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THE ROLE OF RISK PERCEPTION ON THE RELATIONSHIP BETWEEN FINANCIAL KNOWLEDGE, LITERACY AND INVESTMENT DECISION

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Abstract

Financially unsophisticated investors who consistently make sub-optimal financial decisions may suffer lasting consequences for long-term wealth accumulation and welfare. This study examines the role of risk perception on the relationship among financial knowledge, literacy and investment decision. Data was collected from 378 investors through the aids of structured questionnaires. The research hypotheses were tested using partial Least-square (PLS) regression. The findings reveals that there is positive and significant effect between financial knowledge, risk perception and investment decisions, while positive but insignificant effect was found between financial literacy and investment decisions. However, risk perception moderates the effect of financial literacy, investment knowledge on investment decisions. It recommends that investors, policymakers and individuals investors should embark on various educational programmes, to further influence the level of their investment decisions before committing their hard earning fund into project.

Keywords: Risk Perception, Financial Literacy, Knowledge, Investment Decision.

INTRODUCTION

Making a sound investment decisions has become one of the important attribute of both intuitional and individuals investors. Ability to make sound investment decisions are usually affected by a numbers of factors such as level of financial literacy, knowledge, education, risk tolerances among others. However, in 2008, the Department for International Development's (DFID, 2008) study showed that financial literacy levels are quite low in African countries compared to other countries. Furthermore, statistics has shown that among seven African countries, only half of the adult population has knowledge and skills of basic financial products, and about 50 per cent did not use both formal and informal financial products. According to CBN (2012), Nigerians lack financial literacy, and more than 46.3 per cent did not have access to financial services and lag behind some developing and developed countries. According to Gupta (2017) financial literacy comprises of skills and knowledge that enables the individual to understand the principles of finance that an individual requires to know to make informed financial choices and decisions. Lasardi and Mitchell (2011) notes that investors that lack sound financial literacy may not have the ability to make efficient investment decisions. Ability to understand the financial knowledge is very crucial in making a sound investment decisions. At the same time risk are the most important factor with regard to investment decision making. Investors' investment decision may be affected by income level and experience. Khan, (2016) documented that investors with low income or that are new in the market are usually have negative risk perception when it come to investment decisions.

Most studies have found significant relationship between financial literacy, knowledge and investment decisions. Van Rooij, Lusardi&Alessie (2007); Al-Tamimi& Al Anood (2009); Ameriks (2003); Lusardi& Mitchell (2007); Aubram, Kovarova-Simecek & Wanzenried (2016). These studies throw more light on why professional and non-

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professional investors make investment decisions in the real world. However, a couple of studies attempted to explore the risk perception attitude of the investors but they left the exploration of link between risk perception and investment behavior of an employee of the company for future research (Shafi, Akram, Hussain, Sajjad & Rehman, 2011). Some studies found negative relationship between risk perception and investment decision. For instance, studies such as Marcolin& Abraham, (2006); Moore (2003) and Huston (2010), while some found positive relationship between risk perception and investment decision such as thisAmeriks (2003), Lusardi& Mitchell (2007).

However, on the subject matter view studies have been carried out in Nigeria context and there are still some gaps to be research on. The researcher notes that no studies have attempted to address the moderating effects of risk perceptions on the investment decisions Nigeria. Most of the study that attempted to address the moderating role of risk perceptions on investment decisions is conducted in developed countries and there is need for fresh study in Nigeria because of differences in some peculiars factors in which the study was conducted.

Malar and Kungumapriya (2012) reviewed of literature on investment behaviour in rural in Kenya. The study found that investment knowledge of internals is higher than that of individuals with external locus of control. It suggested for further study on risk profile of institutional investors. However, evidence from finance literature has shown that levels of financial literacy worldwide are unacceptably low. Several researches on the impact of financial literacy and knowledge have focused on the relationship between financial literacy and investment decisions in the stock market. Al-Tamimi and Al Anood (2009) notes that, on average, investors are less knowledgeable about money matters and investing decisions. But this may be so in the case of Nigeria. Also there is few published literature in identifying factors leading to split financial knowledge and investment decisions. Furthermore, little attention has been paid to Nigeria regarding the jointly impact of financial literacy, knowledge, and risk perception on investment decisions. However, the current research would filled the above gap in the literature, by examine impact of financial literacy, knowledge and moderating roles of risk perception on investment decisions. Evidence from finance literature, no such studies has been conducting regarding measuring financial literacy, financial knowledge and moderating role of risk perception on investment decisions in Nigeria context. This study would contribute to the existing body of knowledge on how the level of financial literacy, knowledge affect investment behaviour in Nigeria. It would also document significant of risk perception on the behaviour of the investors in Nigeria stock market.

