Gusau Journal of Economics and Development Studies (GUJEDS), Vol 4 (1), December, 2023
ISSN: 3027-1126 (Online); 2786-9695 (Online)
©Authors
DOI: https://doi.org/10.57233/gujeds.v4i1.10

ROLE OF TRUST ON THE DETERMINANTS OF CONSUMER ONLINE BUYING BEHAVIOUR AMONG DISTANCE LEARNING CENTRE (DLC) POSTGRADUATE (PG) STUDENTS IN NIGERIA

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ABSTRACT

This study aimed to investigate the relationship between perceived risk and social influence on consumer online buying behavior among postgraduate students in Ahmadu Bello University (ABU), Zaria. The study also explored the moderating effect of trust on this relationship. The sample size was determined using simple random sampling, and data was collected through a cross-sectional research design. 397 useful responses were used for the main analysis, and SmartPLS 3 was used to analyze the data and test the study's hypotheses. In the direct relationship, the study found that perceived risk and social influence had insignificant relationships with online buying behavior. Additionally, the study found that trust had a significant moderating effect on the relationship between perceived risk and social influence on online buying behavior. online retailers should make efforts to build trust with their customers to increase online buying behaviour. One way to build trust is to ensure customer privacy and security. Online retailers should take measures to protect their customers' personal information and ensure secure transactions to increase trust in their website.

1.0 Introduction

The advancement in new technology has commenced a new era of electronic commerce known as e-commerce, which is viewed as the trading of information, goods and services mostly via the internet, leading to the growth of online shopping or e-shopping (Ekwueme & Nehemiah, 2017). Information communication technology has made a tremendous transformation from the traditional way of shopping to the modern online way of shopping via the internet using several social media networks and different websites (Ekwueme & Nehemiah, 2017).

Online shopping is defined as the notion of buying and selling goods over the internet. From the viewpoint of the seller, it is the attempt on the seller's part to attract and persuade the prospect to conduct the purchase decision-making process and

ensure satisfaction and loyalty. From the viewpoint of the buyer, online purchase behaviour is the degree to which consumers access, browse, shop transact and repeat the behaviour, Sahney, Ghosh, and Shrivastava, (2013) have seen a change in the consumers' mindset of purchase made from a physical store to online buying, the industry has witnessed the ever-increasing volumes of online transactions. Despite the growth of online shopping in Nigeria, the penetration rate is low as a result of the risk associated with online buying (Nasidi et al., 2021). For most Nigerians, the problem of transfers or sending money to an unknown entity you have never seen or encountered physically is strange. This is bound to be terrible for online stores in the country (Nwankwo, Kanyangale & Abugu, 2019) and hence, the significance of this number to the domain of behavioural intention research cannot be overemphasized. Customers are driven by functional and hedonic motives, they like to search the internet and search products and services, they often find themselves with a sense of discomfort, apprehension and skepticism when it comes down to the actual physical and monetary exchange (Sahney, Ghosh & Shrivastava, 2013). The basic underlying issue here is the lack of trust, especially with regard to financial and personal information. Trust is a feeling of mutual acceptance between two parties; it develops out of continuous physical interaction and leads to long-term acceptance and commitment. So, the important issue that needs to be addressed is ''trust'' among the seller-buyer, the lack of which often acts as an impediment in the trial and adoption of the virtual market concept (Lee & Turban, 2001).

Although, online buying has become an important part of individuals life especially the university students, there are numerous problems and challenges encountered by online retailers such as managing the uncertainty of technological problems, solving the logistical difficulties of order execution and delivery, reducing consumers fears regarding safety and privacy breaches, building and developing trust amongst others (Vijayasarathy, 2003) and competition from the rivals. Therefore, it becomes more difficult for online retailers to attract and retain consumers who would engage in online shopping and which makes research in this area to become scarce.

In previous studies, postgraduate students have been found to be frequent users of technology and likely to buy products online and participate in online purchasing, as a

result, postgraduate students were chosen as the target sample (Delafrooz, Paim, Haron, Sidin, & Khatibi, 2009). The reason for choosing these categories was informed by their perceived level of education and knowledge of the internet (Inegbedion et al., 2016). In addition, Bruin & Lawrence, (2000) stated that today's university students represent a significant part of the online buying consumers and a long-term potential market. Similarly, Nwankwo et al., (2019) posits that university students are a potential market for Nigerian businesses using the online channel to shop for goods and services.

In view of the gaps highlighted above, the current study seeks to examine the effect of perceived risk, and social influence as determinants of consumer online buying behaviour. The study aims at investigating the role of trust in enhancing the effect of the determinants of consumer online buying behaviour in Nigeria.

This study intends to trust as a moderating factor of perceived risk and social influence on consumer online buying behaviour.

Based on the highlighted problems, the study questions were raised as to what extent does perceived risk and social influence affects consumer online buying behaviour among Postgraduate students in ABU Zaria? And to what extent does trust moderates the effect of perceived risk and social influence on consumer online buying behaviour?

The main objective of this research is to examine the moderating effect of trust on perceived risks and social influence on consumer online buying behaviour. The specific objectives are to; assess the extent of the effect of perceived risk and social influence on consumer online buying behaviour among Postgraduate students in ABU Zaria and examine the extent of how trust moderates the effect between perceived risk, social influence and consumer online buying behaviour among Postgraduate students in ABU Zaria.

