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MODERATING EFFECTS OF GENDER ON FINANCIAL LITERACY AND LOAN REPAYMENT BEHAVIOUR OF SMALL AND MEDIUM ENTERPRISES (SMES) IN KANO STATE, NIGERIA

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Abstract

The purpose of this research is to examine the moderating effect of financial literacy and loan repayment behavior of small and medium enterprises (SMEs) in Kano State Nigeria. Previous studies suggested that many SME owners lack the financial literacy skills needed to run their business effectively and make accurate financial decisions and yet financial literacy skills help individuals to navigate the financial world and make informed decisions about their money and minimized the chances of being misled on the matters. Borrowers and business characteristics were used as indicators of loan repayment behavior. Financial literacy which is the independent variable for the study was analyzed in terms of book-keeping literacy, budgeting literacy and debt management literacy. Beneficiaries of financial literacy programme of three microfinance banks namely; Bichi MFB, Dawakin-Tofa MFB and Ungogo MFB were used. The population of the study is 900 beneficiaries that participated in financial literacy programmes but the sample size is chosen to be 90using Kothra technique of determining sample size. Convenient sampling technique was used to access the subjects in administering questionnaire. Data was analyzed using Structural Equation Model (SEM). In line with the expectation, the study established that gender has a positive moderating effect with book-keeping literacy while gender has negative moderating effect on budgeting literacy and debt management literacy in Kano State. On the basis of the findings, it can be concluded that financial literacy awareness need to be intensified to enable SME owners key into it to *achieve their business objectives. Thus, it recommended that SME owners should consider enrolling in financial literacy programmes and other related programmes in and outside MFBs so as to enjoy the benefits of financial literacy.*

Keywords: *Loan Repayment, Financial Literacy, Book-Keeping Literacy, Budgeting Literacy, Debt Management Literacy.*

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1. Introduction

Small and Medium Enterprises (SMEs) form the majority of business undertakings in a developing economy like that of Nigeria and are said to be the instrument for the development of any economy (Anyanwu, 2014). SMEs generate employment, bring industrialization and development to the rural areas, utilize indigenous material resources and redistribute income among the poor. From literature, it is evident that the small and medium enterprises (SMEs) contribution to economic growth and development has global recognition (Okoye, 2010). In the view of Ofoegbu, Akanbi and Joseph (2013), SMEs stand to be the instrument of the economic growth and development of many developing countries including Nigeria. In their opinion, interest in SMEs would contribute to the creation of jobs, as well as providing fertile ground for skill development and acquisition, which serve as a mechanism and vehicle for technological innovation and development. In the year 2007, the Nigeria government unveiled a blue print for development of middle income status by the year 2020 and the initiative was named vision 2020. Small and medium enterprises (SMEs) were identified to be at the fore - front of this initiative. Commercial and microfinance banks supported the government's effort in this regard and have been giving advances to SMEs. However, over time, the banks realized that it was not enough to just give credit but training on financial literacy to borrowers that would benefit the banks and the business of SMEs (Owenvbiugie & Igbinedion, 2015). The research sought to investigate the effect of financial literacy on the behavior of SMEs to repay the loans.

In Nigeria, one of the greatest obstacles that small businesses have to grapple with is access to funds. The Nigerian Government, after independence in 1960, has made considerable efforts towards the nation's industrial development. The initial efforts were Government-led through the vehicle of large industries, but lately emphasis shifted to small and medium enterprises (SMEs) following the success of SMEs in the economic growth of Asian countries (Ojo, 2013).

Since 1986, Government has played down its role as the major driving force of the economy by a process of commercialization and privatization. Emphasis therefore shifted from large scale industries mainly to small and medium scale businesses, which have the potentials for developing domestic linkages for rapid and sustainable industrial development and thereby enhancing their growth and therefore, attention was focused on the organized private sector to spearhead subsequent industrialization programmes. Incentives given to encourage increased participation in these sectors were directed at solving and or alleviating the problems encountered by small businesses in the country, thereby giving them greater assistance towards increasing their contribution to the growth of national economy.

In order to enhance the flow of financial services to the micro, small and medium enterprises, (MSME) sector.Government in Nigeria has in the past initiated a series of programmes and policies targeted at the small businesses (Oni & Daniya, 2012). In 2003, the Small and Medium Enterprise Development Agency of Nigeria (SMEDAN), an umbrella agency to coordinate the development of the small and medium enterprises sector was established. In the same year, the National Credit Guarantee Scheme for SMEs to facilitate its access to credit without stringent collateral requirements was re-organized and the entrepreneurship development programme was revived. In terms of financing an innovative form of financing, unique to Nigeria, came in the form of intervention from the Banks through its 246th general meeting held on December 21, 1999. The Banks agreed to set aside 10% of their profits before tax (PBT) annually for equity investment in small businesses. The scheme amongst other things was aimed at assisting the establishment of new viable SMEs, thereby stimulating economic growth and development of local technology, promoting indigenous entrepreneurship, generating employment and reduction of poverty.

