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AUTHORS

Samson Adewumi 

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Samson Adewumi, Ph.D., Research
Fellow, Department of Human
Resource Management, Mangosuthu
University of Technology, South Africa.

Samson Adewumi (South Africa)

FINANCIAL LITERACY AND BUSINESS RISK-TAKING AMONG BUSINESS START-UP STUDENTS IN NIGERIA

Abstract

Low business outlook due to poor financial decisions among students has continued to attract interest of financial educators and professionals. Previous studies have interrogated financial literacy with sparse attention given to business risk-taking among students' start-ups in Nigeria. This research gap forms the basis of this study. The aim of this paper is the interrogation of financial knowledge and financial behavior as a lever for business risk-taking among start-up students of the University of Lagos, Nigeria. The philosophical perspective drew insight from the positivist approach with a random sampling of 145 final-year students selected from the departments of Business Administration, Accounting and Employment, and Labour Relations of the Faculty of Management Sciences. Kaiser-Meyer-Olkin test and Bartlett's test were conducted to determine sample adequacy. Regression analysis was employed to test the hypotheses. The results show that financial knowledge and behavior of start-ups revealed a high propensity to be engaged in business risk-taking ($\beta = .407$, $t(511) = 7.556$, $p < 0.05$; $\beta = .412$, $t(1,511) = 7.525$, $p < 0.05$) with males showing more financial literacy understanding for business risk than females ($\beta = .591$, $t(2,510) = 4.381$, $p < 0.05$; $\beta = .280$, $t(2,510) = 2.217$, $p = 0.262$) respectively. The findings show the need for the continuous development of students' start-up behavioral and attitudinal disposition, especially females in becoming more financial literate for appropriate financial decision-making in business risk-taking and venture creation.

Keywords

financial knowledge, financial behavior, risk-taking, entrepreneurship, venture, learners, institution

JEL Classification

L26, M21, O16

INTRODUCTION

The discourse of financial literacy has been widely recognized as a skill required for individuals involved in the making of complex financial decisions (Mändmaa, 2020). The wide importance of financial literacy for decision-making among students' business start-ups has received sparse attention in the financial and management literature (Zait & Berteau, 2014). The increasing level of poor financial literacy skills and knowledge has remained one of the critical bottlenecks affecting many business start-ups in Nigeria (Egbo et al., 2020). According to Xiao and Porto (2017), financial literacy represents entrepreneurial ability to understand and interpret financial information in business risk-taking and transactions. It offers the requisite knowledge in making effective financial business decisions including budget financing, debt management, financial investment, and loan management (Aydin & Selcuk, 2019). Available studies are showing the importance of financial literacy on business performance (Chepkemoi et al., 2017; Gathungu & Sabana, 2018). However, the question that remains unanswered is the utility of this knowledge in business risk-taking among students (Guliman, 2015). With the escalating trend in economic per-



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Conflict of interest statement:

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formance globally, university students are now more encouraged to engage in business risk-taking for business venture creation (Usama & Yusoff, 2018).

The basis for this paper is the argument that the current business environment has witnessed an unparalleled level of disruption with the emergence of the COVID-19 pandemic requires an army of business start-ups with robust financial literacy dexterity for competitive advantage. This contention ensued with the explanation that students' business start-ups must be deliberate about risk-taking in their business endeavors. The Nigerian educational system leaves many students with weak financial literacy knowledge and a negative outlook on business risk-taking and business start-ups (Umogbaimonica et al., 2018). The study focuses on the students of the University of Lagos, Nigeria – UNILAG – as its research setting. The University of Lagos is one of Nigeria's public universities with an approximate 55,000 student population (National Universities Commission, 2018). UNILAG enjoys the presence of a metropolitan and an army of student population capable of transforming the Nigerian economy through business start-ups and employment creation if financial literacy knowledge and behavior are grossly instilled in its student population.

