

# TEST OF BEHAVIORAL FINANCE FACTORS IN THE NIGERIAN CAPITAL MARKET

**JOEL OBAYAGBONA**

Faculty of Management Sciences, University of Benin, Benin City Nigeria  
joel.obayagbona@uniben.edu

**COURAGE OSE EBURAJOLO**

Faculty of Social and Management Sciences, Benson Idahosa University, Benin City, Nigeria  
cebebhahon@biu.edu.ng

## **Abstract**

The study empirically tests the behavioral finance factors in the Nigerian Capital Market. It is argued that making investment decisions is not only influenced by rational factors but irrational factors like emotions and psychology of individual investor concern. To this end, the study employed four behavioral biases factors such as loss aversion, overconfidence, herding and risk perception to examine investors' decisions at the Nigerian Stock Market using the t-statistics and the ANOVA analysis. A total of one hundred (100) questionnaire were administered to relevant respondents of which about 88 were successfully retrieved. The empirical results revealed that Herding is the only behavioral biases factors that influences individual investors' decisions at the stock market with respect to age. The other factors failed the 5 significant tests. On the basis of the t-test analysis, herding behavior was again found to be statistically significant; suggesting that investors' decision to invest in the Nigerian Stock Market or not to invest, as indicated by the p value at the 5% level of significance  $\{t = 0.462; p = 0.016\}$ , is majorly influenced by the actions of other market participants (herding behavior). However, when the four behavioral biases were statistically ranked, the results showed that risk perception was first, followed by loss aversion, then herding and overconfidence. The study recommends among others that, investors should be very careful about the potential risks and consequences of herding attitudes in the market place (i.e. the tendency of being influenced by the actions of other market participants) which can miss-direct their judgments on the right investment decision if not properly and objectively evaluated.

**Keywords:** Behavioral Finance Factors, Stock Market, Econometric and Statistical Methods

**JEL Classification:** D03, N2, C4.

## 1. INTRODUCTION

The theories of traditional finance assumed that individuals act rationally with respect to share pricing at the stock market. The implication of this is that, investors are rational and utility maximizing. One of these theories is the efficient market hypothesis (EMH) as propounded by Fama (1970). According to him, stock market is deemed to be efficient as relevant information rapidly and swiftly reflected in the current stock price, hence, no one investor can gain undue advantage over another because the information on which prices are determined are readily available to all market participants or investors. This theory according to Peter (2007) has dominated finance and economic environment till 1980s. However, investor's sentiment as to its relevancy and effect on investors' decisions has been a subject of interest in the finance extant literature for several years now. However, Kahneman and Tversky (1979), Shiller (1995) and Shleifer (2000) demonstrated that it is not always the case, adding that several empirical evidences of how irrationality and inconsistency influence the way investors make decisions when faced with uncertainty.

Investors' sentiment refers to the beliefs about share pricing and future cash flows that are not supported by the prevailing economic and financial fundamentals rather, by human sentiments such as overconfidence, herd behavior, Disposition effect, representativeness bias and cognitive dissonance among others (Lemmon & Portniaguina, 2006; Baker & Wurgler, 2006). Thus, "stock market-investors' sentiment has its root in the theories of Noise Trader Models; Kyle (1985) and Black (1986) argue that, if some investors trade on noisy signals, unrelated to fundamental data, then the market prices may deviate from intrinsic value: the noise trader sentiment can persist in financial markets and any changes in it is usually difficult to predict in order to avoid arbitrage (De Long et al., 1990)".

Fromlet (2001) argues that within the context of global financial markets, application of investment ideas based on the belief that the market is predictable coupled with complete price flexibility and knowledge of the other market participant are becoming unrealistic. Hence, stock markets may be irrational especially when it comes to investing in stocks where investors' reasoning may be influenced by their emotions. In essence, this theory hinges on the fact that in the process of making investment decisions, investors seem not to be objective and sometime ignore the ability to correctly update beliefs and likelihood of shifting away from the known process of investment choices (Fromlet, 2001). Therefore, behavioral finance theory successfully explained stock price anomalies with respect to overreaction, under-reaction, overconfidence, and herding behavior; which the studies of Barberis and Thaler (2003) refer to as "trading anomalies". According to them, these observed anomalies negate the trading rules of the efficient market hypothesis theory (EMH) and hence, render the CAPM and other rational based models inappropriate in relating investment risk and returns.