Despite all these efforts, poverty, unemployment and stunted economic growth are still very prevalent in the country as a result of the failure of past attempts by government to fill the gap in making available financial literacy mechanism that will educate entrepreneurs on access to the Micro-credit and overall improved loan repayment behavior among SME borrowers

(Owenvbiugie & Igbinedion, 2015; Obadeyi, 2015).In spite of all these financial policies and programmes aimed at assisting SMEs to move out of their financial problems, operations of SMEs are still plagued by a number of problems. These range from difficulty in accessing credit due to stringent loan conditions, short loan repayment period, unwillingness of MFBs to finance some sectors of the SMEs, high cost of input/materials and interest rates. The current structure of lending to the Nigerian economy is such that the bulk of aggregate credit is channeled mainly towards financial market operations and oil traders to the neglect of the key aspects of the real economy such as the SMEs, amongst others. An economy where interest rate hovers between 9 and 17 per cent per annum is not encouraging for the real sector much less for the SMEs which are managing to survive as most of them are not strong in the business. Further, MFBs that are supposed to serve the needs of the poor in the rural areas are now being concentrated in the urban areas all to the detriment of SMEs located in the rural areas. This can be attributed to the fact that majority of the rural areas are deficient of financial literacy, basic infrastructures, low economic activities, insecurity, among other factors. These aforementioned challenges and the need to examine the correlation between financial literacy and loan repayment behavior of SMEs necessitate this research study.

Statement of the Problem

The level of financial inclusions in forms of credits transmissions for investments in an economy is one of the major elements in determining its future productive capacity and growth. As a matter of fact, the shortage of finance is a critical limiting factor facing the small and medium enterprises and the realization of an entrepreneurial dream globally, especially in developing economies (Oleka, Maduagwu & Igwenagu, 2014).

In Nigeria, one of the greatest obstacles that Small and Medium Scale Enterprises (SMEs) have to struggle with is access to funds. This is further compounded by the fact that even where credit facilities are available, there exists little awareness as well as high interest rates and short repayment period. It is also noteworthy that some microfinance banks are opposed to lending to new businesses making it difficult for young entrepreneurs with business ideas and innovation to get started.

Accordingly, the Study of Owenvbiugie and Igbinedion (2015) have shown that there are too many poor people in Nigeria who require minor/small financial services such as credit, insurance, money transfers, in order to engage actively in productive activities and improve their standard of living. It is ironical that most governments across the world, particularly in Nigeria over the years have not been able to adequately help the poor grow small businesses by the provision adequate financial education on how to access microfinance loans. Some SMEs owners have good ideas of how to run business but their major problems are access to funds and even if the funds are available, some of them lack the financial literacy of accessing the funds.

Banks have separate units to attend to the need of their SME clients in recognition to the diversity between SMEs, consumer and corporate clients. Constraints to SME lending include lack of adequate information and business records and these serve as the reasons why banks are afraid to get involved in small and medium enterprises sector. For this reason alone, banks have allocated internal budgetary resources to assist SMEs through extension of training (African Development Bank, 2012). All the efforts of the banks are meant to have SMEs increase their loans and have their loan repay as schedule without default. However, there is a steady decrease in the loan repayment by SMEs. This study seeks to establish the effect of financial literacy on loan repayment behavior of SMEs as regard to book-keeping, budgeting and debt management skills.

Cumulatively, the three microfinance banks have advanced N1.6 billion naira over the four years period. However, recovery rate remained below 60% for the four years. It is only in Ungogo microfinance bank that the recovery rate was a little above 60%. Preliminary investigations by the researcher indicated possibility of a linkage between lack of financial literacy and loan repayment behavior of SMEs. Further, the empirical results on these variables and factors have been divergent and do not give clear cut results signifying that the concerns are still quite unresolved in the literature, thus there is a gap in the studies on effects of financial literacy on loan repayment behaviour of SMEs performance in Nigeria. Furthermore, there is also a knowledge gap about how the effects financial literacy on loans repayment behaviour of SMEs will impact on business growth in Nigeria. This study seeks to fill this gap and therefore to establish the mediating effect of gender on financial literacy and loan repayment behavior of SMES.

From the various studies conducted on financial literacy, for example, the studies on the role of financial literacy on loan repayment on SMEs in Rwanda (Tuyiseng; Mugambi & Kemirrembe, 2015), Effect of financial literacy on loan repayment of Ecumenical Churches loan fund in Kenya (Wanjiaku;& Muturi; 2017) and finanacial literacy and its impacts on loan repayment on loan repayment: An analysis of the effect of book-keeping skills from Equity Group Foundations Financial training program on loan repayment performance (Mutegi; 2015), there is insufficient evidence about its effect on loan repayment behavior of SMEs, it is therefore pertinent for banks, banks regulators, supervisors, investors understand how financial literacy affect Small and medium enterprises' performance in term of loan payment behavior of SMEs. To achieve this goal, the researcher analyse the financial statement and loan files of some selected SMEs using Structural Equation Model (SEM) as part of new innovation into the research

