

CHRISTIAN SERVICE UNIVERSITY
COLLEGE SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING AND FINANCE

**THE INFLUENCE OF BEHAVIOURAL BIAS AMONG SMALL AND
MEDIUM SCALE ENTERPRISE IN THE KUMASI METROPOLIS**

BY
PRINCE OWUSU AFRIYIE
ESTHER DUFIE
ALEXANDRIA OFORI

JULY, 2020

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**A PROJECT WORK SUBMITTED TO THE SCHOOL OF BUSINESS,
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BACHELOR OF BUSINESS ADMINISTRATION (ACCOUNTING OPTION).**

JULY 2020

DECLARATION

We have read the university regulations relating to plagiarism and certify that this report is all our own work and do not contain any unacknowledged work from any other source. We also declare that we have been under supervision for this report herein submitted.

Name	Index Number	Signature	Date
Prince Owusu Afriyie	(10003738)
Esther Dufie	(10003241)
Alexandria Ofori	(10004682)

SUPERVISOR'S DECLARATION

I hereby declare that the Preparation and Presentation of this dissertation was Supervised In accordance with the guidelines on supervision laid down by Christian Service University College.

Supervisor's Name

Mr. Etse Nkukporu

Head of Department

Mrs. Joyce Quarthey

DEDICATION

This project work is dedicated to lecturers who out of their motivation and advice have helped us complete our studies on campus. We say that may the almighty God out of his abundant grace richly bless them all. We also dedicate this work to Mr. Etse Nkukporu, our supervisor and the entire staff of the Accounting and Finance Department who have all out of their help been our source of inspiration.

ACKNOWLEDGEMENT

Foremost, we give glory to the almighty God for seeing us through this season of pandemic “covid 19”, gathering of information wasn't't easy but the Lord has been so merciful to us and we can not be silent over how great is our God to us. Secondly we would like to express our deepest appreciation to our supervisor- Mr. Etse Nkukporu, who has the attitude and substance of a genius: he continually and convincingly conveyed a spirit of adventure in regard to our research and an excitement in regard to teaching. Without his guidance and persistent help in this dissertation would not have been possible. We also articulate our gratefulness to the entire staff of accounting and finance department.

ABSTRACT

The main purpose of this study is to determine the influence of behavioural bias among SMEs in the Kumasi Metropolis. In this study, three behavioural biases (belief bias, “snakebite” effect and overconfidence bias) and their effect on SME owner decision making. The study uses a questionnaire to collect primary data. A sample size of 120 respondent used and SPSS version 21 used for data analysis. The results from the regression analysis show that the impact of the behavioural bias on SME owner decision making is significant at 0.01 significant level. The findings provided could be useful to SME owner in their decision making to understand the dynamics in businesses.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Small and Medium Scale Enterprises (SMEs) are the engine of growth and the lifeblood of many developed and developing economies (Ahiawodzi and Adade, 2012). According to Abor and Quartey (2010) and Ahiawodzi and Adade (2012), SMEs sector constitute about 90% of business and also contribute about 60% of job creation in Africa. Abor and Quartey (2010) posits that, in a developing economy like Ghana SMEs contribute to about 85% of employment that are towards the manufacturing sector. A statistics from the registrar generals department in Ghana show that 90% of businesses registered are in the category of micro, small and medium enterprises and are the catalyst of economic growth of the country (Mensah, 2004). In addition to job creation in the economy, SMEs also aid to reduce rural – urban migration and efficient resource utilization. According to Ahiawodzi and Adade (2012), the government of Ghana in recognizing the major contributions of SMEs to the socioeconomic development of the country established the National Board for Small- Scale Industries (NBSSI). This body is aimed at the developmental agenda and promotion of SMEs in the country. In an attempt to sustain and grow the SMEs sector in Ghana, successive government have introduced many social intervention programs aimed at helping SMEs.

According to Mensah (2004) such agencies include Micro Finance and Small Loan Center (MASLOC), Venture Capital Trust Fund, Export Development and Investment Fund (EDIF). SMEs are constraint with a lot of challenges in Ghana, despite the critical roles played by NBSSI, Non – Government Agencies and the Government of

Ghana to promote the growth and sustainability of SMEs to accelerate economic growth aimed at alleviating poverty is still critical. Research have concentrated on challenges such as access to credit, equipment and technology, regulatory constraints, lack of data regulation (Bunting, 2010; Ahiawordzi and Adade, 2012; Abor and Quartey, 2010).

Research have shown that most SMEs are unable to grow beyond five and six years of existence (Pena, 2004 ; Hayward, Shepherd and Griffen, 2006). SME owners are rational human being and are controlled by certain psychological factor called behavioural bias. These bias are critical to the development and sustainability of the SMEs sector in a developing economy Ghana. It is based on this that this current research want to ascertain the influence of behavioural bias among SMEs owners decision making. Kengatharan (2014) posits that psychological biases affect how individuals or groups act. According to Prosad et al (2015), individuals are considered rational in their decision making. However there have been very few studies on psychological bias among Ghanaian SME owners. This current study attempts to close the gap of the differences in terms of geographical locations and demographic profile of Ghanaian SMEs and investigate the influence of the following behavioural biases such as; Overconfidence bias, herding, , “snakebite” effect, could possibly influence individual SMEs owners decision in Ghana.

1.2 Statement of the Problem

Amidst the phenomenal contribution of SMEs to the economic development in both developed and developing countries, their rate of survival in the developing context has been inhibited. Scholars have attributed their high rate of failure to financial

literacy, managerial incompetence, inadequate source of funding and logistics. However, prior studies have given little attention to the behavioural bias which could influence the success or failure of SMEs. This gap is relevant in the sense that SMEs owners are rational human beings and are pre-disposed to certain psychological factors which could influence their decisions. This study sought to contribute to enrich the empirical ambience by investigating the influence of certain behavioural bias among SMEs owners decision making.

1.3 Objective of the Study

This research work seeks to ascertain the influence of behavioural biases on owners of SMEs in the Kumasi metropolis.

1. To determine the effect of “Belief bias” on owners of SMEs in the Kumasi metropolis.
2. To ascertain the influence of “snakebite effect” on owners of SMEs in the Kumasi metropolis.
3. To find out the influence of overconfidence bias on owner of SMEs in the Kumasi metropolis.