In line with the research objectives, the following hypotheses were used as perceived risk and social influence have no significant relationship with consumer online buying behavior. Trust has no significant moderating effect on perceived risk and social influence on consumer online buying behavior.

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Concept of Consumer Online Buying Behaviour

Consumer buying behaviour refers to what persuade customers toward deciding to purchase a product or service (Emamdin et al., 2020). According to Lake, (2009), consumer behaviour is when an individual realizes that he has a need, the psychological process starts from the consumer decision process. Through this process, the individual sets out to find ways to fulfil the need he has identified. That process includes the individual's thoughts, feelings, and behaviour. When the process is complete, the consumer is faced with the task of analyzing and digesting all the information, which determines the actions he will take to fulfil the need.

Online buying which is otherwise known as online shopping involves a user accessing internet to search, select, buy, use, and dispose of goods and services, in satisfying his or her needs and wants (Shoki et al., 2014). Internet or web browser is a mechanism that people use to buy and sell goods and services to the target customers. In this present period, devices, such as desktop computers, laptops, tablet computers and even smartphones are gadgets that are found by most individuals which whenever connected to the internet can make a person to have access to a web site, hence, can shop online at his/her convenience (Sarkar & Lahiri, 2018).

2.2 Concept of Perceived Risk

One of the key elements in online buying behaviour is risk (Pappas, 2016). Risk is defined as an attribute of an alternative decision reflecting the variance of its possible outcomes (Moshrefjavadi et al., 2012). As Dholakia, (2001) suggests, perceived risk can be involved in all purchase decisions, particularly when we think that the outcome is uncertain. In online shopping, there are consumers with low risk avoidance profile in which they engage themselves into buying through the internet rather than using the traditional means to purchase their products (Juan, 1999).

2.3 Concept of Social Influence

Social Influence was considered to be most important driver for online shopping in recent studies by (Jin, Lim et al., 2014). External influence triggers consumer to shop online and it is found to be high among Australian people compared to China(Vivian, 2010). Lu, (2014) states that positive informational social influence drives consumer to shop online. According to Tandon, Kiran, and sah, (2016), social influence is seen as the degree to which an individual perceives that others believe he or she should use the system.

2.4 Concept of Trust as a Moderating Variable

Mayer et al., (1995) defined trust as the readiness of a party to be vulnerable to the actions of another party based on the anticipation that the other will execute a particular action important to the trust or, irrespective of the ability to observe or control that other party. Pavlou, (2003) stated that trust in e-commerce is the belief that permits consumers to willingly become vulnerable to Web retailers after having taken the retailers characteristics into consideration. He further stated that web vendors have a major role to play in encouraging trust in the infrastructure by creating safe and secure online shopping atmosphere. Schurr & Ozanne, (1985) defined trust as one's assurance on the exchange party's competence and readiness to set up the business' adherence to the relationship norms, and maintaining promises.

2.5 Review of Empirical Studies

2.5.1 Perceived Risk and Consumer Online Buying Behaviour

Ekwueme and Nehemiah, (2017); Fortes & Rita, (2016);Ramesh & Kumar, (2019);(Davari et al., 2016); Moshrefjavadi et al., (2012); Muda et al., (2016) examined perceived risk as factor that influence consumer online buying behavior. Questionnaire was used to collect data from respondents. Data were analysed using regression analysis and PLS-SEM. Results found positive and others found negative relationship on consumer online buying behavior. However, results of these studies show inconsistencies as to some studies showing positive relationship and others negative relationship.

2.5.2 Social Influence and Consumer Online Buying Behavior

Driediger & Bhatiasevi, (2019); Shweta & Deepak, (2018); Oloveze et al., (2022);Singh et al., (2020) studied social influence also known as subjective norms as one of the factors that influence consumer online buying behavior. Questionnaires were used to collect data from respondents. This study applied structural equation modeling (SEM) to empirically test the research model. SEM is a very useful statistical procedure in surveys using cross-sectional data, combining multiple regression and factor analysis to evaluate the measurement instrument and test the hypotheses. The results found a statistical positive relationship

in some studies whereas, others showed a negative relationship.

2.5.3 Trust and Consumer Online Buying Behavior

Le, & Hoang, (2020);Rehman et al., (2019); Lu et al., (2016);Kadir et al., (2017);Swarnakar et al., (2016) Park et al., (2019) examined trust as a factor that influence consumer online buying behavior. The studies employ logistic regression model, chi square test and PLS-SEM for the analysis. Results found significant relationship in studies such as Singh et al., (2020; Park et al., 2019).

2.6 Theoretical Framework

Theoretical frameworks that will guide the study is the theory of planned behavior (TPB) which will be relevant to this study. This theory is a classical theory used by researchers to explain human behaviour towards adoption of information technologies (Singh et al., 2020). The ability of TPB to predict human behaviour has led to its application in several research fields, including online retailing (Pappas, 2016), since it is considered to be one of the most widely used models for the explanation and prediction of individual behavioural intention and acceptance of Information Technology (Usman & Kumar, 2020).