RESEARCH QUESTIONS

In order to address the research problems raised above, the following research question were raised;

i. Does financial literacy affect investment decisions of the investors in Nigeria?
ii. Does financial knowledge affect investment decisions of the investors in Nigeria?
iii. Does financial literacy and risk perception affect investment decision of the investors in Nigeria?
iv. Does financial knowledge and risk perception affect investment decision of the investors in Nigeria?

Research Objectives

The broad objective of study is to examine the effect of financial literacy, financial knowledge and moderating roles of risk perception on investment decisions of the investors in Nigeria. Specifically, the study seek to;

i. Examine effect of financial literacy on investment decisions of the investors in Nigeria
ii. Examine impact of financial knowledge on financial investment decisions of the investors in Nigeria

iii. Examine effect financial literacy and risk perception on investment decision of investors in Nigeria.
iv. Examine effect of financial knowledge and risk perception on investment decision of investors in Nigeria

RESEARCH HYPOTHESES

On the basis of previous literature the following hypotheses were generated and tested in this study;
H01: financial literacy has no significant effect on investment decisions of the investors in Nigeria
H02: financial knowledge has no significant effect on investment decisions of the investors in Nigeria
H03: There is no significant effect of financial literacy and risk perception on investment decision of the investor in Nigeria.
H04: There is no significant effect of financial knowledge and risk perception on investment decision of investors in Nigeria.

CONCEPT OF INVESTMENT BEHAVIOUR

According to Geetha and Ramesh (2011), Investment is an activity that is engaged in by people who have savings i.e investments are made from savings, or in other words people invest their savings but all savings are not investment. Lusardi et al, (2007) view investment as a commitment of funds made in the expectations of some positive rate of return, expectation of returns is an essential element of an investment. In the financial sense investment is the commitment of a person's fund to derive future income in the form of income (Olowe, 2003). Ameriks (2003) defined as investment the net addition to the economy's capital stock which consists of goods and services, that are used in the production of other goods and services. Investment is rationally based on the knowledge of past share price behaviour. From such knowledge, it is possible to compute the probability of future return. Investment requires an investor to do some work before hand and decisions are made based on known facts and figure. However, in this study investment behaviour would be seen as act of committing funds into investment project.

CONCEPT OF FINANCIAL LITERACY

Financial literacy is define by Remund (2010) as a measure of the degree of which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions. According to Huston (2010) financial literacy involve skill that can help people to make financial decisions effectively. People who are financially literate should have basic understanding of the financial concepts such as interest rate, inflation rate, compound interest, and risk (Huston, 2010). Financial literacy can be defined as the how people manage their money in terms of insuring, investing, saving and budgeting (Hogarth, 2002). Schagen and Lines (1996) view financial literacy as the ability to make informed judgments and to take effective decisions regarding the use and management of money.
Servon and Kaestner (2008) also give a simple definition of financial literacy, referring to it as a person's ability to understand and make use of financial concepts. Financial literacy is the knowledge and understanding of financial concepts and risks, skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life" (OECD, 2014). For the purpose of this study financial literacy of an individual's is their level of understanding of financial matters which enables them to process financial information and make informed decisions about personal finance. There is limited study in Nigeria as regard to influence in of financial literacy on investment

behaviour and this necessitated for the use of the variable.

