MODERATING EFFECT OF RISK BEARING PROPENSITY ON THE RELATIONSHIP BETWEEN ONLINE SHOPPING FACTORS AND CONSUMER PURCHASE DECISION OF E-STORES IN NIGERIA

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Abstract

Internet technology is one invention that has revolutionized shopping methods via online shopping and gaining global recognition though not fully adopted in Nigeria. Several online shopping factors influencing consumer purchase decision in Nigeria are of great concern to online vendors. It is suspected that inherent risk in online transactions influences the relationship existing between the online shopping factors and consumer purchase decision. This study investigates the influence which Consumers' personal characteristics (risk bearing propensity) has on the relationship existing between the online shopping factors (convenience, website design, trust, service quality, privacy/security and product quality) and consumer's decision to purchase from e-stores in Nigeria using South South, a region of Nigeria as study area. A survey of 258 staff of Deposit Money Banks in Nigeria were sampled using questionnaire and the data collected analyzed using regression. The results of the analyses showed that risk bearing propensity has significant influence on the relationship which exists between the online shopping factors and consumer purchase decision. The study concludes that risk bearing propensity significantly moderates the relationship existing between the online shopping factors and consumer purchase decision and therefore recommends that online vendors should allocate appropriate resources for risk reduction marketing programs and ensure that they are transparent in their relationship with the online consumers such that these consumers will not see online shopping as risk taking.

Keywords: Online shopping factors, risk bearing propensity, relationship and consumer purchase decision.

1.0 Introduction

Understanding consumer behavior and purchase decision is very vital for business success and as such marketers are worried to know what influence purchase decision of the online shoppers.

Consumer purchase decision is an activity which is applicable to both online and offline shopping. Online shopping and purchase decision which is the focus of our study is a complex activity. Engel et al., (1973) defined purchase decision as those activities of the consumer which are concerned with how he obtains, consumes and disposes products and services in relation to his feelings, state of mind, thoughts and attractions. In carrying out these activities, the consumer searches for what to buy, decides on where to buy, when to buy, at what price to buy and buying frequency using internet facility and based on information provided by the e-stores in their website (Gao, 2015). In this case, the consumer shops at his most convenient time and place, can visit many sites with ease, review up to date product information, compare prices, choose from many alternatives and save time, energy and cost of moving from one brick and mortar shop to another yet these choices are not easily come by as any wrong choice would deter customer satisfaction and repeat intention especially as there are many e-stores to choose from. All these benefits and opportunities associated with online purchase decision notwithstanding, it is regrettable to note that Nigerian consumers' attitude towards this trending shopping platform still leaves much to be desired when compared with developed economies like Asian countries namely India, Pakistan as well as other Western countries. It is on record that as at end of 2019, only about 38.3%, of the Nigerian population of about 200 million were online shoppers (Simona, 2020). This is ridiculously low for a country wishing to develop its electronic commerce industry. The full knowledge of risk bearing propensity of the consumer and e-store adoption would have made e-shopping easy. It can also be recalled that Nigerians exceptionally suffered untold hardship during the lockdown when markets and shops were closed for weeks due to the coronavirus infectious disease (COVID 19). Movements and physical human contacts were restricted to check spread of the deadly virus. Shopping became a herculean task. In an environment where online shopping thrives, the impact would be less as people could shop online while staying safe at home. In an effort to create online shopping awareness and awaken the interest of Nigerians, Jumia, one of the prominent e-stores in Nigeria embarked on marketing campaign with the following slogans "We have what you need, stay home, stay safe". "Lockdown? No problem, shop online and we will deliver". "Stay safe with Jumia! Shop from home and have it delivered contact free". This campaign notwithstanding, majority of Nigerians are yet to key into this stress free and time saving shopping platform due to fear and lack of knowledge of how online shopping functions. Many factors, six of which are the focus of this study are observed to be associated with this apathy towards online shopping and purchase decision in Nigeria. Some scholars listed some of these factors in their earlier studies; for instance, Muhammad, Muhammad and Chaudhary, (2015) listed Trust, Convenience, Time, Product Variety and Privacy as online shopping and purchase behavior determinants. Others include fear of legitimacy of the e-stores website, product quality, security of private information, trust, nature of post purchase services and challenges associated with returning of defective goods that are not in conformity with what is seen on the website of the e-store (Buchalis, 2004;Osio, & Orubu, 2018). Regrettably, most of the studies did not consider the moderating effect which risk bearing propensity of the consumer has on the relationship between these online shopping factors and consumer purchase decision. However, a study of online shopping behavior from transaction cost perspective by Gao (2015) revealed that the relationship between transaction cost and purchase behavior of consumer is influenced by consumer's risk bearing propensity. This study was therefore

carried out to investigate the moderating effect which risk bearing propensity of the consumer has on the relationships between online shopping factors (convenience, website design, trust, service quality, privacy/security and product quality)and consumer purchase decision of e-stores in Nigeria with focus on the eighteen Deposit Money Banks (DMBs)operating in South South region of Nigeria. Knowledge of this will immensely help online vendors when making policies relating to online transactions. Hence they would want to be sensitive to security issues that will protect their consumers from the risk of fraud and financial loss arising from use of personal information during online transaction thus instilling confidence in online transactions.