The literature is replete with discussion on the importance of financial literacy for organizational development, business expansion, growth, and organizational performance (Umogbaimonica et al., 2018; Tang et al., 2015) Multinationals and national corporations have employed financial literacy as a lever to advance their competitive advantage in the global labor market (de Oliveira, 2020). In Nigeria, for instance, available studies include the relationship between entrepreneurs' financial literacy and business performance (Usama & Yusoff, 2018), entrepreneurship curriculum and pedagogical challenges in captivating students interest towards entrepreneurship education and venture (Chinonye & Akinlabi, 2014), and financial literacy and access: revisiting the bridges and barriers to women entrepreneurship in Nigeria (Egbo et al., 2020). Others are the relationship between entrepreneurial orientation, entrepreneurial skills, environmental factors, and entrepreneurial intentions among Nigerian students (Ibrahim & Lucky, 2014), and financial literacy and financial inclusion for entrepreneurship development in Nigeria (Iriobe et al., 2017).

Interrogation of these studies portrays a research gap in the financial literacy literature with emphasis on students' business risk-taking in start-ups ventures. This argument forms the focus of this study. In the discourse of business risk-taking for students' business start-ups (especially in the narrative of tertiary institutions), scarce attention is paid to the role of financial literacy as a critical factor in the success of students' business start-ups and business risk-taking in Nigeria. This position presents the uniqueness and novelty of this paper. In part, the paper aims to interrogate the intersection between financial knowledge, financial behavior, and financial literacy as predictors of business taking-risk, and gender differences between students' financial literacy and business risk-taking initiatives.

The contribution of this paper is the grilling of students' understanding of financial literacy in the context of business risk-taking toward business start-ups. It is indubitable that existing scholarship relating to financial literacy and business risk-taking is still not comprehensively researched in the broader canon of management and entrepreneurship studies. By advancing this discourse in this context, it is likely to provoke fresh debates on the importance of financial literacy as a lever for business risk-taking among university students. Given this, the paper examines the interplay of financial knowledge and behavior on the business risk-taking initiatives and gender difference between financial literacy and business risk-taking of selected final-year students of the University of Lagos, Nigeria. After a brief examination of the concept of literacy, the paper shifts to unpack financial literacy concepts including financial knowledge and financial behavior. The paper also reviews business risk-taking skills and the relationship between financial literacy and business risk-taking. The methodology framework is clearly explained by operationalizing the variables.

1. LITERATURE REVIEW

1.1. Financial literacy

The conceptual understanding of financial literacy explains an individual ability to apply knowledge and skills towards financial resources or make productive financial business decisions (Njoroge, 2013). It is conceived as a level of a business decision on the utilization and management of money for long-term financial planning by an entrepreneur (Fernandes, 2015). It connotes an individual's capability to demonstrate a set of skills and abilities to utilize existing resources to achieve a goal (Rashid, 2012). Fatoki (2014) referred to financial literacy as the ability to use knowledge and skills to execute financial resources effectively. The need for financial literacy in the classroom has been widely recognized particularly towards business start-ups among young minds (Dwiastanti, 2015).

For this study, financial literacy is regarded as an essential entrepreneurial knowledge and skill for the achievement of entrepreneurial success. Financial literacy has been identified as a critical concept for students (Aydin & Selcuk, 2019). An increase in financial literacy has been established to improve students' financial decisions (Cude et al., 2006) and individuals' self-confidence to take business risks (Potrich et al., 2016). The financial literacy of an individual influences their financial decisions and actions (Fonseca et al., 2012). The lack of financial literacy is widely recognized as one of the causes of low business spin-offs among the youth (Robb & Woodyard, 2011). Considering the continuous increase in the global youth unemployment rate, there is a need to assess the financial literacy of students towards taking business risks.