2.6.1 Theory of Planned Behavior (TPB)

Theory of Planned Behaviour (TPB) explains behaviours over which individuals have incomplete voluntary control (Ajzen, 1991). Intentions to perform behaviours of different kinds can be predicted with high accuracy from attitudes toward the behaviour, subjective norms, and perceived behavioural control; and these intentions, together with perceptions of behavioural control, account for considerable variance in actual behaviour (Fishbein & Ajzen, 1975). Attitude towards a behaviour and subjective norm about engaging in a behaviour are supposed to influence intention. Attitude depicts an individual's feelings, inclination or disinclination towards performing a behaviour. A prospective technology user's overall attitudes toward using a given technology based system (that is, internet) or procedure represents major determinants as to whether or not he/she will ultimately use the system. Subjective norms reveal the individual's perceptions of the influence of significant others (example, family, friends, peers, etc.). Others' opinions about online shopping as well as online reviews will

influence online shopping behaviour. TPB additionally includes perceived behaviour control over engaging in behaviours, suggesting that human behavioural decision-making is affected by the consumer's ability to perform the behaviour (Ajzen, 1991).

2.7 Conceptual Framework

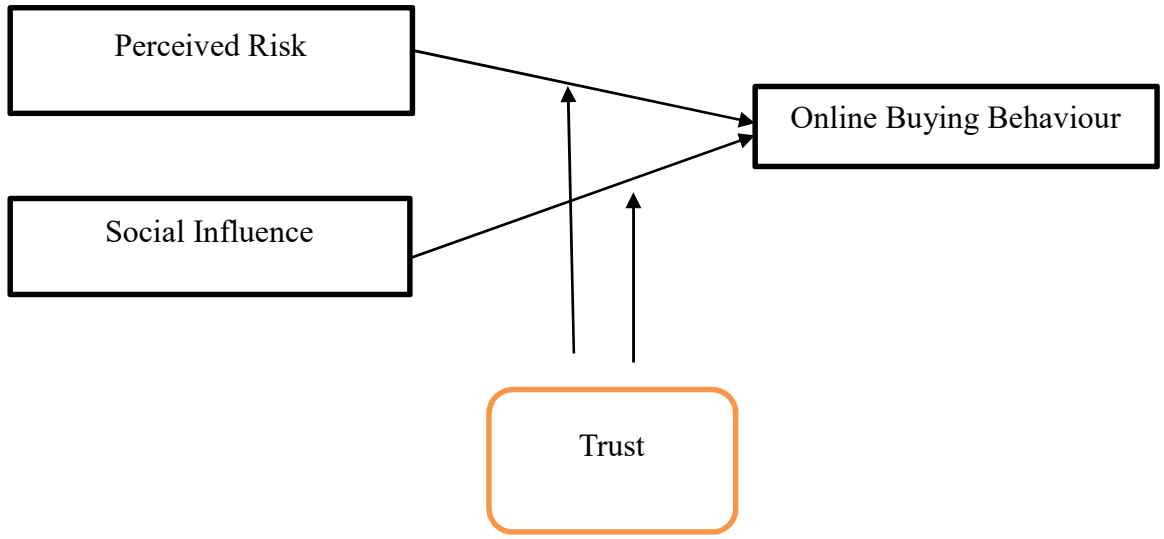


Figure 2.1Research Framework

The figure above, aims at investigating the empirical effect of perceived risk, social influence, and consumer online buying behaviour through the moderation of trust. This relationship is justified by the TPB as discussed.

3.0 RESEARCH METHODOLOGY

The study adopted quantitative research design using a cross sectional survey method. The population of this study are the postgraduate students of Distance Learning Centre (DLC), Ahmadu Bello University (ABU) Zaria. The students include those in Postgraduate Diploma, Masters (Professional) programmes in the University, as these are the only programmes enrolled in DLC. The total number of students for the

courses are 3,765 that registered for the 2021/2022 session (DLC ICT Unit ABU Zaria).

The sample size of this study was determined using Yamane (1973) formula with 95% confidential level at 5% level of precision from the 8 course. Therefore, the calculation of sample size was given in the following equation. n = N / 1+N (e)2 Where n = sample size N = population e = error of the sampling or level of significant Thus, N = 3,765, e = 0.05 and n =? n= 3,765/1+3,765(0.05)2 n= 3,765/10.4125 n=362. sample size was increased by 40 percent to cover up for the missing questionnaire. This will also take care of other unavoidable errors such as incorrect filling and failure of some respondents to return questionnaire (Isreal, 2013). Therefore, in this study the number of questionnaire was increased by 40 percent (145) which makes the total questionnaire to be 507.

This study employed probability sampling method because in a probability sampling method an element in the population has the privilege of having equal chance of being selected in the sampling process (Asika, 2010). Systematic sampling technique was used to select respondents in each postgraduate course. The list of the students in each course serves as sampling frame. The proportionate sample size allocated to each course was used to get the sampling interval (K). K= sampling frame/allocated sample size. The first respondent from each course was randomly selected using simple random sampling technique by balloting, and then subsequent selection was based on sampling interval.

The questionnaire was distributed to the respondents that offer all the PG courses in DLC, A. B. U. Zaria. The apportionment of questionnaires was be based on the number of respondents in each course. Primary data was acquired from research participants through the use of administered online survey questionnaire conducted with the assistance of research assistants. It is divided into two major sections in the survey questionnaire. A 5-point Likert-type scale was used, with numbers ranging from '1' for "Strongly Disagree" to '5' for "Strongly Agree. PLS SEM 3.2.7 was used for data analysis

4.0 Data Presentation and Analysis

The data were analyzed using SPSS and Smart PLS3.2.9. A total of 507 questionnaire were distributed among the sample population and 457 were returned, which constitutes a response rate of 84.5%.