Objectives of the Study

The aim of this study is to empirically examine the moderating effect of gender on financial literacy and loan repayment behavior of small and medium enterprises in Kano State, Nigeria. Specifically, the study seeks to:

i. Examine the effect of book-keeping literacy on loan repayment behavior of SMEs in Kano State, Nigeria

ii. Determine effect of budgeting literacy on loan repayment behavior of SMEs in Kano State, Nigeria

iii. Assess the effect of debt management literacy on loan repayment behavior of SMEs in Kano State, Nigeria.

iv. To examine the moderating effect of gender on financial literacy and loan repayment behavior of SMEs in Kano State, Nigeria.

v. To analyse the data using Structural Equation Model (SEM)

Research Questions

In line with the objectives of the research, the following questions would be asked

1. To what extent does book-keeping literacy affect loan repayment behavior of SMEs in Kano State, Nigeria?
2. To what extent does budgeting literacy affect loan repayment behavior of SMEs in Kano State, Nigeria?
3. To what extent does debt management literacy affect loan repayment behavior of SMEs in Kano State, Nigeria?
4. To what extent does gender moderate the relationship between financial literacy and loan repayment behavior of SMEs in Kano State, Nigeria?

2. Literature review

This section presents a review of the existing literature on financial literacy and loan repayment behavior of SMEs. It introduces the theoretical framework of the study, the conceptual framework and provides the empirical review focusing on financial literacy and loan repayment behavior of SMEs.

Theoretical Framework

This study is guided by the ***Theory of Dual – Process***.

The Dual-process theory was the initiated by Lusardi and Mitchell (2011). Dual-process theories embrace the idea that financial decisions can be driven by both intuitive and cognitive processes which means that financial literacy may not always yield optimal financial decisions. The dual-process financial literacy theory is of the view that the behavior of people with high level of financial literacy might depend on the availability of two thinking styles, intuition and cognition (Lusardi & Mitchell 2011; Glaser & Walter 2011). Intuition is the ability to acquire knowledge without the use of reason. It provides views, understanding, judgments and beliefs that cannot be empirically verified or justified. Parker (2013) affirmed that individual who rely on intuition are likely to use mental short cuts as they make decisions which may be largely influenced by their emotions. Glaser and Walter (2011) stated that the positive effect of financial literacy on reasonable investment decision is diminished by a high level of intuition. Therefore, increased use of intuition results to sub-optimal investment decision.

Cognition on the other hand, is the process by which sensory input is transformed, stored and recovered and used. Cognition is the mental process that includes the comprehension, calculation, reasoning, problem solving and decision making (Parker; 2013). High cognitive individual enjoys thinking, analytical and better at retaining information and more likely to search out new information (Umogbai, Agwa & Asenge; 2018).

The dual-process theory is relevant to this study because it shows that individuals who have high cognitive will seek for information and more likely to be influenced by relevant information and messages. This means that their information skills can be enhanced by financial training. On the other hand, the use of intuition can be reduced by provision of relevant information to support decision making through financial education since individuals tend to rely on intuition where relevant information is lacking.

Loan Repayment

Principally, the typical process of paying off the debt balance on a loan over a period of time without any extra principal paid on the balance called loan repayment. Another method of repayment is a lump sum with interest at maturity. If the repayments of both principal and interest are up to date in accordance with the agreed repayment terms deemed to be performed. However, if the interest on principal is due or exceeds 90 days postponed or transfer into a new loan it is deemed as non-performing (Nawai and Shariff, 2013).The point in the borrower's repayment history which had missed at least three time installments within 24 month period describes as default. Meanwhile, when it comes to circumstances borrowers are fail to repay a loan according to the terms or condition of a loan agreed upon signed the contract will be recognized as loan default. Loan default can be defined as the inability of a borrowers to fulfill their obligations as at when due. It could be either in term of voluntary or involuntary which explained that defaulted may occur if the borrower is either unwilling by their choices (voluntary default) or really unable (un-voluntary default) to make the repayment. Numerous researchers, enlightened that default loan will reduces the loanable fund to enterprise, and negatively affected the enterprises especially those who need to obtain capital for their operation in order to grow and sustain in the industries (Nawai & Shariff, 2013). Addae-Korankye (2014) explained that a defaulted loan is a driven of delinquent loan which happen when the chance of recovery become minimal.

According to the past researches, loan default or repayment performance could be influenced by numerous of factors comprising social economic attributes, demographic, management style, financial, loan characteristics, borrowers characteristics, group lending and cultural characteristics, information, training, business types, social ties and psychological. (Addae-Korankye, 2014; Nawai & Shariff, 2013).The finding of each research mainly provided a fundamental of thought or ideas, not contrary to each other and might be essential for further study.