The objectives of this paper is to empirically test whether and to what extent do behavioral finance factors such as (overconfidence, disposition effect, representativeness bias, cognitive dissonance, herd behavior, loss aversion, risk perception, culture and mood) affect investors decisions in the Nigerian Stock Market. The reason being that behavioral finance studies in relation to stock markets are researched in the more developed economies but relatively few in Nigeria. Thus, a better knowledge of behavioral processes and outcomes that could be relevant to decision makers, financial experts and investment advisers in Nigeria in understanding how investors react to market activities and come up with the right investment strategies that would be more appropriate for their clients to make informed decisions for profitable returns, become very crucial.

The rest of the paper is structured such that section two focuses on literature review, section three on methodology and model specification, section four is on data analysis and results and while conclusion and recommendations are contained in section five.

## **2. LITERATURE REVIEW**

Decision making is sometimes complex and challenging among investors when it comes to stock investing. This is true because, individual investor differs in all aspects as result such factors like demographic factor, socioeconomic background, educational level, sex, age, and race (Chaudhary, 2013). It is believed that making these decisions is not only influenced by rational factors but irrational factors like emotions and psychology of individual investor concern. Hence, behavioral finance simply refers to how investors' emotions and psychology affect their investment decisions at the stock market. It is an evolving field in finance that seeks to explain how investors make common errors in their financial decision due to the influence of emotions. It specifically tries to explain the what, why, and how of financial investment from human point of view (Ricciardi & Simon, 2000). For instance, it focuses on providing specific reasons for the existence of stock market anomalies like "(January effect), speculative market bubbles, and crashes". In a nutshell, "its behavioral finance studies the psychological and sociological factors that influence the financial decision making process of individuals, groups, and entities (Ricciardi & Simon, 2000)".

### **2.1. BEHAVIORAL FACTORS**

Behavioral finance factors that often influence investors' investment decisions at the stock exchange are many. However, for the purpose of this study, specific focus is place on those of loss aversion, overconfidence, herding and risk perception.

#### **(i) Overconfidence**

The term overconfidence refers to a situation where individual's sureness about his own predictions may go beyond the exactness of those predictions (Li &

Tang, 2010). According to Moore & Healy, (2007), overconfidence is estimating more than what you can do in real life situation, excessively placing oneself/performance over other's and excessive precision in one's belief. Benos (1998, p.3) "found that participation of overconfident traders leads to larger depth, higher transactions volume and more volatile in the market; thus, when people's predictions often deviate from reality, they are over-confident, and it can affect anybody; however, investors have been found more inclined to commit such errors (Hammond et al., 2006)". Overconfidence is an act of overestimating the precision of an information, knowledge, skills and abilities. Investors who are overconfidence usually engage in excessive trading (Evans, 2006), have the tendency of encouraging and influencing other investors to estimate more than their ability, with the 'believe they can time the market. They hardly go back on their decisions even when there is strong evidence that their previous investment decision was wrong. This was also in line with the submission of Shiller (1998) and Evans (2006) that, people always believe above their own abilities, and investors are particularly overconfident in areas where they have some knowledge.

### **(ii) Loss Aversion**

Loss aversion behavior means a situation where people seems to be more conscious of what they lose than what they gain (Cherono, Nasieku & Olweny, 2017). It is a tendency in behavioral finance where investors are so much afraid of what will be lost than what will be gained and by so doing their attention are often directed at avoiding losses than the accruing gains. According to Corporate Finance Training (2015), as individual continue to face losses he is likely expose to loss aversion, "which has the tendency of causing stock prices to deviate from its fundamental value leading to stock market reaction resulting from abnormal stock returns. Also, when it comes to the issue of wealth, investors are also affected by loss aversion and it also shows why their consciousness seem to be more on sticking to underperforming shares while hurriedly selling off performing shares. For example, if an investor experienced consecutive gains he is likely to be more conscious of the gains than possible losses within the short term because of the belief that those profits will be able to absolve any possible losses, vice versa. Thus, loss aversion behavior has the tendency of causing abnormal returns that contradict stock market efficiency.

### **(iii) Herding**

According to Banerjee (1992), herding is "everyone doing what everyone else is doing, even when their private information suggests doing something quite different." It is usually applied to various situations in everyday life. Bikhchandani and Sharma (2001) argue that in a situation where market participants deliberately make their buying and selling decisions based on what other investors do, in regarded as herding. This often happen because the stock markets are usually shrouded with so many uniformed investors whose actions directly or indirectly influence others to make foolish decisions (Devenow & Welch, 1996).