1.4 Research Questions

1. What is the effect of belief bias on owners of SMEs in the Kumasi metropolis?
2. What is the influence of “snakebite effect on owners of SMEs in the Kumasi metropolis?
3. What is the influence of overconfidence bias on owners of SMEs in the Kumasi metropolis?

1.5 Significance of the Study

The findings of the study will make contribution in several strands. This provides relevant implications for the growth and sustainability of the SMEs sector in Ghana. First, understanding of behavioural biases will enable the owners of SMEs to identify mistakes. Second, donor agencies and government become more effective by understanding the psychology of the owners of SMEs. This will enable them develop behavioural policies to meet their inclination. Third, the outcome of the research will enable owners SMEs in understanding the dynamic nature of the business environment. Fourth, the knowledge of behavioural biases will enable managers to make prudent financial decisions to increase returns on their investment. Finally, the findings of the study will contribute to the available literature in the area of behavioural finance.

1.6 Scope and Limitation of the Study

There are several owners of SMEs scattered across the country. However, the study focused on those SMEs situated in the Kumasi metropolis in the Ashanti region of Ghana. This is because Kumasi appears to be the largest business hub in the region. However, there are sixteen regions in the country, hence future studies could be extended to other regions in the country. There are also numerous behavioural bias but the study focused on only three. Further studies could consider other bias.

1.7 Organisation of the Study

This study is divided into five chapters. Chapter one consists of the background of the study, the problem statement, research objectives and questions of the study and the significance of the study, scope and limitation of the study. Chapter Two includes

review of relevant literature. Chapter three provides details on the research design and research techniques. Chapter Four contains data analysis and discussion of findings. Chapter Five provides the summary of findings, conclusions and recommendations for the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter delineate relevant literature in the subject area to include; concepts underpinning behavioural bias, decision making among small and medium enterprises (SMEs) and literature on Prospect theory.

2.1 Overview of Behavioural bias

Psychological factor play significant role in decisions taken by managers of organizations. This is evidenced in SMEs where the individual is the same management and the owner of the business. According to (Prosad et al., 2015) individual decisions are sentiment – driven. This therefore suggest that humans are prone to certain psychological errors. These errors are termed behavioural bias which prove to be detrimental to business. Therefore, it is imperative for owners of SMEs to be aware of their own bias. Biases are factors that influence investment decision. Biases may be considered as investors' tendency to make decisions based on cognitive factors, such as memory, attention, learning, problem solving, and may lead to errors in judgement (Barberis et al., 1998; Fama, 1998).

2.2 Factors Influencing SMEs Owners Decision.

According to Bailey et al. (2011), there are many behavioural biases that influence SME owner's decision. This study will focus on the following; Belief bias, Snakebite effect and Overconfidence bias. These behavioural biases are discussed as follows.

2.2.1. “Snakebite” effect or bias

According to Barber and Odean (2011) after individuals experience a loss on their investment, they become less willing to take risks on their next investment. Hence the study hypothesized that:

Ho: “Snakebite” effect has no effect on individual SME owners decision.

2.2.2 Overconfidence Bias

According to Qadri and Shabbir (2014), overconfidence bias have significant positive influence on decision and shows that individuals associate higher returns on their investment to their own knowledge and capacity and blame lower returns on bad luck. According Pompian (2006), Overconfidence is dependent on intuition, judgment and cognitive ability and the mere fact that individuals have certain information make them assume that they can perform better than other. Overconfidence makes individuals to become too confident about their knowledge and skills and disregard the risk associated with their business (Raharja et al., 2017). Overconfident individuals believe that they know more than they actually know (Wickman, 2006). According to Agrawal (2012), overconfidence is among the most important and effective behavioural biases, which has many hostile consequences for investors, such as excessive transactions and lower returns on investment (Bailey et al., 2011). It is evidenced in literature that overconfidence causes individuals to have low returns on their investment (Russo and Schoemaker, 1992). Additionally, Bernardo and Welch (2001) confirm that in general overconfidence is harmful to individual’s business owners.

Hence the study hypothesized that:

Ho: Overconfidence bias has no influence on individual’s SMEs owner decision.

2.2.3 Belief Bias

Emotions have an immense impact on investment decision making, most investors' loss money due to psychological reasons and investors who experience more fear make pessimistic risk estimates (Chin, 2012). According to Hirshleifer and Shumway (2003), positive mood such as being exposed to a lot of morning sunshine could possibly lead to higher stock returns. Fox and Clemen (2005) found out that investors tend to bias their belief towards an equal chance on every possible partition. The expectations depend on the partition of the outcome space (Sonneman et al., 2008). The study therefore hypothesised that:

Ho: There is no influence of belief bias on SME owner decision making

2.3. SMEs Owners Decision Making

Decision-making is the process of choosing an alternative from many available once. Understanding human nature may result in effective investment decision by SMEs. According to Chandra (2008), major emphasis should be placed on behavioural biases since it is significant in the process of sustainability and growth of SMEs. According to Vadali et al. (2011), behavioural finance forms cardinal part in decision process since it influence SMEs performance.

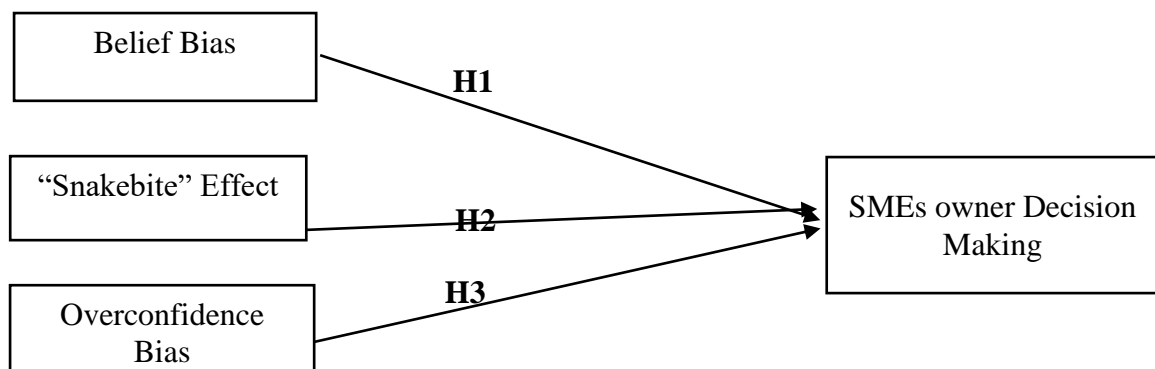


Figure 2.1 Conceptual Framework based on the Behavioural Biases on SME Decisions

Source: Researchers, 2020.