Previous investigations revealed the important influence of financial literacy on entrepreneurship behaviors. Through the application of the Structural Equation Model, Wise (2013) demonstrated that an increase in financial literacy led to the frequent production of financial statements among Canadian entrepreneurs. Guliman (2015) showed that a low level of financial knowledge is demonstrated in taxation, financial institutions, and investment securities by selected entrepreneurs in the Philippines. Evidence from Portugal

also revealed a low level of a significant relationship between financial literacy and micro and small business performance (Fernandes, 2015). Similarly, Njoroge (2013) found a positive significance between financial literacy and SME success among entrepreneurs in Nairobi, Kenya. Oseifuah (2010) examined the level of financial literacy on entrepreneurship among the youth in Limpopo Province, South Africa. It was reported that financial literacy among the youth of Vhembe District was above average and it contributed meaningfully to their entrepreneurial skills. Thus, it is discerning that every business requires money or financial literacy skills, which brings about the relationship between financial literacy and entrepreneurship (Usama & Yusoff, 2018). In this study, the discourse of financial literacy is unpacked from two dimensions including financial knowledge and behavior (Schuhen & Schürkmann, 2014).

1.2. Financial knowledge

Financial knowledge is an individual ability to assess and analyze financial information for improved financial well-being (Lusardi & Mitchell, 2014). Financial knowledge is associated with the ability to study, evaluate, and manage financial situations (Chikezie & Sabri, 2017). It provides skills for the identification of lucrative business opportunities and self-confidence in taking proactive actions (Usama & Yusoff, 2018). The concept of financial knowledge involves being informed and aware of credits, remittances, savings, income, and interest earnings, budget plans, and financial risks (Fernandes, 2015). It refers to understanding key financial terms and ideas required for daily activities (Bowen, 2002). Previous studies have indicated the need to foster financial education programs due to the low level of financial knowledge among students of higher institutions (Kozubíková et al., 2017; Lončar & Golemac, 2014).

Chan et al. (2012) confirmed that students' tendency to engage in healthy financial management activities is related to financial knowledge. Similarly, concerning initiating business risks, the acquisition of financial knowledge has been found to increase the chance of taking business risks particularly among students of tertiary institutions (Aydin & Selcuk, 2019). For instance, through a financial education seminar, Borden et al. (2008)

reported that university students in the United States were able to engage in fewer risky financial behaviors. Therefore, poor implementation of financial principles and lack of financial experience may hinder students' financial futures (Mae, 2002; Njoroge, 2013), particularly in Nigeria. According to Ben-Caleb et al. (2019), most people in developed and developing countries are financially illiterate. For example, Tezel (2015) reported that US high school students lacked both financial knowledge and personal financial skills. Evidence from Australia indicated that university students were not skilled, nor knowledgeable in financial activities (Beal & Delpachitra, 2003).

Robson (2012) noted that about 40% of adult population in Canada lack the basic and necessary financial skills. Chikezie and Sabri (2017) revealed that financial literacy has no significant impact on the financial well-being of Nigerian students living in Malaysia. Besides, both literate and illiterate populace are financially illiterate (Chikezie & Sabri, 2017). The argument pursued in this paper is the position that for students' start-ups to be strongly identified with the need to take a business risk, their knowledge of financial literacy must be appropriately developed for a successful business enterprise.

A low level of financial literacy has been reported among youth globally. In the United States, as quoted by Mandell (2006, p. 1), there is evidence that youth financial literacy has been declining since 1997. Beal and Delpachitra (2003) also noted that low levels of financial literacy exist among Australian college students. Based on gender differences, the strength of financial knowledge between men and women indicated that women tend to score lower on measures of financial knowledge compared to men (Robb & Woodyard, 2011). The performance of financial numeracy and knowledge also shows that men have higher financial numeracy and knowledge than women (Refera et al., 2016). Chen and Volpe (2002) demonstrated that female college students have been shown to possess low knowledge and willingness to learn personal finance subjects than male college students. It is instructive to note that social and biological characteristics such as religion, education, pregnancy, and childbirth, have been identified as the major challenges affecting female literacy in Africa (Ganiyu & Adeniyi, 2021).