2.0 Literature Review

2.1 Theoretical Review

This study is based on two theories namely Simon's model of Bounded rationality and the Technology Acceptance Model (TAM).

2.1.1 Simon's model of Bounded rationality. Simon's model does not believe in the rational choice theorists and classical economists. The rational choice theory, assumes that individuals would naturally act completely rationally to maximize their benefits while making a purchase decision (Schiffman & Kanuk, 1997). Simon's model is of the opinion that decision making is all about satisficing and not optimizing. Optimizing means to select the option which is the best, from all the available alternatives while satisficing is choosing an option that meets or exceeds minimal acceptable criteria that satisfies the decision maker and not necessarily the best option. Some other scholars like Sahar Karami (2013) and Schiffman, Hansen & Kanuk (2008) also doubts the validity of the assumptions of the rational choice theory in real life situation. Their argument is that for the classical economists' view to be reliable, consumers should be aware of all product information and available alternatives so as to correctly rank their benefits before finally selecting.

the best one. However, it is very clear that such expectation is unrealistic. Consumers, in most cases, do not have access to "all the information", do not have time for such an extensive process, and are not skilled enough to make the "perfect" decision hence they settle for a 'satisfactory' decision which is good enough rather than the "optimum choice" (Schiffman, Hansen & Kanuk, 2008). In online shopping purchase decision making therefore, the consumer relies solely on the information available on the e-store's website regarding the e-stores, their products and services, security of private information provided during online transactions and other online factors to make purchase decision without necessarily being aware of all product information and available alternatives so as to correctly rank their benefits before finally selecting the best one. This means that in online shopping and purchase decision of e-stores, consumer satisfices and not optimize.

2.1.2 Technology Acceptance Model (TAM).
TAM as an information systems theory assumes that when users perceive that a type of technology such as online shopping platform is useful and easy to use; they will be willing to use it. It was developed by Davis (1989). Consequently, the more shoppers, consumers, workers or employees recognize that the new technology will make their tasks or shopping easier to do; the higher the probability or likelihood that they will adopt it (Dillon & Morris, 1996). The model believes that when a new technology is presented to users, their decision on whether to use it, how to use it and when to use that technology is influenced by some factors. Such factors include convenience, website features, trust issues, quality of service provided by the technology, security of private information provided during the transaction,

quality of product offered and risk involved as it is the case of e-stores. These factors are the focus of this study.
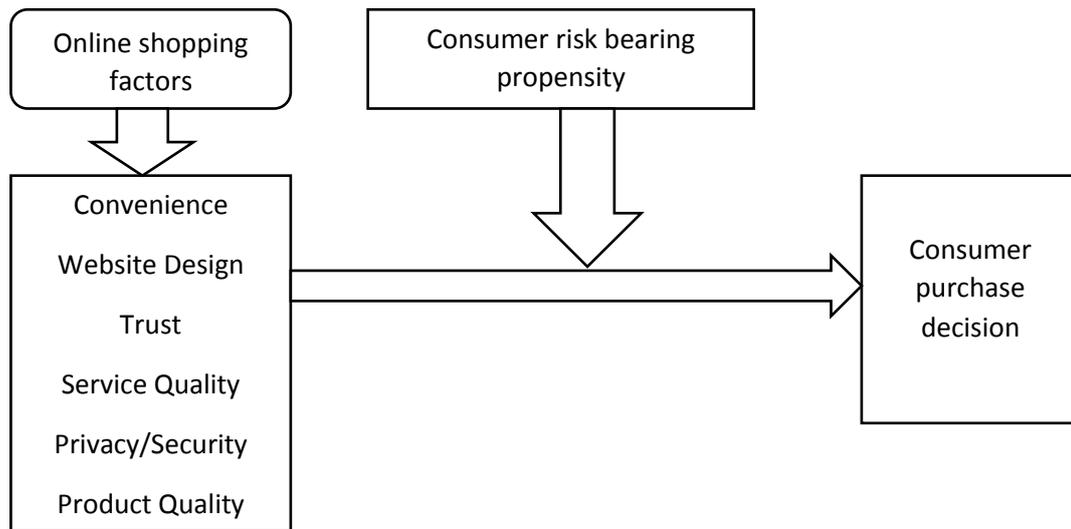
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┌─────────────────┐          ┌──────────────────┐
│ Online shopping │          │ Consumer risk    │
│ factors         │          │ bearing          │
│                 │          │ propensity       │
└─────────────────┘          └──────────────────┘
        │                            │
        ▼                            ▼
┌─────────────────┐                          ┌──────────────┐
│   Convenience   │                          │              │
│                 │                          │  Consumer    │
│ Website Design  │                          │  purchase    │
│                 ├─────────────────────────▶│  decision    │
│     Trust       │                          │              │
│                 │                          │              │
│ Service Quality │                          └──────────────┘
│                 │
│ Privacy/Security│
│                 │
│ Product Quality │
└─────────────────┘
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Figure 1: Theoretical Framework