CONCEPT OF FINANCIAL KNOWLEDGE

Panos (2011) found that higher literacy was positively related to retirement planning and investigating in private pension funds. Huston (2010) recommends that financial literacy should also include application of financial knowledge. Financial knowledge (FK) refers to understanding basic financial concepts of how business performance and business condition is measured using the mental model to facilitate, support or enrich decision-making (Lusardi&BassaScheresberg, 2013). Financial knowledge is required to establish a measure of financial competence for competitive advantage, that is, to stay knowledgeable about financial matters (Lusardi&Michell, 2006).Financial knowledge would affect in increase in the firm's total source of financing (Marcolin& Abraham, 2006). Moore (2003) and Huston (2010) stated that an individual is financially literate if he or she is competent and is able to apply this knowledge. Moore (2003) explained that literacy or knowledge is acquired through practical experience and active integration of knowledge. However, despite the conventional wisdom that financial knowledge is a prerequisite for positive investment decisions (Hathaway & Khatiwada, 2008), the empirical relationship between financial knowledge and investment is not well established. There is limited studies in Nigeria as regard to influence of financial knowledge on investment decision. However, in this study financial knowledge will be define as the ability to utilize financial resources for investment purposes.

CONCEPT OF MODERATING ROLES OF RISK PERCEPTION

Risk is an inherent feature of all types of financial investments. It is the probability that the actual return on an investment will be lower than the expected return. Risk perception can be defined "the perceived damage from the future" but according to Douglas 'the probability of an event combined with the magnitude of the losses and gains that it will entail (Khan, 2016). The concept 'risk perception' means the way in which investors view the risk of financial assets, based on their concerns and experience (Biais, & Weber, 2009). Study of risk perception and its impact on investment behavior is one of the core investigation issues of behavioral finance literature (Shafi, Muhammad, Hussain&Rehman, 2011). Investors have divergence opinion and perceptions about the risk and return which depends upon the prior and previous information, responses and knowledge about the market.However, modern researchers found through experiments that there are significant differences in the level of risk perception as well as returns expectations that explain inconsistent risk taking of the investors (Khan, 2016).

Investors that are willing to take risk, they are more willing to make investment decisions. In other words, the more risk tolerant people are, the more investment decisions to make. Overall risk taken decision affect individuals and institutional financial decisions making and their investment decisions (Zhong, Xiao, 1995). However, in this study Risk perception is a highly personal process of decision making, based on an individual's frame of reference developed over a lifetime, among many other factors. The choice of risk perception as moderating variables was due to the fact that there is inconsistence in the previous studies

REVIEW OF EMPIRICAL STUDIES

Multiple and/or robust research works both theoretically and/or empirically are available in academic circle. In order to gain more insight on the subject matter as regard to what others researchers has been and yet to be done, this study review various studies that relate to the present study in order to identify area of convergence and divergence in the previous work and come up with a valid research gap.

In Africa, Kinoti (2012) conducted a study on financial management literacy and application among university students in Nakuru town as a contingency against unemployment in Kenya. The study concludes that despite the greater saving potentials among university students, the level of savings literacy and practice among university students was generally moderate compared to observed high levels of expenditure literacy and practice among university students. This implies that there was a mismatch between the saving and expenditure literacy and practices among university students in Kenya.Wachira and Kihiu (2012) investigated impact of financial literacy on access to financial services in Kenya using the 2009 National Financial survey data. The study found that financial literacy remain low in Kenya. The regression result documented that household access to finance is not based on financial literacy but factors such as income levels, distance from banks, and age among others. The work of Ashwinprabha and Maruthu (2016) documented that Majority of women investors are risk avoiders and only around four percent alone are risk seekers. It's also documented in the study that, most of them prefer traditional financial products and are risk avoiders. Only minimum numbers are risk seekers. And also there exist relationship between investment behaviour and financial literacy. Varadharajan, (2016) Review of literature on investment behavior of rural investorsrisk profile of rural investors also be studied the study documented that financial knowledge has significant influence on investment decisions and subjected for future research to further study risk tolerance on investment perception. Kahneman and Tverskey (1979) found that investors show risk-averse behavior with respect to gains and risk seeking behavior with respect to losses. Although most of these studies were conducted in less developed countries but the outcome cannot be used in Nigeria because of differences in political, economic and market factors in Nigeria and that of the countries in which the studies were conducted. This called for replicated study to be conducted in Nigeria. In Nigeria series of studies have been conducted on the subject matter, Anthony, Abiodun and Entebang (2017) examined the level of small and medium enterprises (SMEs) business owners-managers financial literacy and its impact on firm's performance. The study employed simple random sampling and structural equation modelling approaches. The study found that complete effect of business owners-manager financial knowledge, awareness and attitude in converting financial literacy to increase the firm's performance. It's also documented that financial awareness and knowledge are not a prerequisite for SMEs performance. The findings of the study cannot be generalized has it limited to three state in Southwest region in Nigeria.