1.3. Financial behavior

An entrepreneur with appropriate financial behavior may provide improved financial performance and business success. Evidence exists of the influence of financial behavior on effective decision-making processes such as prompt bill payment, debt financing, book-keeping, and business planning, and by extension – sound financial system and poverty reduction (Musie, 2015). Financial behavior refers to an individual's responsibility towards the management of money (Aydin & Selcuk, 2019). Tezel (2015 cited in Chua et al., 2020) describes financial behavior as the ability to comprehend the general impact of financial decisions on one's (individual, family, community, or country) condition and make the right decision about cash management and the precautions and opportunities of budget planning. According to Chua et al. (2020, p. 156), financial behavior is the attainment, allocation, and utilization of financial resources oriented toward a target set by an individual.

Chua et al. (2020) argue that the behavior of an individual in the management of finances is linked to an individual's financial decision-making attitude and the cognitive component of managing money. Therefore, the need for good financial behavior and its development among students calls for special attention (Refera et al., 2016). This is important, as graduates of tertiary institutions, especially in Nigeria, have been lacking in the appropriate financial behavior required for the sustenance of a business (Umogbaimonica et al., 2018). Lack of good financial behavior often leads to business failure, and poor entrepreneurial performance (Fernandes, 2015). This is because poor financial behavior will often lead to unwise business decisions. Herawati et al. (2018) argue that good financial literacy will affect an individual's financial behavior towards positive financial actions. Besides, financial behavior is expressed as the management of credit card behavior, investment behavior, insurance behavior, and loan behavior (Chepkemai et al., 2017). Good financial behavior will foster students' spending, investments, and savings behavior towards initiating business-risk taking. Not much is known about the financial behavior of students toward taking business risks in Nigeria. This study seeks to address this research gap.

1.4. Business risk-taking skills

The management of an enterprise is almost impossible without taking business risks. Entrepreneurs are constantly involved in making risk-related business decisions. Risk-taking is one of the core personality traits of a successful entrepreneur. Setiawan (2014) confirmed that calculated risk-taking is a characteristic of an entrepreneur. Studies have been conducted on risk-taking skills towards entrepreneurial success including financial risk-taking (Kozubíková et al., 2017), risk perceptions, attitude towards risk, and risk propensity (Singh et al., 2020), entrepreneurship education, and risk-taking (Gathungu & Sabana, 2018). Poor business risk-taking among students has been attributed to easy access to credit and a permissive attitude to debt (Jiang & Dunn, 2013). Jiang and Dunn (2013) further argue that younger individuals incurred higher levels of debt and expend more money on credit cards, which contribute to young people's financial problems.

To this end, the business risk-taking skills of students are still low in many parts of the world (Beal & Delpachitra, 2003), which have a great impact on business management. For example, Herdjiono and Damanik (2016) report that business risk-taking skills do not influence the financial management behavior of students. Setiawati and Nurkhin (2018) further affirmed that business risk-taking skills do not affect students' financial behavior. Gender difference among students in terms of business risk-taking has been investigated. Studies have shown that male students show higher business risk intention than their female counterparts (de Oliveira, 2020; Refera et al., 2016). For instance, Yong and Tan (2017) revealed that male respondents are more business risk-oriented than their female counterparts. Potrich et al. (2016) also indicate that women's business risk-taking behavior and attitude are still low, while men show positive financial knowledge and saving.

On the contrary, Igbokwe et al. (2014) empirically revealed that female students demonstrated more financial intelligence than male students. Another related study indicated that there is no difference between male and female students within the context of risk-taking skills (Lončar & Golemac,

2014). It has been established that 'fear of failure' is a contributory factor to a higher level of risk aversion in women than men (de Oliveira, 2020). These contradictory reports steer the need to understand interlinks between financial literacy and students' business risk-taking, while gender difference is used as a control variable within the context of university education.

1.5. Financial literacy and business risk-taking

Financial literacy and risk-taking ability have been largely discussed by scholars within the business start-ups domain. The literature has established that financial literacy has a positive influence on an entrepreneur's ability to take business risks (Refera et al., 2016). Risk-taking is an integral part of the financial decision-making process and it is influenced by many variables (Musie, 2015). Singh et al. (2020) found that an increase in investments contributes positively to an individual's ability to take more investment risk. Similarly, Aydin and Selcuk (2019) reported a significant association between financial services and risk-taking behavior. Aren and Zengin (2016) found that financial literacy and risk-taking perception positively influence an investment decision. The study further revealed that men are more willing to take business risks than women.