Financial Literacy

Financial literacy has been recognized across the globe as an important element of stability and economic growth which is a pointer to the recent approval of principles on national trategies for financial education by Organisation of Economic Co-operation and Development (OECD), as endorsed by a G20 meeting (OECD,2013). Financial literacy is a combination awareness, knowledge, skills, attitude and behavior needed tom make sound financial decisions and ultimately achieve individual financial well-being (OECD,2013). From the above definition, OECD identifies financial literacy in three dimensions; financial knowledge, financial attitude and financial behavior.

The concept of financial literacy is education and understanding of various financial areas. It is the ability to manage finance matters in an efficient way and it involves the knowledge of making appropriate decisions about personal finance such as budgeting, tax planning, paying for college, investment, insurance and retirement (Fatoki, 2014). It involves the techniques of financial principles and concepts such as financial planning, managing debt, profit saving techniques and the time value for money. Absence of financial literacy may lead to making poor financial choices that have negative consequences on financial activities of an individual. Based on the afore-mentioned, the federal government of Nigeria established Financial Literacy Education Commission which create conducive environment with the necessary resources for entrepreneurs who want to learn more about finance in business (Ageyi, 2014).

Types of Financial Literacy

Book-keeping Literacy

Book-keeping literacy is the ability to keep track of income and expenses; this improves chances of making a profit, and to collect the finance information necessary for filling various tax returns. There is no requirement that financial records be kept in a particular way. However, some businesses use a certain method of crediting their account known cash method or the accrual method. Depending on the amount of sales, one can create its own ledgers and reports. An accounting system records, retains and reproduces financial information relating to financial transactions flow and financial position. Financial transaction flows involve inflows on account of income and outflows on account of expenses. While elements of financial position include property, money received, money spent or assigned to assets, liability and equity. Within each of asset, liability, income and expenses is represented by respective account. Account is a record of inflows and outflows in relation to their respective assets, liability, income or expenses. Income and expenses accounts are regarded as temporary accounts since they represent only the inflows and outflows and absorbed in financial position on completion of the time period (Tuyisenge, Mugambi & Kemirenbe; 2015).

The types of account are; real account which represents tangible things and certain intangible things. Examples of tangible things are machinery, plants, furniture and fixtures, computers e.t.c

Debt Management Literacy

Idowu (2015) claims that a major barrier to rapid development of SMEs sector is inadequate or shortage of both debt and equity financing. Accessing finance has been seen as a key force for SMEs to succeed in their effort to build productive capacity, to compete, to create jobs and to reduce poverty in developing countries. SMEs in developing economies especially Africa hardly meet the conditions set by financial institutions which sees SMEs as a risk because poor guarantees and lack of information about their ability to access loan and repay it (Idowu, 2016).without finance, SMEs cannot acquire new technologies or compete favourably in global markets.

Poor debt management and accounting practices are hindering the ability of SMEs to raise finance. This is coupled with fact that SMEs are mostly owned by people whose life style may have effects on the operations of such business.

Budgeting Management Literacy

Small and medium enterprises (SMEs) are the largest contributor to global economies and their importance are so glaring in every nation. They are important to the economy and their creation has positive impact towards economic growth. However, there is need to see that these SMEs are constantly in operation and avoid failure. Lack of budgeting management skill has been a major challenge to SMEs and this challenge can be remedied through acquisition of training in budgeting management that can provide lasting solution to the survival of SMEs. Some SMEs, for one reason or the other, end up closing down business at an early stage due to miscalculation of opportunity or unforeseen threats that are too big for the business to cope with, lack of essential information on running the business (Chimucheka in Tayiseng et al… 2015).

Gender Moderates the Relationship Between Financial Literacy and Loan Repayment Behavior.

Gender refers to the social roles that men and women play and the power of relationship between them, which usually have an effect on the use and management of natural resources.

Gender is not based on sex, or the biological differences between men and women but is shaped by culture, social relation and natural environment. Thus, depending on values, norms, customs and laws, men and women have played different gender roles.

Gender roles of women and men include different labour responsibilities, decision making and knowledge. Depending on their needs, men and women often use and manage resources in different ways. The gendering of knowledge for managing biological system has four characteristics (Husner, Yonder & Martin 2001); (1) men and women have knowledge about same thing (2) men and women have different knowledge about the same thing (3) men and women organize their knowledge in different ways (4) men and women may receive and transmit their knowledge in different ways. Gender therefore, plays a moderating role on how financial literacy impact on loan payment behavior of entrepreneurs. Women tend to be soft in repaying their loans than men judging from the fact they always want to avoid problems.