In developed countries Mahdzan and Tabiani, (2013) investigated the impact of financial literacy on individual saving in Malaysia. The study found that level financial literacy has a significant positive impact on individual saving.Panos (2011) examine effect of financial literacy on retirement planning of private pension funds. The study found that higher literacy was positively related to retirement planning and investigating in private pension funds. In the vain Al-Tamimi and Al Anood (2009) investigated financial literacy among the institutional investors in United Arab Emirate (UAE). The study documented positive and significant impact financial literacy on the income level. It was documented that the level of financial literacy in UAE is far less beyond the expected level. (Janor, Wel and Hakim, 2014) investigated influence of financial literacy on investment decisions in Malaysia and United Kingdom. It was found that the overall level of financial literacy in the two countries is very low. It was suggested that better methodology should be used by other study to investigate the subject matter. Aubram, Kovarova-Simecek and Wanzenried (2016), examined influenced of financial literacy, pension planning and investment behaviour in Austria and Switzerland. They documented higher financial literacy has a clear positive impact on the level of pension planning, whereas the effect of the self-assessed financial literacy is stronger than the impact of the factual one. The work Gupta (2017) documented that salaries of individual level has impacted the level of investment decisions in Delhi. However, Khan, 2016, examined influence of financial literacy, knowledge, moderating roles of risk perception on investment decisions in Islamabad stock market. The study employed survey research design. Data was collected from 257 market participants. The study found significant and positive relationship between financial literacy, risk perception, financial knowledge and investment behaviour. Ameriks (2003), Lusardi and Mitchell (2007) also provided links and supports about the relationship existing between financial knowledge, literacy and investment decisions.Liu, Tsai,Wang and Zhu, (2010) investigated empirically the relationship between perception of risk and decision making of investment particularly they consider the individual investor factors. The study conclude documented that risk perception has significant impact on investment behaviour.However, the findings all these studies cannot be generalized because there is differences in the peculiars factors in the countries in which the study was conducted and that of Nigeria. There is need for fresh study to be conducted in Nigeria.

THEORY UNDERPINNING THE STUDY

LIFE CYCLE THEORY

Franco Modigliani (1950) developed life cycle theory in Richard Brumberg. The theory centralized on the idea that investor make intelligent choices about how much they want to invest and spend at each age, limited only by the resources available over their life. The finiteness of life was first introduced in the life cycle theory of Modigliani and Brumberg (1954), under the assumption that the length of life is known with certainty. It assumed that by building up and running down investment asset, working people can make provision for their retirement. This theory leads to important and non-obvious predictions about the investment as a whole. More broadly, anyone who thinks about economic development has to think about the role that saving plays in economic growth. Is thrift the wellspring of growth, or simply its consequence. Modigliani'slife cycle theory is a fine piece of theory, supported by many years of empirical work, both by supporter and detractors. The theory teaches us to view financial assets as vehicles for transferring resources across different times and outcomes over the life cycle, and that perspective allows households and planners to think about their decisions in a logical and rigorous way.However, this theory would be used to underpin the study as it clearly explain the interrelationship between the study independent variables (Financial knowledge, literacy and risk perceptions) and dependent variable (investment decisions).

METHODOLOGY

This aspect documents the techniques and method of carrying the present study. It comprises of the population, sample size, research instrument, and techniques for data analysis among others. This study is survey in nature. The study employed quantitative research design (employ cross-sectional survey). A cross sectional survey will be used to collect data using self-administered questionnaire. According to Sekaranand Bougie (2013) cross-sectional study is a one-shot study that collects data just once upon a time. The choice of this research design is that it enables data to be collected across several respondents at the same time in various locations. The targeted respondents are both individuals and institutional investors that are operating on the Nigeria stock exchange market. The study utilized primary data collected through the aids of questionnaires distributed to the respondents via research assistant. Data for the study were collected via a survey of 400 investors using techniques called convenience sampling from Nigeria Stock Exchange Market (NSE). The researcher chooses these sampling techniques because there is no available information on the actual numbers of investors that are operating on the NSE.