Sharif et al. (2020) found that financial literacy had no significant impact on business risk-taking. Earlier, Borden et al. (2008) demonstrated that an insignificant association exists between financial knowledge and effective business risk-taking behavior. It was argued that increased financial knowledge of students may enhance students' intention toward effective financial behavior, such as starting a business. Jones (2005) also found an insignificant relationship between financial knowledge and credit card debt. Sugiyanto et al. (2019) investigated young pioneering business entrepreneurs in Indonesia and indicated that, while financial attitude significantly influences financial behavior, financial literacy does not influence the financial behavior of young pioneering business entrepreneurs. This suggests that the financial literacy of business entrepreneurs has no significant impact on their ability to make wise business decisions.

The strength of risk-taking ability has been empirically validated to influence entrepreneurial activities. For example, in Iran, Droudi (2014) found that risk-taking factors significantly influence the emotional intelligence of entrepreneurs. Zait and Berteau (2014) found a direct relationship between the risk-taking ability of students and consumer opportunities. Evidence from China and India also revealed that the risk-taking attitude of entrepreneurs from both countries positively correlates with the internal locus of control (Hung et al., 2009). It has been suggested that comprehensive teaching of financial literacy is incorporated and investigated further in academic institutions where financial knowledge is mostly acquired (Lusardi & Mitchell, 2014).

2. AIM AND HYPOTHESES

The study aims to examine the impact of financial literacy on business risk-taking among business start-up students at the University of Lagos, Nigeria. The several arguments reviewed from the literature stimulate the following research hypotheses:

- H1: Financial knowledge is significantly associated with business risk-taking.*
- H2: Financial behavior is significantly associated with business risk-taking.*
- H3: Financial literacy is significantly associated with business risk-taking.*
- H4: Male students show more business risk-taking prospects than female students as a result of financial literacy skills.*

3. METHODOLOGY

3.1. Research philosophy, design, and population

The research philosophical approach took the route of the positivist approach to understand and interpret the opinions and views of students through quantitative measurement (Shields & Rangarajan, 2013). The application of this ap-

proach is to measure and understand the financial literacy level of students' start-ups in business risk-taking. Specifically, the research philosophical approach allows for the measurement and evaluation of variables for a statistically significant relationship or impact (Creswell & Plano-Clark, 2011). In this study, three constructs of financial literacy variables, including financial knowledge, financial behavior, and gender, were evaluated for observed significance in final-year students' business risk-taking initiatives.

The case study research design was utilized to understand the research problem from the prism of the selected students' population as a single entity of the study (Sekaran & Bougie, 2016; Kumar, 2012). The population of the study comprised final-year students of the University of Lagos, Nigeria. A total of 145 final-year students were randomly selected from the Faculty of Management Sciences, UNILAG. The students were selected across the departments of Business Administration, Accounting and Employment, and Labour Relations, respectively. The selection of students involves a special consideration as a requirement for case definition. In other words, the recruitment only focuses on final-year students who have been taught modules in entrepreneurship and business creation modules. This is justified to understand how financial literacy influences their business risk-taking initiatives.

3.2. Instruments and procedure

Data were collected through the administration of questionnaires comprising of a range of instruments employed to measure the different variables under study. For instance, the independent variables including financial knowledge were measured by adapting Annabi et al. (2018) financial knowledge scale, which includes time value of money, numeracy, interest rate, risk and return, and diversification. Financial behavior was measured with the adoption of Van Rooij et al. (2012) financial behavior scale. The range of items includes discipline in purchasing goods, focus on spending money, savings, making a budget, paying bills promptly, being ready to take investment risks, and making a long-term financial plan. For the dependent variable, business risk-taking was measured by adopting Lampenius and Zickar

(2005) business risk-taking scale. The different constructs were rated on a 5-point Likert scale of measurement (strongly disagree, agree, undecided, disagree, and strongly disagree respectively).