2.4 Empirical Review of Literature

Several researches have been conducted in the past years to ascertain the impact and relationship between the psychological factors and the investors' decision making. Lim (2012) in his work examined the relationship between psychological biases, namely the overconfidence bias, herding and regret and the decision making of investors in the Malaysian. The result indicated that overconfidence, regret have positive significant impacts on investors' decision making. However, herding behaviour was found to have no impact on investors' decision making. Kengatharan (2014) in his work dubbed behavioural factors influencing individual investors' decisions found out that overconfidence bias have positive effect on the investment decisions of individual investors. Luu (2014) studied the behaviour patterns of individual investors and found out that regret bias and overconfidence have positive significant relationship with individual investment decision. Atif Kafayat (2014) in his study found out that overconfidence bias have negative influence on investment decision of individual investors. Pourjiban et al., (2014) assessed only the impact of investors' overconfidence bias on investment decision and found a positive significant impact. In a similar study conducted by Qadri and Shabbir (2014), found overconfidence bias to have positive significant impact on investment decision. Wamae (2013), in a study in Kenyan found out that herding bias have a positive significant relationship with investment decision. Bashir et al. (2013) studied behavioral biases including overconfidence, confirmation, and illusion of control, loss aversion, mental accounting, status quo and excessive optimism on investors' financial decision making. The study found out that there is a positive significant relationship and impact of overconfidence.

Babajide and Adetiloye (2012) conducted an empirical study about investors' behavioral biases on the Nigerian and found out overconfidence bias have negative relationship with investment decision. Hong et al. (2005) found that herding bias is significant in influencing investors decision in that mutual fund managers buy shares due to the fact that other managers in the vicinity are buying it as a result of word-of-mouth effect (Gounaris and Prout ,2009) Welch (2000) in his study found out analysts could be exhibiting Herding behaviour too.

2.5 Small and Medium – Sized Enterprises

Small and medium sized enterprises ranges from an individual street hawker to a complex multinational business. The SME and micro- enterprise sector is made up of a broad scope of businesses. This spans from traditional family business engaging activities of over a hundred individuals to survivalist self-employed people working in informal micro – enterprises. According to Anon (2005), SMEs are the lifeblood of most economies and represent over 90% of enterprises and account for about 50 – 60% of employment at a national level. Scholars argue that SMEs are important in supporting economic growth and livelihood in developing economies (Abor and Quartey, 2010; Ahiawodzi and Adade 2012)

2.6 Theoretical Review

This study provides a review on the Prospect theory which is the theory that underpins the study.

2.6.1 The Prospect Theory

Kahneman and Tversky proposed prospect theory as an alternative model of decision-making under risk and uncertainty (Kahneman & Tversky, 1992). Prospect theory posits that individual choices are in two phases namely; framing and evaluation. During the framing stage, the individual investor constructs a representation of the acts, contingencies and outcomes significant to the decision. For evaluation stage, the individual investor assesses each of the prospects available and makes a decision (Tversky & Kahneman, 1992). The following are the characteristics of the choice value according to the prospect theory: Defined on deviation from the reference point, which indicates concave for gains and convex for losses, steeper for losses than for gains; and having a nonlinear transformation of the probability scale (Tversky & Kahneman, 1992). Prospect theory describes several states of mind that can be expected to influence an individual's decision-making processes.

CHAPTER THREE

RESEACH METHODOLOGY

3.1 Introduction

This chapter provide details of the methodology that will be employed for the study. These includes: research design; sources of data; and sampling design, the study population, sampling size and sampling technique and data collection instruments and data analysis.

3.2 Research Design

A descriptive and explanatory research design was adopted for the purpose of this study. Descriptive research design is conducted to explain the demographic characteristics of the respondents (Pallant, 2010). Explanatory research is also conducted to test hypothesis to provide explanation to certain relationship between behavioural biases and SMEs owner decision. Quantitative approach was used since it seeks to ascertain the relationship between dependent variable and independent variable (Hopkins, 2008).

3.3 Study Population

The study population consists of individual SME owners in the Kumasi metropolis. The sample from Kumasi implies that, it is the hub of business activities in the region.

3.4 Sample Size and Sampling Procedure

The study uses a sample size of about 150 respondents. Kent (2007) argues that a sample size of 100 respondents and above is acceptable in quantitative studies. The

questionnaire was administered to SME owner's individuals who were willing and available at the time the researcher was administering the instrument.

3.5 Source of Data

Data are gathered from primary source through the use of questionnaire .Data for this research work was collected from owners of SMEs in the Kumasi metropolis.

3.6 Data Collection Procedure

A pilot test was conducted on individual SMEs owners to check face validity, and reliability. A structured questionnaire was administered to the SME owners personally. The SME owners who were available and willing to participate were contacted and data obtained . The questionnaire was adapted from Chin (2012) and modified slightly to meet the Ghanaian perspective.

The questionnaire is in three sections. Section A contains demographic variables to enable researcher obtain demographic information about investors. SECTION B contains knowledge about investment in stocks. SECTION C contains information about behavioral biases and decision variable.

3.7 Data Analysis

Out of a total of 150 questionnaires, 120 was used for the study since the rest were not completed. Therefore, the mean rate of valid questionnaire is 80%. Data was organized and processed using Statistical Package for Social Scientists (SPSS) version 21.0 and Microsoft Office Excel. Descriptive statistics and regression results were reported.

3.8 Model Specification.

The model is presented below,

$$\mathbf{DM} = \alpha + \beta_1\mathbf{BB} + \beta_2\mathbf{SB} + \beta_3\mathbf{OB} + \epsilon$$

Where,

Dependent variable, DM = Decision making, measured by level of risk and scores obtained from five point Likert scale.

Independent variable BB = Belief bias,

Independent variable SB = Snake bite bias,

Independent variable OB = Overconfidence bias

α – is the constant, and $\beta_1, \beta_2, \beta_3$, the predictors or coefficient of determination

ϵ - Is the random variable or stochastic term or the error term.