**(iv) Risk Perception**

This refers to the subjective judgment that people make about the characteristics and severity of a risk. It refers to how people assess/analyzes risks they are either expose to or are likely exposed to (Ricciardi, 2004). Most investors have been found to evaluate risks based on influenced thinking, intuitive decisions, and inferences made from media coverage and limited information. Hence, Fischer and Jordan (2006) argue that some level of risk are usually associated with stock investment due to the nature of uncertainty in expected equity returns. This was why Kahneman and Tversky (1979) earlier argued that human beings are usually risk averse and as such, they would always prefer better returns with minimum risk.

**2.2. THEORETICAL REVIEW**

**2.2.1.THEORY OF BEHAVIORAL BIASES**

This study is anchored on the modern portfolio theory (MPT), efficient market hypothesis (EMH) and Rational Hypothesis which are regarded as the foundation of traditional theories; “these theories are based on four basic assumptions, such as: investors are rational; markets are efficient; investors design their portfolios according to mean-variance portfolio theory, and expected returns are a function of risk: on the contrary, behavioral finance argue that investors are “normal” not rational; markets are inefficient; investors design portfolios according to the behavioral portfolio theory, and not according to mean-variance portfolio theory; and the expected returns follow behavioral asset pricing theory, in which risk is not measured by beta and expected returns are determined by factors other than risk (Statman, 2014). Hence, the behavioral finance school of thought have identified several factors that cause anomalies in the process of investment decision-making at the stock market. These anomalies were categorized by Shafi (2014) into four; “namely psychological, demographic, social and economic; where psychological factors include overconfidence, disposition effect, herd behavior, loss aversion, loss avoidance, gambler’s fallacy and hot hand fallacy”. Surprisingly, frontier-market investors seem to be more prone to cognitive biases (Nofsinger, 2016; Chen, Kim, Nofsinger, & Rui, 2007).

**2.3. EMPIRICAL LITERATURE**

Obamuyi (2013) empirically investigate the extent to which behavioral factors influence investors’ decisions making in the Nigerian stock market. A sample of about 297 respondents using well-structured questionnaire was used while the ANOVA was employed for the empirical analysis of data. The findings indicate that past stock performance stock split, dividend policy, expected earnings and get-rich-quick syndrome were significantly influenced by investors’ behavior.

Kartasova (2013) employed descriptive statistics and the OLS to examine the effect of irrational behavior of individual investors on stock market returns. The results revealed that the female investors were more overconfident than their male

counterparts. Also, investors experience was found to have strong significant impact on investment than overconfidence.

Mahmood, et al., (2016) empirically investigate how behavioral factors such as Heuristics, Prospects and Herding influence investors' stock market investment decisions using a sample of 477 individual investors in Pakistani stock market. The OLS was used to analyze this relationship and the result indicate that these factors do not have significant effect on investors' decisions.

Umar and Fareedah (2017) examined the relationship between behavioral factors and stock market investment in Nigeria using a sample size of 160 out of a population of 225 stockbrokerage firms' staff in Abuja. Descriptive statistics and regression analysis were employed in the analysis of data, and the results indicate a strong positive relationship between behavioral factors and stock market returns.

Kumari and Sar (2017) investigate whether overconfidence, herding and risk tolerance bias influence investment performance in the stock market particularly in the Eastern part of India. A sample of 106 active investors was used while the OLS was employed for the analysis of data. The findings showed that, "dispositional optimism and unrealistic optimism under overconfidence, trading and speed, and market-wide herding under herd behavior bias; calculative risk and speculative risk under risk tolerance bias affects the investment performance: while situational optimism, others' investment choices and impulsive risk were not found to be significantly affecting the investment performance in Eastern India".

Humaira, Aatiqa and Rafia (2018) on the influence of behavioral factors on investment decision-making process of stock market investors in frontier markets, employed the descriptive statistics and regression analysis found that behavioral factors such as "representative bias, followed by overconfidence, cognitive dissonance and disposition effect" are very key to investors' decision-making process.