However, after reviewing the returned questionnaires, only 397 were found usable for analysis, accounting for 73.4% of the total distributed questionnaires. The remaining 60 questionnaires, representing 11.1 % of the total, were removed from the analysis as they were considered outliers (Hair, Anderson, Tatham, & Black, 1998), and incomplete.

4.1 The PLS – SEM Path Modelling

4.1.1 Assessment of Measurement Model

In order to evaluate the measurement model of a study, it is crucial to assess the reliability of individual items measuring each latent construct, as well as their internal consistency reliability (i.e., construct reliability), discriminant validity, and convergent validity (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014; Hair, Black, Babin, & Anderson, 2019; Henseler, Ringle, & Sinkovics, 2009; Henseler, Ringle, & Sarstedt, 2015), as presented below.

Table 4.1 Measurement Model: Reliability and Convergent Validity of the Variables

Construct	Items	CR	AVE	
Online Buying Behaviour		0.854	0.543	OBB2
0.600			OBB3	0.722
OBB4	0.848			OBB5
0.783			OBB7	0.707
Perceived Risk		0.803	0.578	PR3
0.711			PR6	0.736
PR7	0.828			
Social Influence		0.791	0.565	SI2
0.765			SI3	0.892
SI5	0.563			
Trust		0.935	0.706	TR2
0.809			TR3	0.856
TR4	0.907			TR5
0.884			TR6	0.844
TR7	0.730			

As can be seen from the Table 4.1, apart from the items that were removed due to some measurement issues, all other indicators have loadings of 0.60 and above except item SI5

that has 0.563. Even though this item has a loading below 0.60, it was maintained because it is already above the critical level of 0.40, and its removal would not bring about any significant change to either AVE or CR. Therefore, based on the criterion given by Hair et al. (2017), all the remaining items are reliable to measure their respective reflective latent constructs.

Convergent validity is the extent to which the construct converges in order to explain the variance of its items (Hair et al., 2014). Therefore, the criteria for measuring CV are the average variance extracted (AVE) for all the items for each construct (Hair et al., 2017). Under this, the minimum accepted AVE is 0.5 or higher (Hair et al., 2020). That is an AVE of 0.5 or higher indicates that the construct explains 50% or more of the variance of the items that make up the construct (Hair et al., 2017).

4.1.2 Discriminant validity

For assessing discriminant validity (Hair et al., 2017), this study used the Fornell-Lacker criterion, which states that a reflective construct has discriminant validity if the square root of its average variance extracted (AVE) is greater than its correlation with any other reflective construct in the same model (Fornell & Larcker, 1981). The logic behind this method is that if a reflective construct's AVE is greater than its correlation with other constructs, it suggests that the construct shares more variance with its associated indicators than with any other construct in the model, making it distinct from other constructs (Hair et al., 2017).

Table 4.2 Discriminant validity using Fornell and Lacker

	OBB	PR	SI	Trust
OBB	0.697			
PR	-0.150	0.755		
SI	0.487	-0.104	0.571	
Trust	0.393	-0.263	0.459	0.841

While Fornell, & Larcker, (1981) criteria have been commonly used to establish the discriminant validity (DV) of constructs, Henseler et al. (2015) have found that this criterion is not effective when the indicator loadings on a construct vary only slightly. Instead, Henseler et al. suggest using the Heterotrait-Monotrait (HTMT) ratio of correlations to assess DV. This method compares the mean of item correlations against the construct correlation, and has been shown to outperform both cross-loadings and the Fornell and Lacker criteria (Hair et al., 2017). The threshold values for establishing HTMT should be less than or equal to 0.85 (Henseler et al., 2015) or 0.90

(Franke & Sarstedt, 2019). Table 4.3 shows that DV is established since the serial mean of all the constructs is below the lower benchmark of 0.85.

Table 4.3 Discriminant Validity using HTMT ratio

	OBB	PR	SI	Trust
OBB				
PR	0.232			
SI	0.381	0.171		
Trust	0.453	0.348	0.351	

Table 4.3 presents the results indicating that all constructs have satisfactorily passed the HTMT criteria. This establishes that each construct that measures the research variables is a unique subject, indicating that the requirements for discriminant validity have been met for all the constructs, and it is suitable to proceed with the test of hypotheses.

4.2 Assessment of Structural Model

This includes testing the research hypotheses to determine R2 and effect size (f2). As described in the methodology section, bootstrap analysis was used to analyze both the main and moderating hypotheses.

The standard bootstrapping procedure was employed using 5000 bootstrap samples for 397 cases to assess the significance of the path coefficients of both direct and moderating relationships (Hair et al., 2014; Hair et al., 2011; Hair et al., 2012; Henseler et al., 2009). The results of this analysis are presented in Table 4.4.