3.9 Reliability and Validity of Data

The reliability of the instrument assessed using Cronbachs Alpha. According to Nunnally and Bernstein (1994), reliability within the ranges of 0.6 to 0.9 is acceptable. To achieve face validity the study adapted the questionnaire of Chin (2012) and pilot survey conducted for modifications.

3.10 Ethical Consideration

Ethical issues were taking into consideration in conducting this research work. In this study, the respondents are informed with all important information for them to participate freely in the research. Again the respondents were assured of the confidentiality of their information and data collected is used purposely to achieve the objective of the research.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter contains analysis of data and discuss findings from descriptive statistics, Reliability Analysis (Cronbach's Alpha) and regression results also reported.

4.1 Descriptive Statistics

This provide explanation and summary of demographic profile.

4.2 Statistics for Demographic Variables

4.2.1 Gender

This is shown in Table 4.1. Out of 120 respondents, 71 representing 59.2% are male and 49 representing 40.80% are female. The implication is that male have a greater chance to engage in SME activities than females because male take risky activities than female.

4.2.2 Age

The age range of respondent show that 48 representing 40.0% belong to the age group 31-40 years, age range of 41- 50 years obtain a frequency of 44 representing 36.7% whereas there are 11 respondents representing 9.2% belonging to the age group 25-30 years. Meanwhile, about 15 respondents representing 12.5% belong to those above 50 years and 2 respondent indicating 1.7% are between the age of 18-24 years old. The results show that owners of small business are in the age group of 31-40 years old are most active.

4.2.3 Educational qualification

On the part of educational qualification of individual SME owners, most of the respondents 59 representing 49.2% have senior high school certificate, this is followed by 44 respondents representing 36.7% have diploma qualification. Meanwhile, 10 respondents indicating 8.3% are undergraduate certificate holders and 7 respondents representing 5.8% are post graduate certificate holders. The results shows that most of the about 94.2% are educated (senior high school, diploma, undergraduate, postgraduate) and this enhances their skills and knowledge in the business.

4.2.4 Income

Finally, most of the respondents, 61 representing 50.8% are within the income range of GHC 1001-2000. This is followed by those above GHC 2000 with 56 respondents representing 46.7% and 3 respondents constituting 2.5% belonging to the income range between GHC 5001-1000.

Table 4.1 Demography of Respondent Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	71	59.2	59.2	59.2
Female	49	40.8	40.8	100.0
Total	120	100.0	100.0	
Age				
18 - 24 years	2	1.7	1.7	1.7
25 - 30 years	11	9.2	9.2	10.8
31 - 40 years	48	40.0	40.0	50.8
41- 50 years	44	36.7	36.7	87.5
Above 50 years	15	12.5	12.5	100.0
Total	120	100.0	100.0	
Education				
Postgraduate	7	5.8	5.8	5.8
Diploma	44	36.7	36.7	42.5
Senior high school	59	49.2	49.2	91.7
Undergraduate	10	8.3	8.3	100.0
Total	120	100.0	100.0	
Income				
Between Ghc501 - Ghc1000	3	2.5	2.5	2.5
Between Ghc1001 - Ghc2000	61	50.8	50.8	53.3
Above Ghc2000	56	46.7	46.7	100.0
Total	120	100.0	100.0	

Source: Field Survey, 2020

4.3 Statistics Results for Knowledge about SMEs

This section provides statistics results on how respondents respond to questions on the Section B of the research instrument from questions 6 to questions 10.

4.3.1 How many years have you been in business?

Table 4.2 shows most of the respondents, 78 representing 65.0% out of the total number of respondent have been in business between 1- 5 years. This followed by 41 respondents representing 34.2% have been in business between 6-10 years and only one respondent representing 0.8% have been in business above 10 years.

4.3.2 Do you transact business with financial institutions?

Mostly, 58 respondents which accounted for 48.3% have been transacting with financial institutions. 45 respondents representing 37.5% have been trading with financial institutions. Lastly 17 respondents representing 14.2% have been trading with financial institutions.

4.3.3 Before making investment I think:

This results show that most of the respondents 70 representing 58.3% are concern mostly about potential gains in their business. The second most important issue is security of the investment and about 37 respondents representing 30.8% are in this category, 13 respondents indicating 10.8% think about little loss. This results shows that SME investment is male dominated and that they are concern about potential gain than others which accounted for 58.0% which is the highest.

Table 4.2 Knowledge About Investment
How many years have you been in business.

	Frequency	Percent	Valid Percent	Cumulative Percent
Between 1 - 5 years	79	65.8	65.8	65.8
Between 6 - 10 years	41	34.2	34.2	100.0
Total	120	100.0	100.0	
Do you transact business with financial institutions?				
Below 5 times	58	48.3	48.3	48.3
Between 5 - 10 times	45	37.5	37.5	85.8
Over 10 times	17	14.2	14.2	100.0
Total	120	100.0	100.0	
Before making investment				
Mostly about potential gains	70	58.3	58.3	58.3
A little about potential loss	13	10.8	10.8	69.2
Security of investment	37	30.8	30.8	100.0
Total	120	100.0	100.0	

Source: Field Survey, 2020

4.4 Statistics Results for Attitude Towards Risk

Descriptive test is being used to analyze and abridge the questions designed which are based on dependent and independent variables. The item on each constructs is measured against a five point Likert scale.

4.4.1 Belief bias

As shown in table 4.5, the item in the beliefs bias variable “I trust the research and past performance of the business entity” obtain the largest mean of 4.62 with a standard deviation of 0.568. This result shows that SME owners solve problems through simple judgements (Tversky and Kahneman ,1996), and these leads to errors.

4.4.3 “Snakebite effect”

As shown in table 4.5, the item “I worry about the influence of financial crises” in the snakebite effect variable recorded the highest mean of 4.86 with standard deviation of 0.350. The implication confirm an adage that once biting twice shy. This evidence of the “snakebite effect” is consistent with works of Chin (2012), Keller and Pastusiak (2016).

4.4.4 Overconfidence bias

From table 4.3, the result show that most of the respondent are overconfidence when it come to their prediction. The statement in overconfidence bias “I can predict the future movement of prices of goods and services after I did some analysis” recorded a higher mean of 4.83 with standard deviation of 0.440. This findings is consistent with

Chin (2012) and Glaser et al., (2005) and also on study conducted by Barberis and Thalar (2003).