2.2 Conceptual Review
Online shopping factors

Earlier studies on online shopping and related topics suggest that many factors influence online shoppers purchase decision. Some of the factors include trust, convenience, product quality, product variety, time, security, privacy, cost, website design and service quality (Gao, 2015; Hanmaikyur, 2019; Muhammad, Muhammad & Chaudhary, 2015; Nwagbara& Obot, 2017; Olasanmi, 2019; Olufemi, Onuoha, Ugwu & Falaye 2016). Though there are no clear consensus as there are more contexts and new developments that require investigations among cultural and demographic differences. Though six of these factors namely convenience, website design, trust, service quality, privacy/security and product quality were selected for the study in this research based on their appearance frequency in other researches suggesting that their impact on purchase decision is of great concern and the relevant they appear in e-store in Nigeria context.

Convenience. Many scholars have observed that online shoppers are concerned about the convenience which online shopping provides which includes ease of use, ease of ordering, ease of payment, speed of delivery and ease of return of defective products (Shen et al., 2006; Gao, 2015). It also pertains to enjoyment of exigencies of time and location, stress and effort of doing things.

Convenience is also viewed in terms of round the clock availability of the web for internet transactions, (Edwar, Diansari & Winawati 2018; Kim et al., 2012) place of transaction, convenience in use of the product, time taken to download and search for information about the product and ease of surfing the internet while searching for product information (Edward, Diansari, & Winawati 2018). Generally, convenience is recognized as a major factor influencing consumer purchase decision (Donthu & Garcia, 1999; Wang et al., 2005) in (Muhammad et al 2015).

Website design quality. Website is defined by Zhang (2011) and Ranganathan and Ganapathy, (2002) as the store house from where customers can search for product or service information through the internet. It is the main point of contact between the consumers and

the e-stores during online transactions. It is therefore important that the e-stores understand the personal characteristics of the consumers when designing their website as accessibility of information also determines consumer purchase decision hence poorly designed, unattractive, not easily accessible website that is difficult to navigate by consumers impacts negatively on consumer purchase decision. Well-designed web sites have the competitive advantage of attracting more customers because consumers form opinions about e-store's products and services based on their experiences while navigating through their website during online shopping. Four major dimensions of ideal and desirable website are identified namely content, design, security and privacy (Ranganathan & Ganapathy (2002) in Zhang 2011). Some other scholars like Ganguly et al. (2010) and Tee Yee Teng (2018) indicate that visual design, content of the information and navigation design are the main components of well-designed website. Hashim (2015) in Gotland, rated website design as the most influential factor on consumer's attitude towards online shopping.

Trust. The concept of trust has been of great concern in any business transaction whether online or offline hence it has been studied across different contexts. Mayer, Davis & Schoorman (1995) as cited by Gao, (2015) defined trust as the reliance on the belief that a trusted party will perform as expected to the benefit of the trusting party without the later having control over the action of the trustee and is measured by the intention of the trusting party to take risk in reliance on the perception towards the trustee behavior. Trust issue appears to be more critical in online shopping because of the virtual nature of the transactions which include payment in advance awaiting delivery, selection of product without physically touching it to assess the quality, divulging of sensitive personal information and transacting with computer with no human face, lopsided knowledge of the e-stores, few tangible and verifiable cues in determining e-stores capabilities and intentions, Many studies confirmed that trust has significant and direct relationship with consumer's online shopping intention, attitude, satisfaction, behavior and purchase decision (Balasubramanian, Konana, & Meron, 2003;Kwek et al., 2011; Meskaran, Ismail, & Shanmugam, 2013; Pavlou, 2003; Tee Yee Teng,2018).

Service quality. Customers expect some level of quality services from e-retailers. In this regard service denotes timely delivery of product, website functionality, efficiency, customer support, customer care and relationships (Parasuraman et al., 1985).It entails responsiveness to service feature, empathy and tangibility of service too. Service is evaluated by comparing the actual performance with expectations. There is a lacuna between the time of paying for the product to be delivered or service to be rendered and delivery unlike the case in offline shopping where the consumer takes immediate delivery of the product. This gap is seen by researchers as a source of concern to the buyer (Kim, 2004). The dimensions of service quality include access, communication, competence, courtesy, credibility, responsiveness, security, reliability, tangibility, and understanding of the customers (Zhang, 2011) and can be further compressed into five dimensions namely, tangibility, empathy, responsiveness, reliability and assurance. Quality service delivery is recognized by many scholars as a major influential factor in purchase decision due to its relationship with consumer's level of satisfaction in internet shopping (Ida, 2016; Hermes 2000) in (Wang, & Katawetawaraks 2011; Puja, 2015; Zhang, 2011).