Table 4.4 Size and Significance of the Path Coefficients of Direct Relationships

Hypotheses	Beta	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
H_{01} - PR -> OBB	-0.041	0.059	0.313	0.754	Accepted
H_{02} - SI -> OBB	0.043	0.069	0.434	0.664	Accepted

Source: Computed and Compiled by Author, 2023
***P value <0.01, **P value<0.05 *P-value<0.1

Table 4.4 reveals that the results of the statistical analysis indicate that perceived risk is found to have a negative and insignificant relationship with OBB (β= 0.041, p>0.05). On the other hand, statistical analysis indicates a positive but insignificant relationship between social influence on OBB (β=0.043, p.>0.05). The two hypotheses were not significantly related to online buying behaviour. This means that for H1, the more the risk perceived in online buying, the less people will engage in online buying behaviour. H2 states that people will not engage in online shopping despite the positive reviews they see from family and friends.

4.3 Test of hypotheses for Moderating effects

To test for moderation, the first step is to assess the impact of the independent variables, along with the moderator, on the dependent variable. Next, all the independent variables and their interaction terms should be included. It is only when these interaction terms are found to be statistically significant that the moderating effect can be considered present (Ramayya et al., 2018; Esposito Vinzi et al., 2010; Hair Jr. et al., 2013). The analysis for moderation effect is presented in Table 4.5.

Table 4.5 Test of Moderating effects

Hypotheses	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
H03 - PR*Trust -> OBB	0.152	0.024	6.162	0.000***	Rejected
H04 - SI*Trust -> OBB	0.046	0.020	2.352	0.019**	Rejected

Source: Computed and Compiled by Author, 2023
***P value <0.01, **P value<0.05 *P-value<0.1

In Table 4.5, the focus was on examining the significance of the interaction term, which indicates the moderating effect of the moderator on the relationship between the independent and dependent variables. The bootstrapping analysis presented in Table 4.5 revealed that there is a significant moderating effect on OBB when trust interacts with perceived risk (t = 6.16, p = <0.001) and social influence (t=2.35, p = <0.05). This result is also consistent with the theoretical and conceptual meaning of the variables and in line with the prior assumption of the current study. All hypotheses were rejected.

4.4 Simple Plot Analysis

The Smart PLS provides a visual representation of the moderation analysis through a simple plot analysis. The central line in the plot corresponds to the direct relationship between the independent and dependent variables, while the lower and upper lines represent low and high levels of the moderator variable, respectively. In Figure 4.1 & 4.2, the three lines represent the relationship between SI (y-axis) and OBB (x-axis) at different levels of the moderator trust. The middle line represents the relationship for the average level of trust, while the upper and lower lines represent the relationship at higher and lower levels of trust, respectively. The positive slope of all three lines indicates a positive relationship between PR, SI and OBB. However, the line for a high level of trust has a steeper slope, indicating a stronger positive effect compared to the flatter slope of the line for a low level of trust. Thus, a higher trust indicates a stronger positive relationship between PR, SI and OBB.

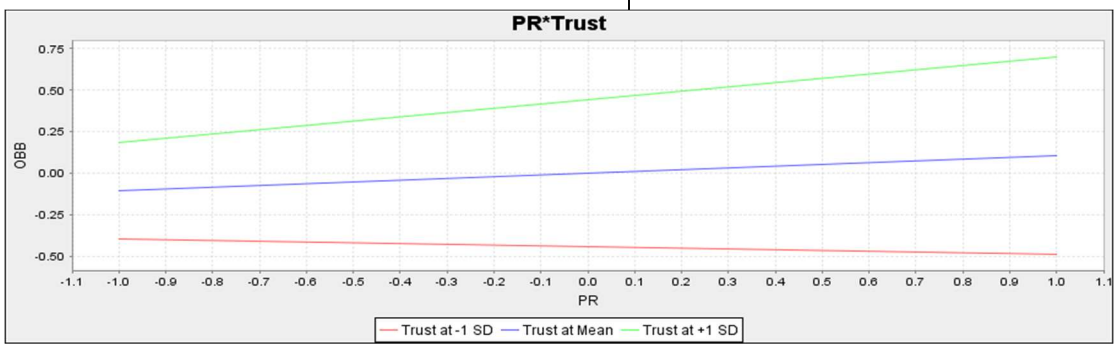


Figure 4.1 PR*trust on OBB

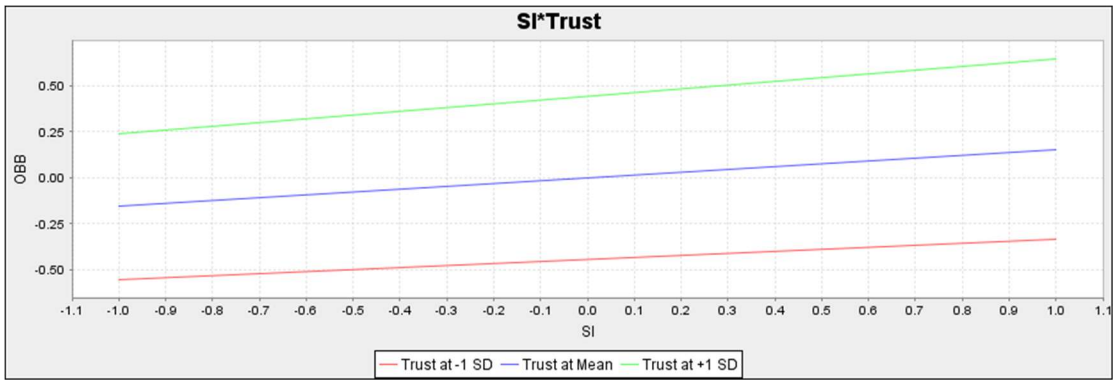


Figure 4.2 PR*trust on OBB

4.5 Coefficient of Determination: R-Squared (R^2)

To determine the extent to which the exogenous latent variables explain the

variance in the endogenous latent variables, the coefficient of determination, or R-squared, was calculated as seen in Table 4.6