4.5 SMEs Owner Decision Making

From table 4.3, the statement in SME owner decision making variable “I take the safe option if there is one” recorded a higher mean of 4.83, standard deviation of 0.382. The implication is that most SME owners are risk averse and would select safer options in their decision making. The findings is consistent with Oslen (1998).

Table 4.3 Statistics Results for Attitude Towards Risk

	Mean	Std. Deviation	N
BB	2.0483	.65285	120
SB	2.1803	.47376	120
OB	2.1458	.44032	120
DM	2.1505	.51069	120

4.6 Descriptive Statistics for Variable Reliability

From table 4.4, the reliability test obtain a Cronbach’s Alpha of 0.693. Cronbach’s Alpha of belief bias is 0.651, snakebite effect is 0.645 and that for overconfidence bias is 0.651. All the scales in the instrument shows a good reliability because they meet the threshold suggested by Nunally and Bernstein (1994), that Cronbach’s Alpha of 0.6 and higher is accepted.

4.7 Pearson’s Correlation Analysis

The result from this analysis is used to ascertain the strength and direction of association among two variables.

4.7.1 Belief bias

From table 4.4, the correlation result show that, there exist significant positive and strong relationship between belief bias and investment decision, $r = 0.952$, $n = 120$, and at 0.01 significance level. The implication is that SME owners believe in the information or news they obtain from other sources. These SME owners persist in their beliefs based on “hot” tips from some forum. This may lead to overreaction which may result in wrong decision making.

Table 4.4 Correlation Results among the variables

Correlations			
		DM	BB
DM	Pearson Correlation	1	.952**
	Sig. (2-tailed)		.000
	N	120	120
BB	Pearson Correlation	.952**	1
	Sig. (2-tailed)	.000	
	N	120	120

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

4.7.2 “Snakebite” effect

From Table 4.5, the result indicated that the relationship among “snakebite” effect and SME owner decision is stronger, positive and significant at 0.01 significant level, $r = 0.946$, $n = 120$, $p = 0.000$. The implication is that SME owners are prone to fear after having experienced a huge loss of money in a particular business due to unpredictable changes in the business environment. This makes them to be pessimistic and do not have the appetite to revisit same business again. These SME owners do not want to take higher risk. They sell their products quickly when they suspect price change to avoid further losses after making few gains.

Table 4.5 Snakebite” effect Correlations

		DM	SB
DM	Pearson Correlation	1	.946**
	Sig. (2-tailed)		.000
	N	120	120
SB	Pearson Correlation	.946**	1
	Sig. (2-tailed)	.000	
	N	120	120

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

4.7.3 Overconfidence bias

From table 4.6, the correlation result show that $r = 0.867$, $p\text{-value} = 0.000$ and $n = 120$, meaning there exist strong, significant and positive relationship among overconfidence bias and SME owner decision at 0.01 significant level.

Table 4.6 Overconfidence bias Correlations

		DM	SB
DM	Pearson Correlation	1	.867**
	Sig. (2-tailed)		.000
	N	120	120
SB	Pearson Correlation	.867**	1
	Sig. (2-tailed)	.000	
	N	120	120

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

4.8 Regression Analysis

Table 4.7 Regression coefficients

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	.083	.013		6.330	.000
	BB	.276	.009	.353	32.391	.000
	SB	.339	.012	.315	28.426	.000
	OB	.090	.010	.078	8.872	.000

a. Dependent Variable: DM

The researcher uses the Statistical Package for Social Sciences (SPSS) version 23 to code, enter and compute the measurements of the multiple linear regression for the study. The regression equation,

$$DM = \alpha + \beta_1 BB + \beta_2 SB + \beta_3 OB + \varepsilon \text{ now becomes}$$

$$DM = 0.083 + 0.276BB + 0.339SB + 0.090 OB + \varepsilon$$

From regression equation, holding all biases constant (belief bias, “snakebite” effect and overconfidence bias) the SME owner decision making will be 0.083. Further, holding other factors constant, a unit increase in belief bias resulted to a 0.276 success in SME owner decision. A unit increase in “snakebite” effect resulted to a 0.339 increase in SME owner decision making, a unit increase in overconfidence bias resulted to a 0.090 increase in SME owner decision making. The implication of the result is that “snakebite” effect contribute more to the decision making, this is followed by belief bias then overconfidence bias contributes the least to decision making among SME owners in the Kumasi metropolis.

4.8.1 The outcome of the hypothesis testing

From both the regression results and the Pearson’s Correlation results show that all the p – values (0.000) less than 0.05 at 0.01 significance level. The correlation results show a significant positive and stronger relationship between each of the independent variables (belief bias, “snakebite” effect and overconfidence bias) and the dependent variable (SME owner decision making). From the multiple linear regression results, adjusted R square is 0.997 and they are significant at 0.01 significance level. The adjusted R square is 0.997 meaning that 99.7% variation in SME owner decision making is explained by behavioural biases.

In all, three (3) hypothesis was tested. The hypothesis result is as follows:

In hypothesis belief bias: the study rejected H_0 and concluded that belief bias have influence on SME owner decision making.

In hypothesis “snakebite” effect: the study rejected H_0 and concluded that “snakebite” influence have effect on SME owner decision making.

In hypothesis overconfidence bias: the study rejected H_0 and concluded that overconfidence bias influences SME owner decision making.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of findings, conclusion based on the objectives, recommendations are given based on the findings and also provides future research direction and limitations of the study.

5.2 Summary of Findings

The focus of the study is to find out the influence of behavioural bias on SME owner decisions. The study has establish the presence of behavioural biases as critical in influencing the decision of SME owners. The analysis revealed that three behavioural biases studied have significant positive and strong relationship with SME owner decision making. The study also established that 99.7% of variation in SME owner decisions can be explained by the behavioural biases (belief bias, “snakebite” effect and overconfidence bias) and the remaining 0.3% of the decisions of SME owner are explained by other factors not captured in the multiple linear regression model. The hypothesis testing results show that behavioural bias influence SME owners decision in managing their businesses. This is significant at 0.01 significance level with all the p-values (0.000) which is less than 0.05 for each of the behavioural bias. Therefore the study rejected all the null hypothesis (H_0) and concluded that all the three behavioural bias influence SME owner decision making in businesses at 0.01 significance level.