Table 1.Research Instruments

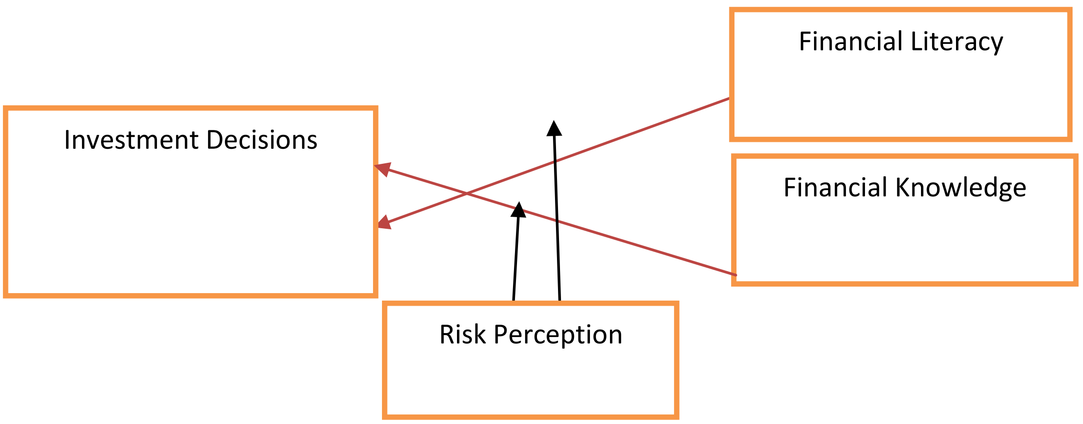
Variables	Dimensions	Source of the Questionnaires
Investment Decision	6	Ahmed (2013)
Risk Perception	4	Keh, Foo, and Lim (2002)
Financial Literacy	4	Parker and Decotiis (1983)
Financial Knowledge	5	Parker and Decotiis (1983).

Source: Researcher Computation, 2018.

The questionnaire on the dependent and independent variables are on five liketh scale ranging from 1= strongly disagree to 5 strongly agree.

CONCEPTUALIZATION OF THE VARIABLES

In other to examine relationship between financial literacy, knowledge and risk perception on investment decision, the following theoretical model was developed.



Moderation Variable (MV);
Dependent Variable (DV);
Independent Variables (IV)
Source: Researcher Illustration, 2018.

RESULT AND DISCUSSION

The data for the study was collected through the structured questionnaire. A total number of 400 questionnaires were distributed among the investor operating on the Nigeria Stock Exchange market. Out of which 13 were never returned and 9 were incomplete filled. However, the returned and complete filled was 378, which represent 94.5%. The result of the study was based on the 378 returned questionnaires. The sample consists of 76.5% males and 24.5% females. The sample consist of participants belongs to different age groups, 31.4% were between the ages of 20-30. 46.3% were between the age group of 30-40 years, while the remaining 22.3 were between the age group of 40 years and above. Furthermore, in the term of qualification, 51.3% of the respondents were bachelor holders, 34.8% were master holders while the remaining 13.9% were M.Phil./PhD holders.In analyzing the collected data, the study adopted two-step approach to test measured variables describing four latent constructs. The first step involved the analysis of the measurement model, while the second step tested the hypothesized structural relationships among latent constructs. The aim of the two-step approach was to assess the reliability and validity of the constructs before their use in the full model (Demir, 2015).

Table 1. Construct Reliability and Validity (Measurement Model)

construct	items	Loadings	AVE	CR
Investment Decisions	IND1 IND2 IND3 IND4 IND5 IND6	0.62 0.65 0.74 0.73 0.80 0.70	0.50	0.86
Financial Literacy	FLT1 FLT2 FLT3	0.79 0.69 0.66	0.51	0.76
Financial Knowledge	FKW1 FKW2 FKW3 FKW4	0.75 0.78 0.78 0.74	0.76	0.85
Risk Perception	RPT 1 RPT2	0.73 0.87	0.64	0.78

Note: IND investment decisions, FLT financial Literacy, FKW financial knowledge, RPT risk perception. RPT 3, 4, FLT 4 were deleted because of low factor loading.