Review of Empirical Study

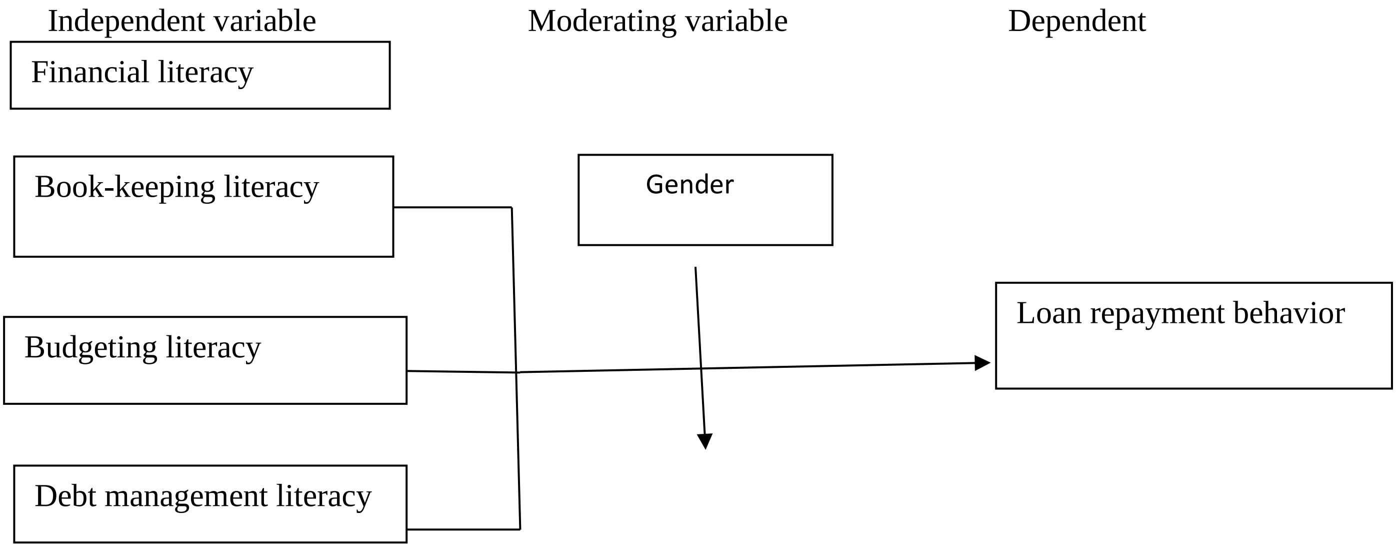
Many studies have been conducted on the effects of financial literacy and its impact on loan repayment and have shown that lack of financial literacy level among entrepreneurs around the world has caused business failure (Mutegi, Njeru & Ongesa; 2015). Many studies that were conducted on financial literacy mainly focused on personal finance but failed to relate it to business management and the loan behavior of SMEs. They tend to only look at the factors like banking service literacy, booking-keeping literacy and ratio analysis on personal and household finance. The studies however emphasized on the numeracy skills of individuals and how these skills affect their financial decision and no attempt was made to show or establish on how the level of financial literacy of these individuals affect their loan repayment behavior.

Karikuri & Muturi (2017) conducted a study on the effects of loan repayment, a case of Ecumenical church fund in Kenya. The found that 73% of the respondents who had debt management literacy did not delay in repaying their loans while 27% of respondents who do not have debt management literacy have delay in repaying their loans. This implies that the respondents with debt management literacy are less likely to default in loan repayment while those without debt management literacy are prone to repayment default. These results are in conformity with the study of (Kimeringe, Mungambi & Tuyisenge; 2015) on financial literacy on loan repayment where respondents agreed that credit management literacy helped them to make wise decisions that were in turn assist them to repay their loan on time. Karikuri & Muturi

(2017) also found out that 55% of the respondents who defaulted in loan repayment had book-keeping literacy while 45% who do not have book-keeping literacy did not delay in paying their loans. This result contradicted the study carried out by Kemirerube, Mugambi & Tuyisenge; 2015) that showed that respondents confirmed that book-keeping literacy helped them to repay their loans as at scheduled time.

Barua & Sane (2014) assessed the impact of compulsory financial education on female micro entrepreneurs of urban institutions (MFIs) in India and found out that financial literacy reduces the repayment defaults. The study by Ongesa (2014) on the assessment of financial literacy on loan repayment by SMEs in Kenya showed that book-keeping skills, credit management skills and budgeting skills significantly affect the ability of SMEs to repay their loans. They therefore, advice SMEs to undergo financial related programmes to enhance their capabilities and also to initiate additional trading programmes that will enhance the loan repayment behavior of the SMEs. Aja, Eyo and Ufem (2014) conducted a study on the analysis of creditworthiness and loan repayment among Banks of Agriculture Beneficiaries in Nigeria in order to identify the factors that discriminate between creditworthiness and non-creditworthiness of the beneficiaries, the findings indicated that farmers with large amounts, better education level, large farm income, late disbursement and large farm size repay their loan more. Enimus, Emmanuel and Aja (2017) conducted an empirical study on the determinants of loan repayment among agricultural microcredit finance group members in Nigeria and the regression's result demonstrated that the determinants of the group members loan repayment include age, household size, house income, educational level, the amount credit received, distance to credit source, supervision and disbursement of lag.

Conceptual Framework



Source: Researcher; 2018

3. Research Methodology

Research Design

Kothari (2010) opined that research design is the collection, measurement and analysis of data. In this study a descriptive survey research design is used with a cross-sectional survey data. The design is found suitable because it describes the effect of financial literacy and loan repayment behavior of small and medium enterprises.