Privacy/security: concerns relate to fear of fraudulent use of personal information provided by the consumer during online transactions which can result to financial, image and reputation loss (Osio & Orubu, 2018). During online transactions, consumers navigate through the websites of e-stores in search of product information as well as making payment for products purchased and to have access to the websites, some private/personal details of

the consumer are required. This is fraught with security risk and danger of exposing consumer's private details for abuse and use for fraudulent purposes. Consumers are therefore concerned about the safety of e-store's website before attempting to use it for online shopping transactions. This concern is not applicable to developing countries only as some studies conducted in some developed economies also confirm that privacy/security is a major concern and key reasons why consumers avoid online purchases (Balasubramanian et al., 2003; George, 2000; Green et al., 1998; Lee et al., 2001; Parasuraman et al., 2005; Zhan et al.2003). Thinking out of the box, exposure of consumer's residence to dispatch riders who deliver the products is another security concern. This is because fraudulent dispatch riders can arrange with robbers to visit the consumer's residence especially when the product delivered is of high value. It is also observed that the dispatch rider act as syndicate to give information of how wealthy the shopper is. This is a concern and a security worry.

Product quality. Many studies confirmed that product quality and variety play a very prominent role in determining consumer's purchase decision whether online or offline (Mirabi, Akbariyeh & Tahmasebifard, 2015). Due to the fact that online shoppers are not in a position to physically evaluate the quality of products in terms of color, standard, reliability, texture, weight and other features, Lala, et al. (2002) and Destiny, (2012) pointed out that the consumers must therefore rely on information, descriptions, reviews, feedbacks from previous purchasers and users of the product and images provided by the e-stores in their websites for decision making. The more the consumer is aware of the physical condition of a product, its usage and side effects, the more he will be attracted to buy it (Puja, 2015). Product quality is measured in terms of its perceived risk, perceived enjoyment, perceived ease of use and perceived usefulness (Hanmaikyur, 2019). It also includes such attributes as product breadth, product depth, product length, product mix, product assortment and product version. Many scholars also believe that if product quality is better than the alternatives, consumers will opt for it. This suggests that product quality has positive impact on consumer's purchase decision (Amankwah 2016; Arnold, Handelman, & Tiger 1996; Chi et al.2008; Mirabi, Akbariyeh & Tahmasebifard, 2015; Muhammad, Muhammad &Chaudhary 2015). Cumulatively, it behooves us to postulate that these identified shopping factors (convenience, website design, trust, service quality, privacy/securityand product quality) individually correlate and act to influence choice of e-store purchase decision.

Purchase decision. Purchase decision is an aspect of consumer behavior and is seen as a complex activity. It is however not synonymous with purchase behavior, purchase attitude or purchase intention. Some scholars see it as the stage of decision making process where consumers make up their minds to buy products or services (Kotler & Armstrong's 2004; Kore, Lamalewa & Mulyaningsih, 2018). In purchase decision making, consumers are bound to address some fundamental issues. Such issues include searching for what to buy, deciding where to buy (online or offline, the e–store to buy from), when to buy, at what price to buy and buying frequency (Gao, 2015; Smith & Rupp, 2003). According to Baruna et al (2017) purchase decision has five dimensions or stages. These stages are product introduction/ need awareness, information search closely followed by evaluation of available alternatives, decision to either buy or not buy and lastly post purchase behavior otherwise known as dissonance in marketing language. It is pertinent to state here that purchase decision is applicable to both online and offline shopping activities but our focus in this study is purchase decisions during online shopping. Studies show that different variables can be used as measures of purchase decision by different scholars. For instance, Muslikhi, Zainal & Rinihidayati (2017) used repeat purchase, recommendation to others and making payment to measure purchase decision while Amankwah (2016); Laroche et. al. (1996) and MacKenzie et. al. (1986) measured same with future purchases and brand purchase influence. Our

measures of purchase decision are however adapted from the work of Gao (2015) and Shareef et al. (2008a) who used purchase intentions, purchase frequency, overall satisfaction in addition to customer loyalty to measure purchase decision. In this context, purchase intention denotes plans aimed at buying from an online shop before actual purchase (Shim et al. 2001). Purchase frequency measures the regularity of purchase from online stores indicated by number of times consumers purchase from e-stores (Gao 2015). Satisfaction is evaluation or assessment of the perceived or expected performance of the e-store which determines consumer's willingness to make purchase decision. It is customer's contentment with a particular e-stores services based on his experience from previous purchases (Gao, 2015). Post purchase satisfaction increases customer loyalty which is the consumer's favorable disposition towards an online shop due to its performance leading to repeat patronage and positive comments about the store (Anderson, & Srinivasan, 2003; Gao, 2015).