5.3 Conclusions and Implications

The findings documented in this study reveals that behavioural biases to a greater extent will affect SME owner decision in conducting their businesses. The study tested the hypothesis and the result shows that all the independent variables (belief bias, “snakebite” effect and overconfidence bias) have a significant positive and strong relationship with SME owner decision making. There exists strong relationship between belief bias and SME owner decision making. The implication is that SME owner depend on belief in decision making. When you have a snake bite and you see the earthworm you are even more careful and afraid. For this reason, some of the SME owners who had experience of bad investment and recorded losses are more reluctant to take a risk. The implication is that they may miss the better opportunity of making higher returns on their business transactions. The results also indicated the impact of overconfidence bias. This shows that the most of the respondents have self-confident in their skills, knowledge in their predictions and they are optimistic when making decisions.

5.4 Specific Recommendations

1. The findings provided could be useful to SME owner in their decision making to understand the dynamics in businesses.
2. The business environment should have full information to enable business owners make an independent decision devoid of bias.
3. SME owners are also supposed to be open-minded while making decisions and refrain from holding on to previous happening with the view that they may influence the future but instead must realize that business is dynamic.

4. SME owners should consider many other variables in their environment rather than focusing on just one in making decision.

5.5 Limitation and Future Research

There are many behavioural biases documented in literature but this study is limited to only three of the biases.

1. It is recommended for future research to consider the influence of other behavioural biases which are not captured in this study.
2. Consider a larger sample size than the one used for this study to confirm the current finding of this study.
3. Future research could also consider other economic factors which may affect the decision making apart from behavioural bias factors.
4. There are sixteen regions in Ghana, however this study is limited Kumasi metropolis. Future research could extend to other metropolis and regions.

REFERENCE

- Abu-Akel, A., & Shamay-Tsoory, S. (2011). Neuroanatomical and neurochemical bases of theory of mind. *Neuropsychologia*, 49(11), 2971-2984.
- Ackert, L., & Deaves, R. (2009). *Behavioral finance: Psychology, decision-making, and markets*. Cengage Learning.
- Agrawal, K. (2012). A conceptual framework of behavioral biases in finance. *IUP Journal of Behavioral Finance*, 9(1), 7.
- Ahmad, Z., Ahmad, Z., Ibrahim, H., Ibrahim, H., Tuyon, J., & Tuyon, J. (2017). Institutional investor behavioral biases: syntheses of theory and evidence. *Management Research Review*, 40(5), 578-603.
- Almlund, M., Duckworth, A. L., Heckman, J. J., & Kautz, T. D. (2011). *Personality psychology and economics* (No. w16822). National Bureau of Economic Research.
- Alós-Ferrer, C., & Strack, F. (2014). From dual processes to multiple selves: Implications for economic behavior. *Journal of Economic Psychology*, 41, 1-11.
- Babajide, A. A., & Adetiloye, K. A. (2012). Investors' behavioural biases and the security market: An empirical study of the Nigerian security market. *Accounting and Finance Research*, 1(1), 219-229.
- Bailey, W., Kumar, A., & Ng, D. (2011). Behavioral biases of mutual fund investors. *Journal of Financial Economics*, 102(1), 1-27.
- Bailey, W., Kumar, A., & Ng, D. (2011). Behavioral biases of mutual fund investors. *Journal of Financial Economics*, 102(1), 1-27.
- Bakar, S., & Yi, A. N. C. (2016). The Impact of Psychological Factors on Investors' Decision Making in Malaysian Stock Market: A Case of Klang Valley and Pahang. *Procedia Economics and Finance*, 35, 319-328.
- Bakar, S., & Yi, A. N. C. (2016). The Impact of Psychological Factors on Investors' Decision Making in Malaysian Stock Market: A Case of Klang Valley and Pahang. *Procedia Economics and Finance*, 35, 319-328.
- Barber, B. M., & Odean, T. (2011). The behavior of individual investors.
- Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053-1128.

- Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053-1128.
- Barberis, N., Shleifer, A., & Vishny, R. (1998). A model of investor sentiment. *Journal of financial economics*, 49(3), 307-343.
- Bashir, S., Zeeshan, M. U. H. A. M. M. A. D., Sabbar, S. A. B. B. A. R. D. A. H. H. A. M., Hussain, R. I., & Sarki, I. H. (2013). Impact of cultural values and life style on impulse buying behavior: a case study of Pakistan. *International Review of Management and Business Research*, 2(1), 193.
- Bell, E., & Bryman, A. (2007). The ethics of management research: an exploratory content analysis. *British Journal of Management*, 18(1), 63-77.
- Ben-David, I., & Hirshleifer, D. (2012). Are investors really reluctant to realize their losses? Trading responses to past returns and the disposition effect. *The Review of Financial Studies*, 25(8), 2485-2532.
- Bernardo, A. E., & Welch, I. (2001). On the evolution of overconfidence and entrepreneurs. *Journal of Economics & Management Strategy*, 10(3), 301-330.
- Black, F., & Scholes, M. (1973). The pricing of options and corporate liabilities. *Journal of political economy*, 81(3), 637-654.
- Brabazon, T. (2000). Behavioural Finance: A new sunrise or a false dawn. *28th August*.
- Carlé, T. A. (2016). *Disposition Effect, Expectations and Behavior: Essays in Experimental Finance* (Doctoral dissertation, University of Luxembourg, Luxembourg, Luxembourg).
- Chandra, A. (2008). Decision making in the stock market: Incorporating psychology with finance.
- Chin, A. L. L. (2012). Psychological biases and investor behaviour: Survey evidence from Malaysian stock market. *International Journal of Social Science, Economics and Arts*, 2(2), 67-73.
- Coricelli, G., Critchley, H. D., Joffily, M., O'Doherty, J. P., Sirigu, A., & Dolan, R. J. (2005). Regret and its avoidance: a neuroimaging study of choice behavior. *Nature neuroscience*, 8(9), 1255.
- Daniel, K., Hirshleifer, D., & Teoh, S. H. (2002). Investor psychology in capital markets: Evidence and policy implications. *Journal of monetary economics*, 49(1), 139-209.