Population

From the microfinance banks records in Bichi, Dawakin-Tofa and Ungogo, 900 beneficiaries who participated in the financial literacy programmes were used (Microfinance Banks Bichi, Dawaki-Tofa & Ungogo, 2018)

The formula adopted from Kothari (2004) was used to calculate the sample size for beneficiaries from each of the microfinance bank. The formula is given as;

$$n = \frac{Z^2 * p * q * N}{e^2 (N - 1) + Z^2 * P * q}$$

Where; n = the sample size for a finite population.

N = Size of the population of the SMEs

P = population reliability or frequency estimated for a sample of size n where p = 0.5 which is taken for all deviating population and p + q = 1

e = margin of error at 10% for the study

2α/2 = normal reduced variable at 0.05 level of significance Z = 1.15 according to

the above formular, the sample size for SMEs for each MFB is;

MFB Bichi $n = \dfrac{1.15^2 * 0.5 * 0.5 * 300}{0.1^2 *(300 - 1) + 1.15^2 * 0.5 * 0.5} = 30$

MFB Dawakin – Tofa $n = \dfrac{1.15^2 * 0.5 * 0.5 * 285}{0.1^2 * (285 - 1) + 1.15^2 * 0.5 * 0.5} = 30$

MFB Ungogo $n = \dfrac{1.15^2 * 0.5 * 0.5 * 315}{0.1^2 * (315 - 1) + 1.15^2 * 0.5 * 0.5} = 30$

Data collection procedures

The data was collected using questionnaire and the questionnaire were administered through drop and pick later approach. This gives the respondent enough time to go through the questions before answering them. The questionnaires were collected after a week and some days for analysis. The questions were structured in the context of designed Likert Scale of 1 – 5 with 1 being strongly disagree and 5 strongly agree.

Validity and Reliability of Instruments

Before drafting the questionnaire, two senior managers of Microfinance Banks were interviewed with the view of identifying the right questions for the variable under study. Then the questionnaire was drafted and given to experienced senior academics, MFBs manager and business person to validate in order to assessing the readability, language simplicity and content coverage of the subject matter. Observation and comment received were effected in the drafted questionnaire before distribution.s

Analysis of Data

Descriptive statistics was applied to help establish the patterns, trends and relationships between the variables and to make it easier to understand and interpret the implication of the study. Data collected was organized, coded and enter into the computer for analysis using Statistics Package for Social Sciences (SPSS) Version 23.0 and AMOS for the Structural Equation Model (SEM).

Here, the study's findings are presented on the moderating effect of gender on financial literacy and loan repayment behavior of SMEs in Kano State, Nigeria.

4. Results and discussion

Summarized Characteristics of the Respondents

Table 1 Summarized Characteristics of the Respondents

Demographic		**Frequency**	**Sample %**
Sex	Male	39	46
	Female	45	54
		84	100
Age	Below 18yrs	9	10.7
	20-30 yrs	35	41.7
	30-40yrs	31	36.9
	Above 40 yrs	9	10.7
		84	**100**
Education	Primary	3	3.6
	Secondary	19	22.6
	NCE/ND	38	45.2
	HND/Bachelor	21	25
	Others	3	3.6
		84	**100**
Form of Business	Sole proprietorship	40	47.6
	Partnership	28	33.9
	Private limited company	5	11.6
	Cooperative	5	1.2
	Joint venture	1	1.3
		84	**100**
	Less than 2yrs	13	15.5

Business Age	2 – 5 yrs	46	54.8
	5 – 10 years	21	25.0
	Above 19 yrs	4	4.8
		84	**100**
Business capital	Less than N100,000	12	14.3
	N100,000 – N400,000	20	23.8
	N500,000 – N1,000,000	32	28.1
	Above N1,000,000	20	23.8
		84	**100**

Source: Generated by Author using SPSS version 23 from Questionnaire Response, 2018

Reliability Test of Instruments

Variables	Number of Items	Cronbach's Alpha
Book-keeping Literacy	6	.886
Budgeting Literacy	6	.910
Debt Management Literacy	6	.840
Loan Repayment Behaviour	18	.886

Source: Field Survey 2018

Correlation between Constructs

Based on the results of the model estimation, correlation coefficients (r) between constructs (Table 1) indicate that a minimum correlation value (in absolute terms) is achieved by a correlation between DMLT and gBGTL with a correlation coefficient of 0.029. A maximum correlation value (absolute) is achieved by the association between BGTL and gBGTL with a value of 0.667. Since correlation coefficients between constructs are less than 0.85, the discriminant validity test can be met. Based on the criteria, since all correlation values of constructs are less than 0.85, the constructs of this study have good discriminant validities.