Purchase decision can however be influenced by the consumer's risk bearing propensity.

Consumer's risk-bearing propensity. In real life situation, life and behavior are not linear (straight), they are mediated and explained by individual contextual and demographic variables. It therefore follows that the relationship which exists between online shopping factors and consumer purchase decision can be influenced by personal characteristics of the consumer. Though consumer's personal characteristics include age, income level, social status, educational level, internet expertise and risk-bearing propensity. In this study however, risk-bearing propensity is used to moderate the relationship which exists between online shopping factors and purchase decision of the consumer with focus on convenience, website design, trust, service quality, privacy/security and product quality.

It appears that Nigerians view online shopping as a risky venture due to the absence of physical interactions between the buyer and the seller, non-physical examination of the product to be bought, provision of personal and sensitive information through the web and payment for the products in advance for delivery at a later date or time and our perceived lack of trust for others among others. If this suspicion is right it then implies that only risk takers would see online shopping as regular shopping option hence the need to investigate the influence which individual's risk bearing propensity has on the relationship which exists between the two constructs. Risk bearing propensity can be described as the extent to which one is prepared to take risk in anticipation of benefits or to achieve a desired goal. It shows clearly that level of risk bearing propensity vary from individual. Researches on online related businesses confirm that consumer's usage of the internet for online transactions is a function of his risk-bearing propensity (Gao, 2015). This implies that the higher the risk bearing propensity of the consumer, the more he is likely to adopt internet shopping. Understandably therefore consumers who are risk averse (risk dodgers) are not likely to consider online shopping as an active alternative. Other studies have also indicated that risk bearing propensities of consumers have affected their decision to do online transactions (Gao, 2015; Hanmaikyur, 2019; Li & Zhang, 2002; Mohammed, 2012). It is however the belief of some scholars that understanding internet technology and the processes involved in online transactions reduces fears and increases risk bearing propensity (Chang & Chen 2008; Gao, 2015; Smith& Sivakumar, 2004).

Mohammed, (2012) enumerated the various types of risk associated with internet shopping as postulated by some scholars. They include, social, financial, performance, physical, time and psychological risk. Social risk is concerned with the acceptability or approval of the product purchased by family and friends, financial risk is about financial losses associated with internet transactions while physical risk is concerned with the fear that the purchased product may be dangerous. Performance risk relates to the inability of the product to perform as

expected, time risk is concerned with stress and time wasting while waiting for either product delivery or returning of defective products. The last category of risk as identified by the scholars is psychological risk. This is the risk that consumer's peace of mind may be negatively affected by defective product. (Dowling & Staelin, 1994; Kim & Lernon, 2000) Following from Gao, (2015) and other submissions, it would be difficult to predict consumers' purchase behavior without taking their risk-bearing propensity into consideration. To remain in business therefore, it is important for online vendors in Nigeria to know the risk bearing propensity of consumers and its effect on purchase decision as this will help them in planning their marketing program. This leads us to hypothesize that consumer risk bearing propensity does not significantly influence the relationship which exists between online shopping factors (convenience, website design, trust, service quality, privacy/security and product quality) and consumer purchase decision of e-stores in Nigeria. The measure of variables of risk bearing propensity of the consumer and shopping factors were sourced from extant literature (Gao, 2015; Muhammad et al., 2015).

3.0 Methodology

This study adopted non-experimental and cross sectional research designs. The target population comprised staffs of the 18 Deposit Money Banks (DMBs) operating in Nigeria as at the time of this study. Our accessible population is 2112 consisting of branch managers, relationship managers and heads of customer service of the 704 branches of these banks in South-South region. The choice of the respondents is that they have busy work schedules and hardly have time for physical shopping and are very conversant with online shopping and use same frequently. Sample size of 336 was determined using Taro Yamen's formula and cross checked with Krejcie and Morgan table. The Bowley's 1964 population allocation formula was used in obtaining the individual bank's sample allocation. Out of the 340 questionnaires that were distributed, 291 were returned but only 258 copies were found valid and therefore used for descriptive and inferential analyses.

Probability simple random sampling and stratified sampling were used with the aid of random numbers to ensure that each of the bank's branches (the strata) has equal opportunity of being selected. Structured questionnaire with the five point Likert type scale of Strongly Agree to Strongly Disagree of one (1) point were used to generate data from respondents for analyses.

Pilot test was carried out to determine reliability of the study instrument using Cronbach's Alpha coefficient. The result of the Reliability Test is shown on Table 1.0 below:

Table 1. Reliability Tests Results

Variable	Cronbach's Alpha coefficient	Conclusion
Convenience	0.899	Reliable
Website design	0.792	Reliable
Trust	0.813	Reliable
Service quality	0.741	Reliable
Privacy and security	0.742	Reliable
Product quality	0.781	Reliable
Consumer purchase decision	0.811	Reliable
Risk bearing propensity	0.738	Reliable
Combination off all variables	0.867	Reliable

Source: Researcher, 2020

The study instrument was also validated. This was done in order to confirm that the instrument measures what it should measure. Results of the validity tests are shown below.