Areiqat, Abu-Rumman, Al-Alani and Alhorani (2019) investigate the impact of behavioural finance variables such as "overconfidence, loss aversion, risk perception and herding" on investors' decision-making at Amman Stock Exchange (ASE). The study employed the multiple regression and hierarchal regression analysis on a structured questionnaire administered to 165 active individual investors at the trading halls Amman Stock Exchange. The results showed that overconfidence, loss aversion and herding affect investment decisions of the individual investors at the stock market. The results also showed that overconfidence had the highest significant impact on investment decisions.

Tuan and Sampath (2020) examined investors' irrationality in Sri Lanka stock market using about 221 individual investor's data of CSE in the first half of 2019. The structural models was employed for the analysis of data and the finding revealed that market information and past stock trends as market factors coupled with herding have a significant bearing on investment decision making, which

ultimately affect IP, while the aggregate effect of BF upholds a significant impact on IP.

Danish and Zafar (2020) investigate behavioural finance factors and their attendant influence on investors' stock returns, and effectiveness of stock market performance in Pakistan for the period 1994 to 2018, which was segmented along Military era (1999-2008) and Democratic era (1994-1998) (2009-2018). Using the autocorrelation and variance ratio tests analysis, the weak efficiency tests showed trends of a stock performance, and consequently developing of bounded-adaptive market effectiveness. These tests recognized the presence of asymmetric dynamic behavior of returns obviousness in calculation of risk and return associations during two political eras.

Kashif, Yasir and Mamoon (2022) examines the effect of behavioural factors like overconfidence, optimism, pessimism and rational expectation on investment decisions in the Pakistani stock market over the period January 2012 to December 2015. The OLS descriptive statistics were employed in the analysis of data and the results revealed a strong positive influence of overconfidence and optimism factors on stock market performance. On the other hand, the results suggest that while optimism negatively affects the trading volume, pessimism positively influence stock market activities.

### **3. METHODOLOGY**

The study employed survey research design which entails the use of primary data (structured questionnaire) in which responses are solicited appropriate respondents on the specific phenomena being studied.

#### **3.1. POPULATION, SAMPLE SIZE AND SAMPLING PROCEDURE**

The population of the study consists of the entire investors in the Nigerian Capital Market. However, to constitute the sample size, a total of one hundred respondents (100) who are active traders or investors at the Nigerian Stock Market, whose annual income of not less than five hundred thousand Naira or above to ensure his/her capability to invest in the stock market were selected using the Purposive non-probability sampling method. The concept of non-probabilistic procedure allows more information within the distribution and accords the research work more scientific feature, thereby concretizing the validity of the research findings.

#### **3.2. INSTRUMENTATION AND ADMINISTRATION OF INSTRUMENT**

A total of 100 structured questionnaires were extensively used to solicit opinions and perceptions of respondents on the extent to which behavioural factors influence investors' investment decisions in the Nigerian capital market. The questionnaire is made up of two sections consisting demographic profile of the investors and behavioural related questions such as loss aversion, overconfidence,

herding and risk perception. A-four point Likert scale ranging from strongly agree (SA), agree (A) strongly disagree (SD) to disagree (D) was used to rate the respondent’s opinions.

**3.3. METHOD OF DATA ANALYSIS**

Since the data involved is a qualitative one, the descriptive statistics (tables, descriptive statistics, t-tests) and ANOVA were employed in this regard for analysis of data derived from the structured questionnaire responses.

**4. DATA ANALYSIS AND INTERPRETATION OF RESULTS**

This section contains the analyses of data collected from the fieldwork in line with the objectives of the study on the test of behavioural finance factors in the Nigerian Capital Market using the SPSS (16.0) package:

**4.1. DEMOGRAPHIC BACKGROUND OF RESPONDENTS**

*Table 1. Demographic Details of Respondents*

Demographic Variable	Category	Frequency	Percentage %
Age	26-35 Years	6	6.81%
	36-45 Years	33	37.5%
	46 Years and Above	49	55.68%
Gender	Male	56	63.63%
	Female	32	36.36%
Educational Background	O Level	3	3.409%
	ND (Ordinary Diploma)	1	1.136%
	B.Sc (Bachelor of Science Degree)	25	28.40%
	Master ‘ Degree	59	67.04%
Investment in Stock Market	Yes	68	77%
	No	20	23%
Experience	2 Years	1	1.136%
	5 Years	6	6.81%
	10 years	43	48.86%
	15 years	38	43.18%