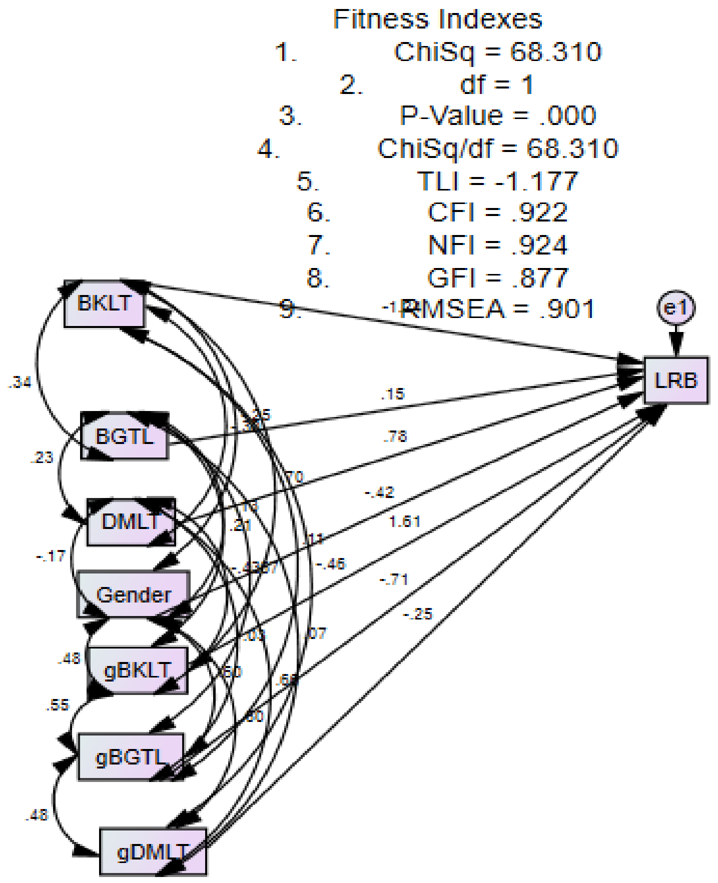
Table 2: Correlation Coefficients among Constructs

Correlations			Estimate		Correlations			Estimate
BGTL	<-->	DMLT	.227		BKLT	<-->	gDMLT	-.459
BKLT	<-->	BGTL	.338		BGTL	<-->	bio1	-.129
Gbgtl	<-->	gDMLT	.479		BGTL	<-->	gBKLT	.207
gBKLT	<-->	gBGTL	.549		BGTL	<-->	gBGTL	.667
bio1	<-->	gBKLT	.483		BGTL	<-->	gDMLT	.072
DMLT	<-->	bio1	-.170		bio1	<-->	gBGTL	.605
BKLT	<-->	DMLT	-.300		bio1	<-->	gDMLT	.602
BKLT	<-->	bio1	-.254		DMLT	<-->	gBKLT	-.428
BKLT	<-->	gBKLT	.701		DMLT	<-->	gBGTL	.029
BKLT	<-->	gBGTL	.112		DMLT	<-->	gDMLT	.660

Structural Model

The purpose of this test is to examine the relationships between constructs. Since this study addresses a moderating effect of a construct, an examination of the structural model was conducted with the moderating effect.

Regression Weights: (Group number 1 - Default model)



The model achieved a value for x */df* of 68.31. This result proves that *x^/df* meets the threshold. Likewise, the other goodness-of-fit measures (Bollen-stine p-value, GFI, AGFI, NFI, CFI, and RMSEA) can fulfil the threshold. Hence, the structural model with moderation modification fits the data very well.

Table3: Path Coefficients among Constructs in the Modified Model

	Estimate	S.E.	C.R.	P	Std. Estimate
LRB <--- BKLT	-.761	.270	-2.815	.005	-1.244
LRB <--- BGTL	.095	.202	.470	.638	.148
LRB <--- DMLT	.513	.272	1.881	.060	.775
LRB <--- bio1	-.702	.696	-1.008	.313	-.420
LRB <--- gBKLT	.548	.172	3.192	.001	1.607
LRB <--- gBGTL	-.237	.135	-1.756	.079	-.709
LRB <--- gDMLT	-.084	.174	-.483	.629	-.247

Furthermore, the structural model produces a path coefficient (P) that reflects the magnitude of relationships between constructs. The results demonstrate that there are five path coefficients that are not significant statistically at a p-value< 0.05. These path coefficients are between LRB and BGTL (P = 0.148; p- value = 0.638), LRB and DMLT (P = 0.775; p-value = 0.060), LRB and bio1 (P=-0.420; p-value = 0.313), LRB and gBGTL (P = -0.709; p-value = 0.079 as well as LRB and gDMLT (P = - 0.247; p-value = 0.629) (Table 3).

Hypothesis Testing

After conducting a series of examinations, the best structural model fit was obtained. In the model, relationships of constructs proposed in this study generate the coefficients of paths. Based on these coefficients, hypotheses are examined.