Table 2: Factor Matrix showing Discriminant Validity

		PS	SQ	TRUST	WD	CONV	PD	PQ	RISK
	PS	**0.707**							
	SQ	0.046	**0.756**						
	TRUST	.002	0.530	**0.730**					
	WD	.008	0.552	0.563	**0.805**				
	CONV	0.07	0.089	.002	.015	**0.805**			
	PD	.001	0.479	0.537	0.391	0.052	**0.745**		
	PQ	.005	0.023	.000	.010	.003	.000	**0.722**	
	RISK	.006	0.018	0.064	.000	.003	0.028	0.038	**0.727**

The diagonal items on table 2 above shows the square root of AVE's, and the off diagonal items represent squared correlation between constructs.

As seen from the factor correlation matrix on table 2 above, the lowest AVE value was 0.707 (Privacy/security construct), which exceeded the largest squared correlation between any pair of constructs (0.563, which is for Trust and Website Design). This analysis showed that the shared variance between factors were lower than the AVE's of the individual factors, which confirmed discriminant validity.

Table 3: Summary of validity test results.

S/NO	CONSTRUCT	AVE'S	CRs	REMARKS
1	PS	**0.500**	**0.832**	Valid
2	SQ	**0.571**	**0.867**	Valid
3	TRUST	**0.533**	**0.849**	Valid
4	WD	**0.521**	**0.864**	Valid
5	CONV	**0.648**	**0.916**	Valid
6	PD	**0.555**	**0.861**	Valid
7	PQ	**0.626**	**0.868**	Valid
8	RISK	**0.528**	**0.842**	Valid

Source: Researcher 2020.

From the results shown above, on table 3, all the AVE were above 0.500, exceeding the threshold of 0.50 as recommended by Fornell & Larcker (1981). Thus convergent validity of the measuring instrument was established.

Also, CRs depicted were all above the recommended minimum value of 0.700. This also confirmed the composite reliability of the instrument used in the study

3.1 Methods of Data Analysis: Data collected for this study was subjected to analyses with the aid of IBM Statistical Package for Social Sciences (SPSS) Software version 23.0.

DESCRIPTIVE STATISTICS
Demographic Data of Respondents
From the survey conducted, the following demographic data of the respondents (Gender, Age and Educational Qualification) were analyzed and the results shown below.

Table 4: Distribution of the Respondents Gender

GENDER				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	81	31.4	31.4	31.4
	FEMALE	177	68.6	68.6	100.0
	Total	258	100.0	100.0	

Analysis: As shown above, female respondents are more in number (177 respondents), representing 68.6% of the entire respondents, while the male respondents are 81, which is 31.4 % of our total respondents. This implies that more females shop online in Nigeria.

Table 5: Distribution of the Respondents Age

AGE				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-28 YRS	81	31.4	31.4	31.4
	29-39 YRS	153	59.3	59.3	90.7
	40-50 YRS	24	9.3	9.3	100.0
	Total	258	100.0	100.0	

Analysis: Table 5 above shows that majority of those respondents who took part in the survey by completing our questionnaire fall within the age of 29-39 years. There are 153 respondents in this category, representing 59.3% of our total respondents. None of the respondents is

above 60 years implying that younger and middle aged Nigerians are into online shopping more than the older ones.

Table 6: Distribution of the Respondents Educational Qualifications

EDUCATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	WASC/GCE	8	3.1	3.1	3.1
	NCE/HND/BSC	202	78.3	78.3	81.4
	MBA/MSC	48	18.6	18.6	100.0
	Total	258	100.0	100.0	

Analysis: Table 6 above shows that majority of the respondents (78.3%) are first degree holders of either NCE, HND or BSC. They are therefore in position to understand the issues being discussed hence they are eminently qualified to serve as respondents in this study.

Furthermore, analysis of table 7 (distribution of respondents' purchase frequency) below shows that greater number of the respondents 153 representing 59.3 of our respondents occasionally shop online in Nigeria. This is the exact percentage of age category of our respondents who most patronize e-stores in Nigeria. This clearly points out that online shopping is still not a popular form of shopping in Nigeria.

Table 7: Distribution of the Respondents Purchase Frequency

PURCHASE FREQUENCY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	OTHERS	24	9.3	9.3	9.3
	OCCASIONALLY	153	59.3	59.3	68.6
	MONTHLY	49	19.0	19.0	87.6
	WEEKLY	16	6.2	6.2	93.8
	DAILY	16	6.2	6.2	100.0
	Total	258	100.0	100.0	

INFERENTIAL ANALYSES.