The data collection approach strictly follows the non-pharmaceutical prevention of the COVID-19 pandemic and the entire questionnaire distribution lasted for a period of two months. The questionnaire distribution began with a brief introduction of the aim of the study. Participating students were allowed to participate voluntarily with coercion.

3.3. Reliability and validity of instruments

The reliability of the financial literacy sub-scales was ascertained with the Cronbach's alpha test of reliability, and a reliability coefficient of 0.7 was obtained with adequate discriminant validity (Andarsari & Ningtyas, 2019). With the current global health pandemic, the questionnaire distribution was conducted in compliance with all the non-pharmaceutical guidelines in curtailing the spread of the coronavirus. The challenge of the COVID-19 pandemic restricted the number of participants to 145, yet this is sufficient to generalize statistical reports (Nieuwenhuis, 2011).

3.4. Data analysis and ethics

The questionnaires were all coded with the Statistical Package for Social Science (SPSS) software. Kaiser-Meyer-Olkin test and Bartlett's test were employed to test sample adequacy. The simple and multiple regression analysis was employed to test the relationship and level of influence among the variables. On ethics, the participating students' population was all briefed about the aim of the study, and a consent note was shared during the data collection process. This gesture was to ensure the voluntary and involuntary partici-

pation of students in the study. To add, students' vital information including their names and other important information were all excluded from the range of questions enquired and the report of findings respectively.

4. RESULTS

A factor analysis was conducted using SPSS version 25 for data validity and reliability. Kaiser-Meyer-Olkin test and Bartlett's test were also conducted to determine sample adequacy. Further, four hypotheses were formulated, and multiple regression analysis was adopted to test the validity of the hypotheses. Table 1 depicts measures of the variables.

As shown in Table 1, the Cronbach's alpha values for all the variables range between 0.731 and 0.926. As a result, all the independent and dependent variables exceeded the recommended requirement of 0.7 (Wilson, 2014). The Kaiser-Meyer-Olkin test result for the independent and dependent variables was all higher than the recommended threshold of 0.5. This means that the sample from which the data were collected was adequate. Additionally, Bartlett's test of sphericity revealed that all the constructs were statistically significant. This validates the sampling adequacy of the data. Multiple regression analysis was conducted to test the hypotheses and determine the link between the independent variables and the dependent variable.

Table 2 indicates that financial knowledge explains 16.6% variations in business risk-taking. The remaining 83.4% may be determined by other external factors such as an entrepreneurial ecosystem. Also, the standardized beta value $\beta = .407$, $t(1.511) = 7.556$, $p < 0.05$ shows that financial knowledge is significantly associated with business risk-taking. This suggests that a 0.396 increase in financial knowledge will lead to an equal improvement

Table 1. Validity and reliability of variables

Source: Authors' compilation.

Construct	Mean	Std. Dev	Cronbach's α	KMO	Bartlett's test
Financial literacy	4.91	0.812	0.731	0.731	< 0.05
Financial knowledge	4.94	0.777	0.897	0.903	< 0.05
Financial behavior	4.95	0.760	0.926	0.874	< 0.05
Business risk-taking	4.79	0.755	0.767	0.793	< 0.05

Table 2. Financial knowledge and financial behavior as predictors of business risk-taking

Variables	B	Beta	T	p-value	R ²	F	Df	P-value
Constant	.971		10.799	< 0.05				
Financial knowledge	.396	.407	7.556	.000	.166	57.089	1;511	< 0.05
Financial behavior	.403	.412	7.525	.037	.169	56.622	1;511	< 0.05

Note: a. Predictor: Financial knowledge, Financial behavior. b. Dependent Variable (DV): Business risk-taking.

in taking business risks. Therefore, the first hypothesis (*H1*) is accepted explaining that financial knowledge is directly related to students' tendency to engage in business risk-taking. In other words, the need for robust financial knowledge represents a significant business risk-taking initiative for students' business start-ups.