Table 1 show the reliability and validity of constructs of the study. Construct reliability and convergent validity of constructs were tested using composite reliability and Average Variance Extracted (AVE) as suggested by Garson (2016). Composite reliability coefficient should be ≥ 0.7,while AVE coefficient should be ≥ 0.5 (Garson, 2016). Item loadings should be above 0.5 (Hair, Black, Babin& Anderson, 2014). On Table 1, it is seen that all of the items met the minimum bench mark for item loadings (i.e., 0.5), composite reliability (i.e., 0.7) and AVE (i.e., 0.5). Therefore, it is assumed that the items on Table 1 displayed reliability and convergent validity. The study would further carried out discriminant validity test using fornell-larcker criterion.

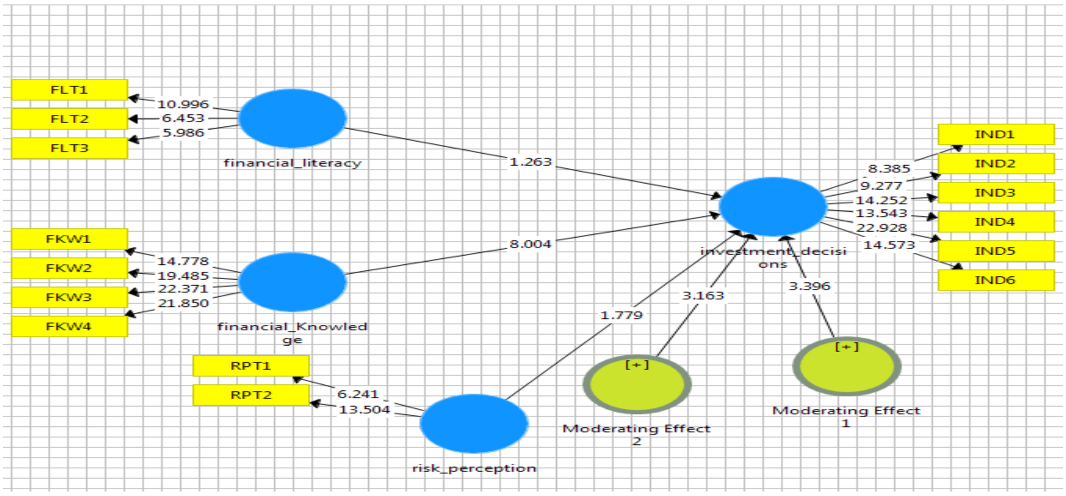
Table 2. Fornell-Larcker Criterion

	financial_Knowledge	financial_literacy	investment_decisions_	risk_perception_
financial_Knowledge	0.76			
financial_literacy	0.52	0.72		
investment_decisions_	0.68	0.43	0.71	
risk_perception_	0.36	0.48	0.35	0.80

Source: Researchers Computation, 2018

Note: The bolded numbers represents the square root of the AVE of each latent construct. AVE was used to establish discriminant validity using the Fornell–Larcker criterion. For discriminant validity to exist, the square root of the AVE should be higher than its correlation with other latent variables (Garson, 2016). On Table 2, the bolded numbers represent the square root of the AVE of each latent construct. The square roots of the AVE of each construct are higher than their correlations with other latent construct. Going by the fornell-larcker criterion, the data exhibited discriminant validity. The study next tested the hypotheses of the study by calculating the structural model, bootstrapping the samples 5,000 times. The moderating variable (i.e. risk perception) was included in the model to determine the moderating role of risk perception on the relationship between financial literacy, financial knowledge and investment decisions among the investors in Nigeria stock exchange market.

Figure 2. Analysis of PLS (Partial Least Square).



Source: Researchers Computation, 2018

The result in the diagram 1 should the level of influence of explanatory and moderating variables on the outcome variable. The result shows that financial literacy and moderating variable risk perception are not significantly affect investment decisions of the investors given the t-statistic value of 1.263 and 1.779 less than 1.96 significant level at two tails. While financial knowledge is significantly affect investment decisions given the t-statistic value of 8.008 greater that 1.96 at two tails significant level. However, the moderating effect 1 and 2 reveals that risk perception significantly moderate the influence of the financial literacy and knowledge on investment decisions of the investors.