Table 4.6 Coefficient of Determination: R-Squared (R^2)

R Square	Direct Relationship	Moderated Relationship
Online Buying Behaviour	0.278	0.82.5

Table 4.6 displays that the variables of perceived risk, social influence, and trust have accounted for 28% (0.278) of the variance in online buying behaviour through direct relationships. However, the inclusion of a moderator in the model has increased the explained variance to 82.5%. Therefore, based on Hair et al. (2010), that an R-squared of 0.1 is a weak effect size, 0.3 is a moderate effect size, and 0.5 is a strong effect size it can be concluded that the R^2 value for these latent variables in relation to the outcomes is moderate, and substantial. The remaining 0.722 or 72% is influenced by other variables outside this study. These results indicate that perceived risk, and social influence only have a moderate influence on consumer online shopping behaviour.

4.6 Assessment of effect size: F-Square

The specific effect size (f2) for this study is reported in Table 4.7

Table 4.7 Assessment of effect size: F-Square

Construct	OBB	(F2)
Perceived risk	0.028	Small
Social influence	0.059	Small
Trust	0.312	Medium
PR*Trust	0.072	Large
SI*Trust	0.010	Medium

Table 4.7 displays the effect sizes for the independent and moderator variables. The results indicate that trust has a moderate effect size, while perceived risk, and social influence have small effect sizes. Regarding moderation effects, perceived risk has large effect and social influence with a medium effect size.

4.7 Discussions of Findings

The main objective of this research was to examine the effect of perceived risk, and social influence, on consumer online buying behaviour. Also, to examine the moderating effect of trust in the relationships thereof. Therefore, in line with the research objectives, the following hypotheses will be discussed in this section in relation to the findings of the study.

4.7.1 H_{01}: Perceived risk has no significant effect on consumer online buying behaviour among Postgraduate students in ABU Zaria.

In line with this, the first hypothesis looked at the relationship between perceived risk and OBB. The results of the statistical analysis indicate that perceived risk is found to have a negative but insignificant relationship with OBB (β= 0.041, p>0.05). Therefore, the research hypothesis is accepted (H01). It shows that perceived risk has an insignificant relationship with online buying behaviour. Meaning, the more the perceived risk, the less people will engage in online buying. This finding is consistent with some previous studies that have also reported an insignificant relationship between perceived risk and online buying behaviour (Kaur and Soch, 2020; Ozturk et al., 2019). However, this finding is in contrast to some other studies that have reported a significant negative relationship between perceived risk and OBB (Alalwan et al., 2017; Hameed et al., 2012).

4.7.2 H_{02}: Social influence has no significant effect on consumer online buying behaviour among Postgraduate students in ABU Zaria.

The results of the statistical analysis indicate a positive but insignificant effect with social influence, and OBB (β=0.043, p,>0.05). There is no relationship between social influence and OBB. Meaning, reviews from friends and relatives that can influence customers will not make the customers to engage in online shopping. Other things need to be in place such as trust. Previous studies have found mixed results regarding the relationship between social influence and online buying behaviour (OBB). Some studies have found a significant positive relationship between social influence and OBB. For instance, Liu et al. (2019) found that social influence positively affected consumers' intention to purchase online in the context of social commerce platforms. They argued that social influence, through social networks and peer recommendations, could

enhance consumers' trust and perceived value of online products and services, thus increasing their intention to buy.

4.8 Discussion on the Moderating effect

$H_{03\ \&4}$: Trust as a moderator of perceived risk, and social influence has no significant effect on consumer online buying behaviour among Postgraduate students in ABU Zaria.

The bootstrapping analysis presented in Table 4.5 revealed that there is a significant moderating effect on OBB when trust interacts with perceived risk (t=6.16, p0.05), and social influence (t=2.35, p<0.05). The finding that trust has a significant moderating effect on the relationship between perceived risk, and social influence, on OBB is consistent with prior research on the topic. For instance, a study by Kim and Stoel (2004) found that trust has a moderating effect on the relationship between perceived risk and online purchase behaviour. Similarly, a study by Gefen et al. (2003) found that trust moderates the effect of social influence on online purchase behaviour.

4.9 Managerial Implications

The findings of this study have several practical implications for businesses and policymakers in Nigeria. The study reveals that perceived risk and social influence are not predictors of online buying behavior. Therefore, businesses in Nigeria should focus on reducing the level of risk associated with online buying, encouraging customers to share their experiences and recommendations on social media, businesses can create a positive perception of their brand, which can lead to increased sales.

Future Research

Although, this study provides some useful insights in the link between the aforementioned variables and online buying behaviour, However, there are several limitations to this study that should be acknowledged. Firstly, the study population was the use of DLC PG students alone, other students were not included as part of the study population. Secondly, the study only focused on one country, Nigeria, which may limit the applicability of the findings to other countries or regions. Thirdly, the study only focused on two variables and their relationships, which may not capture the complexity of the online buying behaviour phenomenon.

