions in the VSALs among other individual behavioural factors. Therefore, conclusion on research results obtained after analysis include: individual investors should take into account monetary and individual behavioural factors when coming up with investment choices in the VSALs since they aim at getting maximum earnings from their investments.

5.4 Recommendation for Policy and Practice

It is obvious from the findings that the individual behavioural influence analysis makes an essential part in reviewing investment choices in the VSALs. However, individual behavioural factors are not stand-alone factors; but should be assimilated with the typical finance models and use of skilled and investment experts in order to make realistic and prudent investment decisions especially in the VSALs investments.

The research recommends that management of the Village Savings and Loans Associations need to incorporate the individual behavioural factors in their investment decisions. It was determined that representativeness, herd behaviour, overconfidence and anchoring are used to make investment decisions, but these factors need to be carefully evaluated when making the investment decisions.

The study also recommends that management of VSALs groups should regard full implementation of the individual behavioural factors as key elements in making investment decisions in order for the groups to make appropriate decisions when it comes to investments to put in place in the villages.

5.5 Limitations of the study

Data for investigation was primarily gathered by only using questionnaires. It was hard to convince respondents in taking part in the study due to inherent fear of being victimized for giving out the information. However, efforts were in place to ensure that respondents are assured of their confidentiality and the investigation was only meant to realize academic purpose.

The investigation did not exhaustively consider all individual behavioural factors that impact on investments choices in VSALs because of time and cost constraint of conducting the study. The research work could best if it covered all individual behavioural in order to understand the enormousness at which these individual factors affect investments decision making at the VSALs.

During data collection, most of the respondents were very difficult to identify and to get them, since most of them were anonymous in the database and even after identifying them, most of the were so busy with their day to day operations in the villages. It was therefore not possible to collect data from the busy respondents in a single day or in person. For adequacy of the gathered information, the tools were left for a while then taken up later on.

5.6 Suggestions for further research

The researcher's focus was on individual behavioural factors with regard to investment decisions in the Village Savings and Loans Associations Groups. Future studies may also be conducted among other firms outside the realm of investment market. The study also suggests that future studies on the same variables may be conducted not solely on cross-sectional design but use of other designs too that will be beneficial in correcting changes in the data in comparison to the time element. A

study should also be conducted to investigate how aversion to ambiguity and innumeracy factors have an effect on the investment decision.

The study should also divide the groups investments according to some distinguishing characteristics such as investment share. Once the investment has been grouped according to their characteristics, the research should look at how investors decisions in each category have been affected by the individual behavioural factors. If there are differences in how the investors decisions are made considering the individual behavioural factors, then it will be clear that individual behavioural factors are different in each group.

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Appendix I: Research Questionnaire

INTRODUCTION

This questionnaire is *intended* for use specifically in gathering data in pursuit of the objectives of the study titled "The Effects of individual behavioral factors on investment decisions in Village Savings and Loan Associations (VSALs)". It incorporates questions on general survey participant information, investment behavioural factors and the connection between individual behavioural factors and the investment decisions. Kindly complete the questionnaire as per the instructions. Your participation is highly valued.

PART 1: GENERAL SURVEY PARTICIPANT INFORMATION

1. Your group name……………………………………………………………..

2. For how long have you been in investing? (Tick as appropriate)

     1-4 years   ☐

     5-8 years   ☐

     9-12years   ☐

     Over 12 years   ☐

     Other (Specify)   _____

3. Do the past historical events influence your current investment decisions?

           Yes   [   ]

           Somehow   [   ]

           No   [   ]

4. Based on the last four years, how would you describe the performance of your investment decisions?

           Excellent   [   ]

           Good   [   ]

           Fair   [   ]

           Bad   [   ]

Poor   [   ]

5. Do you consult investment and financial experts before investing in a particular investment(s)?

        Yes   [   ]

        No   [   ]

6. How do you evaluate your investment decision? (Put a tick in the appropriate box)

    Using standard finance models   [ ]

    By intuitions   [ ]

7. How would you rate the performance of your investment decision based on the returns?

        Excellent   [ ]

        Good   [ ]

        Moderate   [ ]

        Bad   [ ]

        Poor   [ ]

8. Based on your expertise and skills in investment, do you still consult the financial and investment analysts before investing in any activity/project(s)?

        Yes   [ ]

        No   [ ]

PART 2: INDIVIDUAL BEHAVIOURAL FACTORS

In this section, respond to the questions by ticking the most appropriate choice.

1=Very frequently 2=Frequently3= Occasionally   4=Rarely5=Never

Investment Behavioural factors.   1   2   3   4   5

Herd behavior

Given a chance to invest in others investment(s), to what extent will your decisions to invest be affected by other investors' decisions?

Anchoring

To what extent do you consider making reference to the purchase price when making investment decisions about the property to invest in?

Overconfidence

How many times do you consider your knowledge and skills more important in deciding on the kind of investment to undertake?

To what extent do you believe in your knowledge and skills to help you perform better than other investors?

Representativeness

How many times do you use performance index i.e profits of investment in one particular area to predict the performance of investment?

PART 3: EFFECT OF INDIVIDUAL BEHAVIOURAL FACTORS ON INVESTMENT DECISIONS IN VILLAGE SAVINGS AND LOAN ASSOCIATIONS (VSALs) GROUPS IN SAMBURU COUNTY.

In this section, respond to the questions by ticking the most appropriate choice.

1=Very high influence 2=High influence 3=Average influence   4=Little influence 5= No influence

Particulars	1	2	3	4	5
The past historical events influence your current investment decisions					
Fundamental analysis of the information from the company contributes to our decisions					
Advice, recommendations and forecast from professional investors					
Focus on popular investment activities					
Own intuition of the future performance					
Investment price changes					
Over-reaction to changes in investment activities due to seasons					
Under-reaction to changes in in investment activities due to seasons					

THANK YOU