*Source: Author’ Computations from SPSS 2021*

Table 1 above presents the demographic details of the respondents in terms of age, gender, educational background, investment in stock market and experience. Indeed, the male respondents are 63.63%, while female respondents constitute 36.36%. The proportion of female investors in the Nigerian stock market is less than male. However, the people of all age groups invest in the stock market but those of



46 years and above seems to be the highest (55.68%), followed by those of 36-45 years (37.5%). With respect to educational background, those with master’s degrees are the dominant investors in the Nigerian stock market, having a total of about 67.04%; followed by those with BS.c (28.40%). It therefore suggests that investment in the Nigerian capital market seems to be built along the level of education among investors. Again, about 77% of the respondents invest in the stock market while 23% do not. With respect to years of investment in the stock market, 48.86% of respondents with 10 years investment experience dominate this category. This was closely followed by those of 15 years and above (with 43.18%).

**Table 2.** Behavioral Bias in Investors’ Decision Making in the Nigerian Stock Market

Descriptive Statistics			
	N	Mean	Rank
Risk Perception	88	3.519	1 <sup>st</sup>
Loss Aversion	88	3.166	2 <sup>nd</sup>
Herding	88	2.622	3 <sup>rd</sup>
Overconfidence	88	2.475	4 <sup>th</sup>

Source: Author’ Computations from SPSS 2021

Table 2 shows the ranking of behavioural biases among individual investors in the Nigerian Stock Market. Indeed, it is seen that investors in Nigeria are highly influenced first, by risk perception as indicated by the mean statistic. This is closely followed by loss aversion (3.166), then herding (2.622), and the least is overconfidence (with 2.475). Thus, we can safely conclude that, Nigerian investors seem to pay more attention on the subjective judgment/evaluation of the characteristics and severity of risks they are either expose to or associated with stock market investment than the other behavioural factors (Loss Aversion, Herding and Overconfidence).

**Table 3.** One-Sample Test

	Test Value = 2.5					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Loss Aversion	13.196	87	0.000	.6655303	.565286	.765775
Overconfidence	-0.454	87	0.651	-.0246212	-.132490	.083248
Herding	2.076	87	0.041	.1221591	.005223	.239095
Risk Perception	1.636	87	0.105	1.0189394	-.218648	2.256526

Source: Author’ Computations from SPSS 2021

In table 3, the analysis of One Sample t-test for all the behavioral biases was carried out. From this, it is seen that the test clearly rejects the null hypothesis for two behavioural biases (Loss Aversion and Herding) at the 1% and 5% significance levels except for Overconfidence and Risk Perception. Based on this result, the study

submits that Nigerian investors are highly influenced by Loss Aversion and Herding in their investment decision.

**4.2. INFLUENCE OF DEMOGRAPHIC FACTORS (GENDER AND INVESTMENT IN STOCK MARKET) ON BEHAVIOURAL BIASES OF INDIVIDUAL INVESTORS IN THE NIGERIAN STOCK MARKET**

*(a) T-Test Analysis*

The demographic attributes of the respondents are presented below in terms of gender and investment in stock market using the t-test statistics. The t-test statistics was used because the category is two (i.e. yes or no; male or female) respectively. The results are presented in Table 4.4:

**Table 4.** *T-Statistics of Gender and Investors’ Behavior in Nigeria*

Variable	Category	Frequency	Percentage %	Mean	T-test Stat.
Loss Aversion	M	56	63.63	3.146	t = -0.499;
	F	32	36.36	3.199	P = 0.619
Overconfidence	M	56	63.63	2.477	t = 0.34
	F	32	36.36	2.473	P = 0.973
Herding	M	56	63.63	2.58	t = -0.737
	F	32	36.36	2.680	P = 0.463
Risk Perception	M	56	63.63	2.937	t = 1.104
	F	32	36.36	2.82	P = 0.273

*Source: Author’ Computations from SPSS 2021*

The results from table 4 shows that gender with respect to the four (4) behavioural biases such as loss aversion {t = -0.499; p = 0.619}, overconfidence {t = 0.34; p = 0.973}, Herding {t = -0.737; p = 0.463} and risk perception {t = -1.104; p = 0.273} do not significantly influence investors’ investment decision at the stock market. So, age is not a determining factor for investors’ decision at the stock market.

On the other hand, table 5 t-test statistics also presents the analysis of whether respondents invest in the stock market or not.