Impact of Book-keeping literacy on Loan Repayment Behaviour

Hypothesis 1 states that "There is no significant statistical relationship between book-keeping literacy and loan repayment behavior of SMEs in Kano State, Nigeria.". Results from the structural model shows that the relationship between book-keeping literacy and loan repayment behavior of SMEs in Kano State yields standardised coefficient P = -1.244 at p-value = 0.005. This result also demonstrates that the value of the coefficient is positive. Due to a p-value of the coefficient being less than 0.05significance level, it is therefore concluded that there is significant statistical relationship between book-keeping literacy and loan repayment behavior of SMEs in Kano State, Nigeria.

Impact of Budgeting Literacy on Loan Repayment Behavior

Hypothesis 2 states that "There is no significant statistical relationship between budgeting literacy and loan repayment behavior of SMEs in Kano State, Nigeria.". Results from the structural model shows that the relationship between budgeting literacy and loan repayment behavior of SMEs in Kano State yields standardized coefficient P = 0.148 at p-value = 0.638.. Due to a p-value of the coefficient being greater than 0.05 significance level, it is therefore concluded that there is no significant statistical relationship between budgeting literacy and loan repayment behavior of SMEs in Kano State, Nigeria

Impact of Debt Management on Loan Repayment Behavior

Hypothesis 3 states that "There is no significant statistical relationship between debt management and loan repayment behavior of SMEs in Kano State, Nigeria.". Results from the structural model shows that the relationship between debt management and loan repayment behavior of SMEs in Kano State yields standardized coefficient P = 1.607 at p-value = 0.060.. Due to a p-value of the coefficient being greater than 0.05 significance level, it is therefore concluded that there is no significant statistical relationship between debt management and loan repayment behavior of SMEs in Kano State, Nigeria.

Gender as a Moderating Effect on the Impact of Book-Keeping Literacy on Loan Repayment Behavior

Hypothesis 4 states that "Gender does not moderate the relationship between book-keeping literacy and loan repayment behavior of SMEs in Kano State, Nigeria". Results shows that gender as a moderator in the relationship between book-keeping literacy and loan repayment behavior of SMEs in Kano State yields standardized coefficient P = 1.244 at p-value = 0.001. This result also demonstrates that the value of the coefficient is positive. Due to a p-value of the coefficient being less than 0.05 significance level, it is therefore concluded that gender significantly moderates the relationship between book-keeping literacy and loan repayment behavior of SMEs in Kano State, Nigeria

Gender as a Moderating Effect on the Impact of Budgeting Literacy on Loan Repayment Behavior

Hypothesis 5 states that "Gender does not moderate the relationship between budgeting literacy and loan repayment behavior of SMEs in Kano State, Nigeria". Results shows that gender as a moderator in the relationship between budgeting literacy and loan repayment behavior of SMEs in Kano State yields standardized coefficient P = -0.709 at p-value = 0.079. Due to a p-value of the coefficient being greater than 0.05 significance level, it is therefore concluded that gender is not a significant moderator of the relationship between budgeting literacy and loan repayment behavior of SMEs in Kano State, Nigeria

Gender as a Moderating Effect on the Impact of Debt Management on Loan Repayment Behavior

Hypothesis 6 states that "Gender does not moderate the relationship between debt management literacy and loan repayment behavior of SMEs in Kano State, Nigeria". Results shows that gender as a moderator in the relationship between debt management literacy and loan repayment behavior of SMEs in Kano State yields standardized coefficient P = -0.247 at p-value = 0.629. Due to a p-value of the coefficient being greater than 0.05 significance level, it is therefore concluded that gender is not a significant moderator of the relationship between debt management literacy and loan repayment behavior of SMEs in Kano State, Nigeria.

5. Conclusion and Recommendations

From the findings of the study, it can be concluded that the moderating effect of gender on financial literacy and loan repayment behavior is indeed affected by book-keeping literacy positively, while budgeting literacy and debt management literacy have no significant moderating effect loan repayment behavior. The study focused on primarily on the moderating effect of financial literacy and loan repayment behavior of SMEs. There are challenges facing SMEs and the acquisition of financial literacy by the stakeholders in the sector. The global economy is dependent on the success of SMEs which create employment, alleviate poverty and balance developments and for this objective to be achieved; there is need for proper introduction of financial literacy where SME owners can acquire the needed knowledge to run their business effectively.

Thus, the study recommends that;

i. SMEs whose managements have little or no financial literacy should consider enrolling in related programmes in and out of microfinance banks.
ii. SMEs facing challenges in the market, should concentrate their energies by forming groups to help on training to expand their necessary skills in business
iii. Every SME should employ boo-keeping in their day to day running of the business to improve performance without any leakages of revenues.
iv. MFBs should have functional financial literacy departments which will assist the SMEs in acquiring financial analysis and other related skills.

Doing so, will enable SME owners to be able to project on the profitability of their business as well as understanding financial statements which help interpret and understanding of business environments.

Recommendations for further study

A further research should be carried out to find out why gender do not moderate the budgeting literacy and debt management literacy and loan repayment behavior of SMEs. Further studies should be done on factors like moderating effect of culture, environment e.t.c on financial literacy and loan repayment behavior of SMEs. It is also recommended that the research be replicated in different states of Nigeria in order to come out with generalized findings.

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