This section presents results of the hypothesis test conducted to determine the effect which risk bearing propensity of the consumer has on the relationship between the six online shopping factors and consumer purchase decision of e-stores in Nigeria.

Research Hypothesis: Consumer risk bearing propensity does not significantly moderate the relationship existing between online shopping factors and consumers purchase decisions of e-stores in Nigeria.

We wish to start these analyses by throwing more light on moderation. Generally speaking, a moderator is any variable that has impact on the association or relationship between two or more dependent and independent variables. The impact which the moderator has on the association or relationship is termed moderation (Dawson, 2014).

Moderation implies an interaction effect, which occurs when the introduction of a moderating variable changes the direction or magnitude of the relationship between two variables. According to Elite Research (2013), a moderation effect may be such that an increase in the moderator would also increase the effect which the independent variable has on the dependent or a situation where increasing the moderator would decrease the effect which the

independent variable has on the dependent. In some cases, it may be that increasing the moderator would reverse the effect which the independent variable has on the dependent. Moderators are used in the following instances:

1. When the findings by earlier studies about relationships between two or more variables is inconsistent or weak (Memon et al., 2019).
2. When testing for new theoretical insights (Andersson et al., 2014).

This study investigated the role which consumer's risk bearing propensity plays on the relationship existing between online shopping factors and consumer purchase decision. To achieve this, a hierarchical multiple regression was used to assess the effects of the moderating variable (consumer's risk bearing propensity) on the relationship which exists between online shopping factors and consumer purchase decision. The test for moderation requires looking at the interaction effect between the independent variables (online shopping factors) and the moderating variable (consumer's risk bearing propensity) and checking whether or not such an effect is significant in predicting purchase decision. The study was guided by the Whisman and McClelland (2005) three-step or model hierarchical regression approach for test of moderation.

Model 1. Regress the independent variables (online shopping factors) on the dependent (consumer purchase decision)

Model 2. Moderating variable- risk bearing propensity and online shopping factors were included together in the Regression to find their effect on purchase decision.

Model 3. The interaction variable (online shopping factors * risk bearing propensity) *-that is sum of the results of multiplying each of the online shopping factors with the moderating variable*, was included in the model as an independent variable in addition to online shopping factors and risk bearing propensity.

Table 8: Model Summary: Moderating effect of risk bearing propensity of the consumer on the relationship between online shopping factors and consumer purchase decision.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.716[a]	.512	.500	2.00138	.512	43.899	6	251	.000
2	.725[b]	.525	.512	1.97784	.013	7.011	1	250	.009
3	.782[c]	.612	.591	1.81074	.086	9.045	6	244	.000

a. Predictors: (Constant), PROD_QUAL, TRUST, PS, CONV, SQ, WD
b. Predictors: (Constant), PROD_QUAL, TRUST, PS, CONV, SQ, WD, RISK
c. Predictors: (Constant), PROD_QUAL, TRUST, PS, CONV, SQ, WD, RISK, RISK_X_PQUAL, RISK_x_PS, RISK_x_TRUST, RISK_X_WD, RISK_x_CONV, RISK_x_SQ.

Analysis

Results in table 8 shows that R2 =0.512 and adjusted R^2= 0.500 for **Model I.** This indicates that the six online shopping factors being studied accounted for 51.2% variation in purchase decision of online shoppers and were significant in explaining consumer purchase decision in Nigeria. With the inclusion of risk bearing propensity as a moderator in **Model 2**, there was an increase R^2 change of 0.013 or 1.3 % from 0.512 to 0.525. Hence online shopping factors and consumers risk bearing propensity explains 52.5 % of the variation observed in purchase decisions of online shoppers.

 In **Model 3** when the interaction terms {each of the (total not items) of online shopping factors multiplied by risk bearing propensity (total not items)} that is (online shopping factors

* risk bearing propensity) were introduced, the interaction variable led to R2 change of 0.087 from 0.525 to 0.612 (8.7%). This signifies a substantial improvement in the explanatory power of the model. The interaction of the moderator and online shopping factors magnifies the change in consumer purchase decision.

Table 9: ANOVA on moderating effects [of] **risk bearing propensity of consumer on the relationship existing between online shopping factors and consumer purchase decision.**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1055.035	6	175.839	43.899	.000[b]
	Residual	1005.384	251	4.006		
	Total	2060.419	257			
2	Regression	1082.460	7	154.637	39.531	.000[c]
	Residual	977.959	250	3.912		
	Total	2060.419	257			
3	Regression	1260.394	13	96.953	29.570	.000[d]
	Residual	800.024	244	3.279		
	Total	2060.419	257			

a. Dependent Variable: PD
b. Predictors: (Constant), PROD_QUAL, TRUST, PS, CONV, SQ, WD
c. Predictors: (Constant), PROD_QUAL, TRUST, PS, CONV, SQ, WD, RISK
d. Predictors: (Constant), PROD_QUAL, TRUST, PS, CONV, SQ, WD, RISK, RISK_X_PQUAL,
RISK_x_PS, RISK_x_TRUST, RISK_x_SQ, RISK_x_CONV, RISK_x_WD

Table 9 shows the statistics and the level of significance, for the three models. All of them have p-values 0.000<0.05 indicating a significant effect of the moderating variable on the relationship between online shopping factors and consumer purchase decision.