**Table 5.** *T-Statistics of Investment in Stock Market and Investors’ Behavior in Nigeria*

Variable	Category	Frequency	Percentage %	Mean	T-test Stat.
Loss Aversion	Y	68	77	3.186	t = 0.739;
	N	20	23	3.097	P = 0.462
Overconfidence	Y	68	77	2.490	t = 0.485
	N	20	23	2.427	P = 0.629
Herding	Y	68	77	2.699	t = 0.462
	N	20	23	2.362	P = 0.016
Risk Perception	Y	68	77	2.931	t = 1.327
	N	20	23	2.766	P = 0.188

Source: Author' Computations from SPSS 2021

From the analysis in table 5, we can see clearly that loss aversion { $t = -0.739$ ;  $p = 0.462$ }, overconfidence { $t = 0.485$ ;  $p = 0.629$ }, and risk perception { $t = -1.327$ ;  $p = 0.188$ } do not significantly influence investors' decision to invest in the stock market. However, those of Herding is the only factor influencing investors' decision to invest in the Nigerian Stock Market as indicated by the p value at the 5% level of significance { $t = 0.462$ ;  $p = 0.016$ }. It can be concluded that herding under the demographic attribute of whether investors invest in the stock market or not is a major determinant of investors' behavioural biases; while the other factors failed the 5% significance level.

**4.3. INFLUENCE OF DEMOGRAPHIC FACTORS (AGE, EDUCATIONAL BACKGROUND AND EXPERIENCE) ON BEHAVIOURAL BIASES OF INDIVIDUAL INVESTORS IN THE NIGERIAN STOCK MARKET**

**(b) ANOVA Analysis**

The demographic attributes of the respondents are presented below in terms of age, educational background and experience using the ANOVA statistics. The ANOVA was used because the categories involved are more than two. The results are presented in Table 6, 7 and 8, respectively.

*Table 6. Age and Investors' Behavior in Nigeria*

Variable	Category	Frequency	Percentage %	Mean	T-test Stat.
Loss Aversion	26-35 years	6	6.81	3.133	F = 0.097;
	36-45 years	33	37.5	3.194	P = 0.908
	46 years and above	49	55.68	3.150	
Overconfidence	26-35 years	6	6.81	2.367	F = 0.150;
	36-45 years	33	37.5	2.491	P = 0.861
	46 years and above	49	55.68	2.478	
Herding	26-35 years	6	6.81	2.667	F = 0.021;
	36-45 years	33	37.5	2.621	P = 0.979
	46 years and above	49	55.68	2.617	
Risk Perception	26-35 years	6	6.81	3.000	F = 0.570;
	36-45 years	33	37.5	2.732	P = 0.568
	46 years and above"	49	55.68	2.990	

Source: Author' Computations from SPSS 2021

For the analysis of age and investors' behavior in Nigeria using the ANOVA in table 4.6, apart from those of herding behavior whose F statistics was significant at the 5% level ({ $F = 0.021$ ;  $P = 0.979$ }), the other demographic factors do not significantly influence investors' decisions in the stock market. Thus, we can conclude that the herding behavior among Nigerian investors is majorly influenced by the age of individual investors at the market. By implication, investors with peculiar age bracket are more influenced by the actions of other market participants. This result agrees with those of Bikhchandani and

Sharma (2001) who submitted that investors can be seen to be part of a herd if they are conscious of and influenced by the actions of market participants.

**Table 7. Educational Background and Investors' Behavior in Nigeria**

Variable	Category	Frequency	Percentage %	Mean	T-test Stat.
Loss Aversion	O LEVEL	3	3.409	3.400	F = 0.257;
	ND	1	1.136	3.200	P = 0.856
	B.Sc	25	28.40	3.160	
	MASTER'S DEGREE	59	67.04	3.152	
Overconfidence	O LEVEL	3	3.409	2.600	F = 0.603;
	ND	1	1.136	2.000	P = 0.615
	B.Sc	25	28.40	2.552	
	MASTER'S DEGREE	59	67.04	2.445	
Herding	O LEVEL	3	3.409	2.750	F = 0.094;
	ND	1	1.136	2.750	P = 0.963
	B.Sc	25	28.40	2.640	
	MASTER'S DEGREE	59	67.04	2.606	
Risk Perception	O LEVEL	3	3.409	3.167	F = 0.169;
	ND	1	1.136	2.000	P = 0.917
	B.Sc	25	28.40	2.900	
	MASTER'S DEGREE	59	67.04	2.893	

Source: Author' Computations from SPSS 2021

In table 7, the ANOVA was conducted to find out whether significant differences exist between demographic variable (educational background) and investors' behavior in Nigeria. The ANOVA was used because the variables involve more than two categories. The result shows for the T-test Statistics with regards to educational background for loss aversion {F = 0.257; P = 0.856}, overconfidence {F = 0.603; P = 0.615}, herding {F = 0.094; P = 0.963} and risk perception {F = 0.169; P = 0.917} do not significantly influence investors' behavior in the Nigerian Stock Market.