Hypotheses Testing

Table 3. Path Coefficient

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
Moderating Effect 1 -> investment_decisions_	0.205	0.198	0.062	3.321	0.001	Supported
Moderating Effect 2 -> investment_decisions_	0.164	0.156	0.053	3.093	0.002	Supported
financial_Knowledge ->investment_decisions_	0.548	0.552	0.068	8.036	0.000	Supported
financial_literacy -> investment_decisions_	0.091	0.095	0.071	1.271	0.204	Not Supported
risk_perception_ ->	0.127	0.120	0.072	1.776	0.076	Not

investment_decisions_						Supported

Adjusted R2 0.416 or 41.6%
Source: Researchers Computation, 2018.

Note: moderating effect 1 is the moderating effect of risk perception on the relationship financial literacy and investment decisions. Also moderating effect 2 is the moderating effect of risk perception on the relationship between financial knowledge and investment decisions. Table 3 presents information on the test of hypotheses. The value of adjusted R^2 of .416 or 41.6% shows that the study explanatory variables are jointly accounted for about 41.6% variation in the investment decisions of the investors, while the remaining 58.4% are accounted for by other variables that are not incorporated into the study model. The result shows that three out of the five formulated hypotheses are supported.

The findings shows that risk perception has positive but insignificant effect on investment decisions given the coefficient value of 0.127 and p-value of 0.076 less than 5% significance level. This implies that investor with positive risk perception about the future outcome tend to make more investment decisions irrespective market conditions. The findings was not in conformity with study of Liu, Tsai, Wang and Zhu, (2010). Similarly, financial literacy has no significant effect on the investment decisions at >5% level (β = 0.091, p<0.204). The findings signify that a unit percent increase in the level of financial literacy will bring about 0.091 or 9.1% rise in the investment decisions among the investors. This implies that when investors has information on financial literacy such stock price, market return, macroeconomic variables then the investors will make good investment decisions and vice versa. However, investors risk perception was found to moderate the relationship between financial literacy and investment decisions as the moderating effect has positive and significant impact on investment decisions of the investors ((β = 0.205, p>0.001). this findings was in conformity with the work of van Rooij et al. (2007); (Khan, 2016).

The findings further shows that financial knowledge have positive and significant effect on the investment decisions of the investors given the coefficient value of 0.548 with the p-value of 0.000 at 5% significance level. This result shows that a unit percent increase in the financial knowledge of the investors will bring about 0.548 or 54.8% increase in their investment decision. These findings demonstrate that investors with financial knowledge (finance or money) will make good financial decisions in the market and vice versa. This shows that ability of the investors to put their financial resources together or source financial asset affect their investment decisions. Similarly, risk perception was found to moderate the relationship between financial knowledge and investment decisions of the investors in Nigeria stock exchange market (β = 0.164, p>0.002). This result is positive which signify that risk perception is strongly moderate the relationship between financial knowledge, literacy and investment decisions. This shows that risk perception is one of the factors that is capable of affecting investment decisions even in the present of financial knowledge and literacy among the investors. Risk perception is more likely to affect the investing behavours of the newly or low income investors because of the fear of losing their hard earning. This findings is in line with the work of (Khan, 2016); Ameriks (2003), Lusardi et al, (2007).

Table 4. Effect Size of Exogenous Variables

Construct	f^2	Effect Size
Financial Literacy	0.183	Small
Financial Knowledge	0.167	Small

Source: Researchers Computation, 2018.

The study further tested for the effect size of the exogenous variables on the endogenous variable of this study using f^2. According to Cohen (1988), f^2 values of 0.02, 0.15, and 0.35, represents small, medium, and large effects respectively. The effect size of financial literacy on investment decisions is 0.183. This means financial literacy has medium effect on investment decisions of the investors in Nigeria. Similarly, financial knowledge has medium effect on investment decisions having an effect size of 0.167.

Conclusion and recommendations

This study examined effect of financial literacy, knowledge on investment decisions, moderating role of risk perception. The process of making sound investment decisions is good when the investors is familiar with a numbers of factors that could affect such investment decisions. The five formulated research objectives were achieved after tested the study research hypotheses using structural equation modelling techniques. However, based on the findings of this study investors with high risk perception or tolerance level with sound financial literacy and knowledge would make sound investment decisions in the future and vice versa. It's therefore recommends that Investors should ensure that they have sound investment knowledge, literacy, and other risk factors of the market and economic system in which they carry out their operations. It also recommends that investors, policymakers and individuals investors should embark on various educational programmes for both institutional and individual's investors, to further influence the level of their investment decisions before commit their hard earning fund into project.

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