For future research, it is recommended that other population of students are used. Additionally, future research should consider cross-cultural differences in online buying behaviour to expand the scope of the study and which can be used for comparative study. Moreover, researchers can consider other variables that may influence online buying behaviour, such as perceived enjoyment, product variety, and delivery speed. Finally, future research can use qualitative research methods, such as interviews or focus groups, to complement the findings of qualitative study.

REFERENCES

Ajzen, I. (1991). *The theory of planned behavior. Organizational Behavior and Human Decision Processes*. *50*(2), 179–211. https://doi.org/doi:10.1016/0749-5978(91)90020-T

Asika, N. (2010). *Research Methodology in the Behavioral Sciences.* Longman Nigeria PLC.

Bruin, M., & Lawrence, F. (2000). Differences in spending habits and credit use of college students. *J. Consum. Aff*, *34*(1), 113-133.

Davari, A., Iyer, P., & Rokonuzzaman, M. (2016). Identifying the determinants of online retail patronage : A perceived-risk perspective. *Journal of Retailing and Consumer Services*, *33*, 186–193. https://doi.org/10.1016/j.jretconser.2016.08.009

Delafrooz, N., Paim, L. H., Haron, S. A., Sidin, S. M., & Khatibi, A. (2009). Factors affecting students ' attitude toward online shopping. African Journal of Business Management, 3(5), 200–209.

Dholakia, U. M. (2001). A motivational process model of product involvement and consumer risk perception. *European Journal of Marketing*, *35*(11–12), 1340–1360.

Driediger, F., & Bhatiasevi, V. (2019). Online grocery shopping in Thailand : consumer acceptance and usage behavior. *Journal of Retailing and Consumer Services*, *48*, 224–237. https://doi.org/10.1016/j.jretconser.2019.02.005

Ekwueme, A., & Nehemiah, A. (2017). The influence of online marketing of Jumia and Konga on consumer purchasing behaviour among Kogi state residents of Nigeria. *Global Journal of Human-Social Science: Arts and Humanities*,

17(6), 25–32.

Emamdin, M., Singh, Jugindar S., K., & Fah, Benjamin C., Y. (2020). Role of E-trust , E-loyalty , and E-satisfaction on Online Buying Behaviour among Millennials in Kuala Lumpur , Malaysia. *Global Business and Management Research: An International Journal*, *12*(3), 1–16.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research.*

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research.*, *18*(1), 39–50.

Fortes, N., & Rita, P. (2016). Privacy concerns and online purchasing behaviour: Towards an integrated model. *European Research on Management and Business Economics*, *4*, 1–10. https://doi.org/10.1016/j.iedeen.2016.04.002

Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-commerce and the importance of social presence: experiments in e-products and e-services. Omega, 32(6), 407-424.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis. Pearson Education India.

Inegbedion, H. E., Obadiaru, D. E., & Bello, V. D. (2016). Factors that Influence Consumers ' Attitudes toward Internate Buying in Nigeria. *Journal of Internet Commerce*, *15*(4), 353–375. https://doi.org/10.1080/15332861.2016.1252646

Jin, Lim, Y., Bin Osman, A., & AB.Halim, M. S. (2014). Perceived usefulness and trust towards consumer behaviors : a perspective of consumer online shopping. *Journal of Asian Scientific Research*, *4*(10), 541–546.

Juan, J. S. (1999). Strategies for reducing consumers' risk aversion in Internet shopping. *Journal of Consumer Marketing*, *16*(2), 163–180.

Kadir, M. R. A., Nor, Fatimah S., M., & Saaid, F. A. (2017). A study on customer online purchasing behavior : a Malaysian perspective. *International Conference on Information Technology (ICIT) A*, 507–511.

Lake, L. A. (2009). *Consumer Behavior for dummies*. Wiley publishing inc., indianapois, indiana.

Le, N., B., M., & Hoang, T., P., T. (2020).

Measuring Trusts and the Effects on the Consumers ' Buying Behavior. *Journal of Distribution Science*, *18*(3), 5–14. https://doi.org/org/10.15722/jds.18.3.202003.5

Lee, M. K. O., & Turban, E. (2001). A trust model for consumer internet shopping. *International Journal of Electronic Commerce ISSN:*, *6*(1), 75–91. https://doi.org/10.1080/10864415.2001.11044227

Lu, B., Fan, W., & Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: An empirical research. *Computers in Human Behavior*, *56*, 225–237. https://doi.org/10.1016/j.chb.2015.11.057

Lu, J. (2014). Are Personal Innovativeness and Social Influence Critical to continue with mobile commerce? *Journal of Internet Resaerch*, *24*(2), 134–159. https://doi.org/10.1108/IntR-05-2012-0100

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust,. *Review, Academy of Management*, *20*(3), 709–734.