**Table 8. Experience and Investors' Behavior in Nigeria**

Variable	Category	Frequency	Percentage %	Mean	T-test Stat.
Loss Aversion	2 years	1	1.136	3.400	F = 1.264;
	5 years	6	6.81	2.933	P = 0.292
	10 years	43	48.86	3.110	
	15 and above	38	43.18	3.259	
Overconfidence	2 years	1	1.136	2.800	F = 0.953;
	5 years	6	6.81	2.733	P = 0.127

	10 years	43	48.86	2.352	
	15 and above	38	43.18	2.566	
Herding	2 years	1	1.136	2.500	F = 1.151;
	5 years	6	6.81	2.958	P = 0.333
	10 years	43	48.86	2.541	
	15 and above	38	43.18	2.664	
Risk Perception	2 years	1	1.136	3.333	F = 0.801;
	5 years	6	6.81	2.972	P = 0.497
	10 years	43	48.86	2.822	
	15 and above	38	43.18	2.952	

*Source: Author' Computations from SPSS 2021*

Finally, in table 8, the ANOVA was also employed to find out whether significant differences exist between demographic variable (investors' experience) and investors' behavior in Nigeria. The empirical analysis also indicates as in the case of table 4.7 above that loss aversion, overconfidence, herding and risk perception within the context of experience do not significantly influence investors' behavior in the Nigerian Stock Market. Thus, the study concludes that in the determination of demographic factors affecting investors' behavior in the Nigerian Stock Market, investors' experience is not a relevant factor to be considered in this direction.

## 5. CONCLUSION AND RECOMMENDATIONS

This study empirically investigates the test of behavioural finance factors in the Nigerian Capital Market. Behavioural finance believed that making investment decisions is not only influenced by rational factors but irrational factors like emotions and psychology of individual investor concern. This study has employed four behavioural biases factors such as loss aversion, overconfidence, herding and risk perception to examine investors' decisions at the Nigerian Stock Market using the t-statistics and the ANOVA analysis. Generally, the empirical results suggest that Herding is the only behavioural biases factors that influences individual investors' decisions at the stock market with respect to age. The other factors failed the 5 significant tests. On the basis of the t-test analysis, herding behavior was again found to be statistically significant; suggesting that investors' decision to invest in the Nigerian Stock Market or not to invest, as indicated by the p value at the 5% level of significance {t = 0.462; p = 0.016}, is majorly influenced by the actions of other market participants (herding behavior). However, when the four behavioural biases were statistically ranked, the results showed that risk perception was first, followed by loss aversion, then herding and overconfidence. Thus, we can safely conclude that, Nigerian investors seem to pay more attention on the subjective judgment/evaluation of the characteristics and severity of risks they are either expose

to or associated with stock market investment than the other behavioural factors (Loss Aversion, Herding and Overconfidence).

### **Recommendations**

Based on the findings of this study, the following recommendations are made:

First, investors should be very careful about the potential risks and consequences of herding attitudes in the market place (i.e. the tendency of being influenced by the actions of other market participants) which can miss-direct their judgments on the right investment decision if not properly and objectively evaluated. To this end, they must ensure that the right market fundamentals should be the only basis upon which their investment decisions and judgments are based.

Secondly, investors should not ignore the other behavioural factors (loss aversion, overconfidence and risk perception) in this study even though they were not statistically significant. They can also cause surprises in overall investment returns.

Lastly, based on the statistical ranking of the four behavioural factors in this study, it becomes obvious that behavioural factors can no longer be wished away by investors in stock market decision making. They should begin to think and rethink on the best proactive strategy of dealing with these behavioural factors to effectively avoid making wrong, painful and irrecoverable investment losses that might lead to untold headaches and nightmares.

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