An estimate of 16.9% variation in business risk-taking was also explained by financial behavior. The standardized beta value $\beta = .412$, $t(1.511) = 7.525$, $p < 0.05$ indicates that financial behavior is significantly associated with business risk-taking. This implies that a 0.403 increase in financial behavior will yield an equal increase in the ability to take business risks. Based on this outcome, the second hypothesis (*H2*) is also confirmed: financial behavior is significantly associated with business risk-taking. Making sense of this result, it is evident that students' possession of financial behavior in terms of the understanding of investments ratio and business planning initiatives are important pointers to desire to embark on business risks.

Table 3 shows that financial literacy made $R^2 = 18\%$ prediction in business risk-taking. The coefficient of the beta value $\beta = .445$, $t(2;510) = 4.809$,

$p < 0.05$ suggests that financial literacy is significantly associated with business risk-taking. This implies that a unit increase of 0.437 in financial literacy will yield a proportionate increase in taking business risks and this confirms the proposition that the higher students' financial literacy level, the higher the tendency to want to engage in business risk-taking.

For gender variations, Table 4 indicates that financial literacy was able to explain 7% variations in business risk-taking for female students, while 32.1% variations in business risk-taking were predicted by financial literacy for the male students. Table 4 also revealed that financial literacy is not significantly associated with business risk-taking for female students $\beta = .280$, $t(2;510) = 2.217$, $p = 0.262$. However, financial literacy shows significant association with business risk-taking for male students $\beta = .591$, $t(2;510) = 4.381$, $p < 0.05$. This implies that male students have more potential in taking business risks than their female counterparts. Based on this finding, the fourth hypothesis (*H4*) is accepted and this is explained by social, religious, and biological constraints affecting women on many grounds (Oseifuah, 2010).

Table 3. Financial literacy as a predictor of business risk-taking

Variables	B	Beta	T	p-value	R ²	F	Df	P-value
Constant	.262		9.496	< 0.05				
Financial literacy	.437	.445	4.809	.003	.180	31.147	2.510	< 0.05

Note: a. Predictor: Financial literacy. b. Dependent variable: Business risk-taking.

Table 4. Gender differences between financial literacy and business risk-taking

Variables	B	Beta	T	p-value	R ²	F	Df	p-value
Female								
Constant	.345		8.672	< 0.05				
Financial literacy	.273	.280	2.217	.262	.070	5.831	2;510	< 0.05
Male								
Constant	.186		4.920	< 0.05				
Financial literacy	.585	.591	4.381	.032	.321	30.085	2;510	< 0.05

5. DISCUSSION

The purpose of this study is to understand university students' behavioral patterns towards taking business risks within the context of financial literacy. Research finding reveals that financial knowledge explains 16.6% of variations in business risk-taking. Additionally, financial knowledge is significantly associated with business risk-taking among students' business start-ups ($\beta = .407$, $t(511) = 7.556$, $p < 0.05$). This supports Lončar and Golemac (2014), who reported that financial knowledge is highly correlated with risk-taking among investors. Similarly, Aydin and Selcuk (2019) empirically proved that financially knowledgeable individuals are more likely to perform successfully in undertaking a business risk. These assertions are embedded in the theory of planned behavior, which assumes that an individual will only act if there is a perception of being successful in completing a task (Ajzen, 2005).