- De Bondt, W. (2010). The crisis of 2008 and financial reform. *Qualitative Research in Financial Markets*, 2(3), 137-156.
- De Bondt, W. F., & Thaler, R. H. (1987). Further evidence on investor overreaction and stock market seasonality. *Journal of finance*, 557-581.
- Economou, F., Kostakis, A., & Philippas, N. (2011). Cross-country effects in herding behaviour: Evidence from four south European markets. *Journal of International Financial Markets, Institutions and Money*, 21(3), 443-460.
- Eichholtz, P., & Yönder, E. (2011, September). CEO Overconfidence, Corporate Investment Activity, and Performance: Evidence from REITs. In *The 2011 Annual Meeting of the Academy of Behavioral Finance & Economics* (p. 128).
- Evans, J. S. B. (2003). In two minds: dual-process accounts of reasoning. *Trends in cognitive sciences*, 7(10), 454-459.
- Fama, E. F. (1998). Market efficiency, long-term returns, and behavioral finance. *Journal of financial economics*, 49(3), 283-306.
- Fama, E. F. (1998). Market efficiency, long-term returns, and behavioral finance. *Journal of financial economics*, 49(3), 283-306.
- Feng, L., & Seasholes, M. S. (2005). Do investor sophistication and trading experience eliminate behavioral biases in financial markets?. *Review of Finance*, 9(3), 305-351.
- Fox, C. R., & Clemen, R. T. (2005). Subjective probability assessment in decision analysis: Partition dependence and bias toward the ignorance prior. *Management Science*, 51(9), 1417-1432.
- Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual review of psychology*, 62, 451-482.
- Glaser, M., Langer, T., & Weber, M. (2005). Overconfidence of professionals and lay men: individual differences within and between tasks?.
- Goldfarb, A., Ho, T. H., Amaldoss, W., Brown, A. L., Chen, Y., Cui, T. H., ... & Xiao, M. (2012). Behavioral models of managerial decision-making. *Marketing Letters*, 23(2), 405-421.
- Haigh, M. S., & List, J. A. (2005). Do professional traders exhibit myopic loss aversion? An experimental analysis. *The Journal of Finance*, 60(1), 523-534.
- Hirshleifer, D., & Shumway, T. (2003). Good day sunshine: Stock returns and the weather. *The Journal of Finance*, 58(3), 1009-1032.

- Hong, H., Kubik, J. D., & Stein, J. C. (2005). Thy neighbor's portfolio: Word-of-mouth effects in the holdings and trades of money managers. *The Journal of Finance*, 60(6), 2801-2824.
- Hopkins, W. G. (2008). Quantitative research design.
- Jaiyeoba, H. B., Jaiyeoba, H. B., Haron, R., & Haron, R. (2016). A qualitative inquiry into the investment decision behaviour of the Malaysian stock market investors. *Qualitative Research in Financial Markets*, 8(3), 246-267.
- Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. *The American economic review*, 93(5), 1449-1475..
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the econometric society*, 263-291.
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American psychologist*, 39(4), 341.
- Kahneman, D., & Tversky, A. (1996). On the reality of cognitive illusions.
- Keller, J., & Pastusiak, R. (2016). The Psychology of Investing: Stock market recommendations and their impact on investors' decisions (the example of the Polish stock market). *Acta Oeconomica*, 66(3), 419-437.
- Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance & Accounting*, 6(1), 1.
- Kent, R. (2007). *Marketing Research: Approaches, methods and applications in Europe*. London: Thomson Learning.
- Lim, L. C. (2012). The relationship between psychological biases and the decision making of investor in Malaysian share market. In *Unpublished Paper International Conference on Management, Economics & Finance (ICMEF 2012) Proceeding*.
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *The review of economics and statistics*, 13-37.
- Malkiel, B. G., & Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The journal of Finance*, 25(2), 383-
- Malkiel, B. G., & Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The journal of Finance*, 25(2), 383-417.

- Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial services review*, 16(2), 105.
- Mbaluka, P., Muthama, C., & Kalunda, E. (2012). Prospect Theory: Test on Framing and Loss Aversion Effects on Investors Decision-Making Process At the Nairobi Securities Exchange, Kenya.
- Mittenness, C., Sudek, R., & Cardon, M. S. (2012). Angel investor characteristics that determine whether perceived passion leads to higher evaluations of funding potential. *Journal of Business Venturing*, 27(5), 592-606.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, 48(3), 261-297.
- Mossin, J. (1966). Equilibrium in a capital asset market. *Econometrica: Journal of the econometric society*, 768-783.
- Muradoglu, G., & Harvey, N. (2012). Behavioural finance: the role of psychological factors in financial decisions. *Review of Behavioural Finance*, 4(2), 68-80.
- Muradoglu, G., & Harvey, N. (2012). Behavioural finance: the role of psychological factors in financial decisions. *Review of Behavioural Finance*, 4(2), 68-80.
- Nofsinger, J. R., & Varma, A. (2013). Availability, recency, and sophistication in the repurchasing behavior of retail investors. *Journal of Banking & Finance*, 37(7), 2572-2585.
- Nofsinger, J., & Varma, A. (2014). Socially responsible funds and market crises. *Journal of Banking & Finance*, 48, 180-193.
- Nunnally, J. C., & Bernstein, I. H. (1994). Validity. *Psychometric theory*, 99-132.
- Odean, T. (1998). Are investors reluctant to realize their losses?. *The Journal of finance*, 53(5), 1775-1798.
- Odean, T. (1998). Volume, volatility, price, and profit when all traders are above average. *The Journal of Finance*, 53(6), 1887-1934.
- Olsen, R. A. (1998). Behavioral finance and its implications for stock-price volatility. *Financial analysts journal*, 54(2), 10-18.
- Olsen, R. A. (1998). Behavioral finance and its implications for stock-price volatility. *Financial analysts journal*, 54(2), 10-18.
- Önkal, D., & Muradoglu, G. (1996). Effects of task format on probabilistic forecasting of stock prices. *International Journal of Forecasting*, 12(1), 9-24.