Decision. It was expected and hypothesized that risk bearing propensity would not moderate the relationship existing between online shopping and purchase decision. However, our results shown above have demonstrated that risk bearing propensity of the consumer is a significant moderator of the relationship which exists between online shopping factors and consumer purchase decisions, the study cannot accept the Null hypothesis which states that risk bearing propensity of the consumer does not significantly moderate the relationship between online shopping factors and consumers purchase decisions. Therefore, the study concludes that risk bearing propensity of the consumers is a significant moderator of the relationship existing between online shopping factors and consumer purchase decisions.

Discussion

It was expected that the identified shopping factors (convenience, website design, trust, service quality, privacy/security and product quality) would not significantly relate to purchase decision.

However, it was not supported, it further showed that privacy, product quality, trust, website design, service quality and convenience, all significantly relate and act as influencer of purchase decision. This supports previous work of Muhammad (2015). It further explains that when bankers make purchase choice, they often consider these e-shopping factors.

Above analyses suggest that risk bearing propensity has significant and direct moderating effect between online shopping factors and consumer purchase decision. This research outcome agrees with the opinion of Sholtz (2001), that consumers' differing risk-bearing propensity determines the extent of trust they place in online transaction. Thus, a consumer with low risk-bearing propensity would most likely want to inspect merchandise before purchase and would also be reluctant to provide personal and sensitive information while

surfing in order to avoid any post-purchase regret. Such consumers would rather prefer to shop offline where they could touch and feel the offerings before buying them. This means that people who are risk averse are likely to be skeptical about online shopping more than risk takers.

Generally, risk-averse consumers usually feel threatened and uncomfortable with ambiguous or unknown situations and therefore avoid uncertainties (Baker and Carson, 2011; Curley et al. 1986) thus their tendency to avoid online shopping is higher (Yeh *et al*., 2012b). This demonstrates how an individual's risk-bearing propensity tends to moderate the relationship between online shopping factors and purchase decision. Thus, consumer's risk bearing propensity plays an important role and seems to matter more to this individual than any other shopping factor.

In the same regard, if a consumer is a risk-taker, there is a tendency for him to tolerate risks in online environments and tends to trust the quality of the product offered by the online vendor and purchase the product without any extra quality inspection. In this situation, the high risk-bearing attitude would tend to make him purchase from an online store and develop loyal relationship with the store. Earlier study by Gao (2015) on understanding of consumer online shopping behavior with focus on transaction costs using consumer risk bearing propensity as a moderating variable is in consonance with the finding of this study. Other scholars who used risk bearing propensity as a variable to arrive at same conclusion regarding the effects on online shopping are Hanmaikyur (2019) and Li & Zhang (2002). There may be other personal characteristics of the consumer that can moderate the relationship between the variables, online shopping factors and consumer purchase decision. This study therefore suggests that the effects of other personal characteristics of the consumer such as age, income level, social status, educational level and internet expertise on the relationship existing between online shopping factors and consumer purchase decision should be explored in further researches as knowledge of the effects will equip online shopping vendors with appropriate marketing strategy.

5.0 Conclusion and Recommendations.
5.1 Conclusion
Identified shopping factors namely convenience, website design, trust, service quality, privacy/security and product quality influence and are drivers of purchase decision. Mainly, consumer risk bearing propensity affects the relationship between the variables -online shopping factors and consumer purchase decision. A consumer who is risk averse will be more skeptical to shop online since he would have no opportunity of inspecting and physically examining the product before purchase. He would also be afraid to divulge his personal information which website browsing and online payments require. Conversely, a risk taker would not mind and would still resort to online shopping, those requirements notwithstanding. Conclusively, consumer risk bearing propensity influence and affect the nature of relationship between e-shopping factors and purchase decision.

5.2 Recommendations
Online vendors should be sensitive to security issues that portray online shopping as risky venture such as the risk of fraud or financial loss from use of their credit cards during the online transactions. They should adopt encryption and security purchase certificates and assure consumers that online transactions are risk free.

Additionally, consumers should be provided with full information about their legal rights, guarantee and warranty and liabilities for any losses arising from the identified shopping factors (convenience, website design, trust, service quality, privacy/security and product

quality) if a fraudulent transaction occurs. This information can help to convince and give them reasons to trust online vendors when giving any personal information.

Online vendors should allocate adequate resources to risk reduction marketing programs and should be transparent in their relationship with the online shoppers such that these shoppers will not regard online shopping as risk taking.

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