Moshrefjavadi, M. H., Rezaie Dolatabadi, H., Nourbakhsh, M., Poursaeedi, A., & Asadollahi, A. R. (2012). An Analysis of Factors Affecting on Online Shopping Behavior of Consumers. *International Journal of Marketing Studies*, *4*(5), 81–98. https://doi.org/10.5539/ijms.v4n5p81

Muda, M., Mohd, R., & Hassan, S. (2016). Online Purchase Behavior of Generation Y in Malaysia. *Procedia Economics and Finance*, *37*(16), 292–298. https://doi.org/10.1016/S2212-5671(16)30127-7

Nasidi, Q. Y., Ahmad, M. F., Garba, M., Hassan, I., & Gamji, M. B. (2021). Empirical Investigation of Factors Affecting Online Shopping Behavior. *Laplage Em Revista (International)*, *7*, 363–377.

Nwankwo, C. A., Kanyangale, M., & Abugu, J. O. (2019). Online shopping industry and its consumers in Nigeria. *Journal of Economics, Management and Trade*, *24*(3), 1–12. https://doi.org/10.9734/JEMT/2019/v24i330165

Oloveze, A. O., Ogbonna, C., & Ahaiwe, E. (2022). From offline shopping to online shopping in Nigeria : evidence from African emerging economy. *IIM Ranchi Journal of Management Studies*, *1*(1),

55–68. https://doi.org/10.1108/IRJMS-08-2021-0110

Pappas, N. (2016). marketing strategies , perceived risks , and consumer trust in online buying behaviour. *Journal of Retailing and Consumer Services*, *29*, 92–103. https://doi.org/10.1016/j.jretconser.2015.11.007

Park, J., Ahn, J., Thavisay, T., & Ren, T. (2019). Examining the role of anxiety and social influence in multi-benefits of mobile payment service. *Journal of Retailing and Consumer Services*, *47*, 140–149. https://doi.org/10.1016/j.jretconser.2018.11.015

Pavlou, P. A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, *7*(3), 101–134.

Ramesh, S., & Kumar, A. S. (2019). Problem Faced by Online Customers- A Garret Ranking Approach. *Management Science Letters*, *9*, 577–584. https://doi.org/10.5267/j.msl.2019.1.005

Rehman, S. U., Bhatti, A., Mohamed, R., & Ayoup, H. (2019). The moderating role of trust and commitment between consumer purchase intention and online shopping behavior in the context of Pakistan. *Journal of Global Entrepreneurship Research*, *2*, 1–25.

Sahney, S., Ghosh, K., & Shrivastava, A. (2013). Conceptualizing consumer "trust" in online buying behaviour: An empirical inquiry and model development in Indian context. *Journal of Asia Business Studies*, *8*(1). https://doi.org/10.1108/JABS-Jul-2011-0038

Sarkar, J. G., & Lahiri, I. (2018). Consumers ' online buying behaviour : A study with reference to home appliances in Kolkata . *International Journal of Business and Management Invention (IJBMI)*, *7*(12), 1–8.

Schurr, P. H., & Ozanne, J. L. (1985). Influences on exchange processes: Buyers' preconcep- tions of a seller's trustworthiness and bargaining toughness. *Journal of Consumer Research*, *11*(4), 939–953.

Shoki, M., Sylvester, M., Ismail, K., & Ali Mat, K. (2014). Consumer perceived risk , attitude and online shopping

behaviour ; empirical evidence from Malaysia. *IOP Conference Series: Materials Science and Engineering*, *58*, 1–10. https://doi.org/10.1088/1757-899X/58/1/012007

Shweta, P., & Deepak, C. (2018). Engaging m-commerce adopters in India Exploring the two ends of the adoption. *Journal of Enterprise Information Management*, 1–21. https://doi.org/10.1108/JEIM-06-2018-0109

Singh, N., Sinha, N., & Liébana-cabanillas, F. J. (2020a). Determining factors in the adoption and recommendation of mobile wallet services in India : Analysis of the effect of innovativeness , stress to use and social influence. *International Journal of Information Management*, *50*, 191–205. https://doi.org/10.1016/j.ijinfomgt.2019.05.022

Singh, N., Sinha, N., & Liébana-cabanillas, F. J. (2020b). Determining factors in the adoption and recommendation of mobile wallet services in India : Analysis of the effect of innovativeness , stress to use and social influence. *International Journal of Information Management*, *50*(October 2018), 191–205. https://doi.org/10.1016/j.ijinfomgt.2019.05.022

Swarnakar, P., Kumar, A., & Kumar, S. (2016). Why generation Y prefers online shopping : a study of young customers of India. *Int. J. Business Forecasting and Marketing Intelligence*, *2*(3), 215–232. https://doi.org/10.1504/IJBFMI.2016.078604

Tandon, U., Kiran, R., & Sah, A. N. (2016). Understanding online shopping adoption in India : Unified Theory of Acceptance and Use of technology 2 (UTAUT2) with perceived risk application. *Journal of Service Science*, *8*(4), 420–437.

Usman, M. U., & Kumar, P. (2020). Factors influencing consumer intention to shop online in Nigeria : a conceptual study. *Journals.Sagepub.Com/Home/Vis*, 1–8. https://doi.org/10.1177/0972262920926797

Vijayasarathy, L. E. O. R. (2003). Shopping orientations , product types and internet shopping intentions. *Electronic Markets*, *13*(1), 67–79. https://doi.org/10.1080/1019678032000039903

Vivian, A. M. (2010). *A comparison study of online shopping behaviours of Nigerian students in Sheffield and Nigeria*. THE UNIVERSITY OF SHEFFIELD.