- Phuoc Luong, L., & Thi Thu Ha, D. (2011). Behavioral factors influencing individual investors' decision-making and performance.: A survey at the Ho Chi Minh Stock Exchange.
- Pompian, M. M. (2006). Behavioral finance and wealth management. *How to build optimal portfolios for private clients*, 28.
- Prosad, J. M., Kapoor, S., & Sengupta, J. (2015). Behavioral biases of Indian investors: a survey of Delhi-NCR region. *Qualitative Research in Financial Markets*, 7(3), 230-263.
- Qadri, S. U., & Shabbir, M. (2014). An Empirical Study of Overconfidence and Illusion of Control Biases, Impact on Investor's Decision Making: An Evidence from ISE. *European Journal of Business and Management*, 6(14), 38-44.
- Raharja, B. S., Suhaeli, D., & Mranani, M. (2017). Research of the Stock Price Overreaction and Investor Overconfidence Issues. *Business, Management and Education*, 15(1), 127-139.
- Russo, J. E., & Schoemaker, P. J. (1992). Managing overconfidence. *Sloan management review*, 33(2), 7.
- Sewell, M. (2007). Behavioural finance. *University of Cambridge*.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The journal of finance*, 19(3), 425-442.
- Shefrin, H. (2000). Beyond Greed and Fear Harvard Business School Press.
- Shefrin, H. (2009). How psychological pitfalls generated the global financial crisis.
- Shefrin, H. (2010). Behavioralizing finance. *Foundations and Trends® in Finance*, 4(1-2), 1-184.
- Simon, H. A. (2000). Bounded rationality in social science: Today and tomorrow. *Mind & Society*, 1(1), 25-39
- Slovic, P. (1972). Psychological study of human judgment: Implications for investment decision making. *The Journal of Finance*, 27(4), 779-799.
- Sorum, P. C., Mullet, E., Shim, J., Bonnin-Scaon, S., Chasseigne, G., & Cogneau, J. (2004). Avoidance of anticipated regret: the ordering of prostate-specific antigen tests. *Medical Decision Making*, 24(2), 149-159.
- Subrahmanyam, A. (2008). Behavioural finance: A review and synthesis. *European Financial Management*, 14(1), 12-29.

- Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk and uncertainty*, 5(4), 297-323.
- Vadali, M., Ramachandran, G., & Banerjee, S. (2011). Effect of training, education, professional experience, and need for cognition on accuracy of exposure assessment decision-making. *Annals of occupational hygiene*, 56(3), 292-304.
- Wamae, J. N. (2013). Behavioural factors influencing investment decision in stock market: A survey of investment banks in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1(6), 68-83.
- Welch, I. (2000). Herding among security analysts. *Journal of Financial economics*, 58(3), 369-396.
- Wickham, P. A. (2006). Overconfidence in new start-up success probability judgement. *International Journal of Entrepreneurial Behavior & Research*, 12(4), 210-227.
- Zikmund, W. G., & Carr, B. B. JC & Griffin, M. 2010. *Business research methods*, 302-303.

APPENDIX
CHRISTAIN SERVICE UNIVERSITY COLLEGE
SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING AND FINANCE
QUESTIONNAIRES

QUESTIONNAIRE

This survey seeks to elicit responses on the topic *“The influence of Behavioural Biases on SME owner decision making.”* Information provided for the purposes of this research will be treated confidentially and used for academic purposes only. Please take a few minutes to fill out this questionnaire by ticking (✓) where appropriate. Thank you.

SECTION A: Background/ Demographic data of respondents

1. Gender:
Male () Female ()
2. Age:
18- 24 years () 25-30 () 31-40 ()
41-50 () Above 50 years ()
3. Educational Qualification:
High school () Diploma () Undergraduate () Postgraduate () PHD ()
4. Profession: Public sector (excluding banks)() Private sector (excluding banks)()
Banks (including public & private)() Financial experts () Self-employed ()
5. Income in GHC: below 500 () 501-1000 () 1001-2000 () Above 2000 ()

SECTION B: Knowledge about investment in stocks

5. How many years have you been investing in stocks?
1- 5 () 6- 10 () Above 10 ()
6. How often have you invested in stocks that seem safer to invest in?
Below 5 times () 5-10 times () Over 10 times ()
7. Before making an investment I think:
 - a. Mostly about the potential gain ()
 - b. A little about potential gain ()
 - c. Mostly about potential loss ()
 - d. A little about potential loss ()
 - e. Both ()
 - f. Security of investment ()
8. Consider that just within two months after you put money into an investment your stock price valued at GHC10 declines by 20% to GHC 8. Assuming that none of the fundamentals have changed, how would you respond?
 - a. I would remain invested and ignore temporary changes as I look for long term growth. ()
 - b. I would buy more as it was a good investment before now it's cheap investment too. ()
 - c. I would sell to avoid further worries and try something else. ()
 - d. I would discuss this situation with my fellow traders and do what they are doing. ()

9. The price of your investment jumps by 25% a month after you buy it. The fundamentals of the firms remain same, how would you respond now?
- I would buy more as the price could go higher. ()
 - I would sell it and lock in my gains. ()
 - I would stay put and hope for more gains ()
 - I would discuss this situation with my fellow traders and do what they are doing. ()

SECTION C: Measuring Instrument for the influence of Behavioural Biases among SME owner decision making.

On a scale of 1-5, please Tick [√] the response that reflect your level of agreement or otherwise in each of the under listed statements.

1= Strongly Disagree (SD) 2=Disagree (D) 3= Neutral (N) 4=Agree (A) 5=Strongly Agree (SA)

No.	STATEMENTS	1	2	3	4	5
	BELIEFS BIAS					
1.	I follow the hot” tips from some forums.					
2.	I buy stock of firms when I hear a good news and quickly sell the stock upon hearing a bad news.					
3.	I follow the crowd to buy or sell the popular stock.					
4.	I trust the research and past performance of the firm					
	“ SNAKEBITE EFFECT OR BIAS					
10.	I don’t want to take the high risk although high risk yields high return.					
11.	I try to avoid buying losing stock in which I had made losses.					
12.	When the stock price drop temporarily, I will sell the stock to prevent further losses.					
13.	I worry about the influence of financial crises.					
	OVERCONFIDENCE BIAS					
14.	I consider that I buy the stock at the lower price and sell at the higher price.					
15.	I believe that the price of my stock will go up in the bull market.					
16.	I am confident based on my skills and knowledge to select better stocks than others.					
17.	I can predict the future stock price movement after I did some analysis.					
	SME OWNER DECISION MAKING					
18.	I work out all the advantages and disadvantages before make a decision.					
19.	I remain calm when I have to make decisions very quickly.					
20.	I make decisions after considering all of implications.					
21.	I take the safe option if there is one.					