Financial knowledge serves as a skill that enables an individual to predict (perceive) the outcome of taking a business risk (behavior). This assertion supports the first hypothesis. In addition, an estimate of 16.9% variations in business risk-taking was also explained by financial behavior. The interplay between financial behavior and business risk-taking was also found to be significantly associated ($\beta = .412$, $t(511) = 7.525$, $p < 0.05$). This result supports many existing findings that have shown that increase in financial behavior is associated with investment and business risk-taking (Aydin & Selcuk, 2019; Chua et al, 2020). The study found that a significant association exists between financial literacy and business risk-taking ($\beta = .445$, $t(2;510) = 4.809$, $p < 0.05$). These research findings further affirm the impact of financial literacy on business start-ups. In a similar vein, people with financial education have been found to have

increased entrepreneurial skills towards business start-ups (Oseifuah, 2010). Empirical evidence suggests that financial literacy contributed positively towards a risk-taking perception of making business decisions (Aren & Zengin, 2016). The acquisition of financial skills allows an individual to determine and predict future financial implications (favorable/unfavorable perception) before making business decisions (behavior). This supports the assumption of perceived control, which implies that individuals' behavior relies upon the perception of favorable/unfavorable outcome of taking an action (Ajzen, 2005).

With respect to gender as a control variable, while financial literacy is significantly associated with business risk-taking ($\beta = .591$, $t(2;510) = 4.381$, $p < 0.05$) for male students, an insignificant association was found between financial literacy and business risk-taking ($\beta = .280$, $t(2;510) = 2.217$, $p = 0.262$) for female students. This suggests that male students show more risk-taking skills towards starting a business than their female counterparts. This outcome refutes the report of Refera et al. (2016), as no significant difference was revealed between male and female students. Although financial literacy was not included in the study, Ibrahim and Lucky (2014) found that there was no significant difference in risk-taking skills between male and female university students in Nigeria. The findings align with many empirical results. Previous studies revealed that women's levels of financial literacy and risk-taking are lower than men's. For example, women's lower financial knowledge (Van Rooij et al., 2012) women's lower numeracy, risk aversion, and lower income (Fonseca et al., 2012). In the Nigerian context, a poor level of financial literacy and business risk-taking among women may be attributed to the biological role of pregnancy and birth, short education period, and low-level employment (Ganiyu & Adeniyi, 2021).

CONCLUSION

The focus of this study has been to examine the impact of financial literacy on business risk-taking initiatives among selected final-year students of the University of Lagos, Nigeria. The objectives of the study include understanding the impact of financial knowledge and behavior on students' business risk-taking, and gender differences between financial literacy and business risk-taking, respectively. The result showed that the four hypotheses tested were confirmed. Specifically, it was shown that students with higher financial knowledge are likely to be engaged in business risk-taking after the completion

of their studies. Similarly, the financial behavior of students greatly explains their financial literacy understanding and business risk-taking. The overall impression of the analysis explains financial literacy as an important indicator for engaging in business risk-taking on the part of students. Therefore, it can be concluded that financial knowledge and behavior are fundamentals to provoke business risks. In addition, male students exhibit more financial literacy understanding for initiating business risks than female students. The conclusion from this result can be related to some social and cultural constraints affecting women in terms of financial decisions and the drive for business start-ups among others.

Higher education institutions focus on financial knowledge and behavior of students will continue to improve their financial literacy understanding for engagement in business risk-taking and venture creation. Research findings show that managers of the higher education institutions can extend the positive display of financial knowledge and behavior to other female students for improvement in their financial literacy dexterity and understanding for business risk-taking and the creation of social venture opportunities. Overall, the conclusion that can be drawn from this study is the clarity and significance it conveys to financial literacy and business risk-taking literature. The limitation of this study is the focus on one research setting and the inability to unravel students' perception of financial literacy and business risk-taking qualitatively, although a large number of samples were drawn for generalization. Future studies can explore the research problem from the qualitative perspective to have a clearer understanding of students' perception of financial literacy and taking business risk, as well as a comparative study of institutions.

AUTHOR CONTRIBUTIONS

Conceptualization: Samson Adewumi.

Data curation: Samson Adewumi.

Formal analysis: Samson Adewumi.

Investigation: Samson Adewumi.

Methodology: Samson Adewumi.

Project administration: Samson Adewumi.

Software: Samson Adewumi.

Supervision: Samson Adewumi.

Validation: Samson Adewumi.

Writing – original draft: Samson Adewumi.

Writing – review & editing: Samson Adewumi.

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