xIlkogretim Online - Elementary Education Online,2021; Vol 20 (Issue 5): pp.3709-3716
http://ilkogretim-online.org
doi: 10.17051/ilkonline.2021.05.407

# Student's Attitude, Usefulness, and Satisfaction as an Antecedents of their Behavioral Intention towards E-pad Usage

**Dr Navin Kumar Koodamara,** Assistant Professor-Selection Grade, Manipal Institute of Management, Manipal Academy of Higher Education (MAHE), Manipal, India, 576104
**Dr Raveendra Rao K,** Associate Professor, Manipal Institute of Management, Manipal Academy of Higher Education (MAHE), Manipal, India, 576104
**Dr Suraj Francis Noronha,** Assistant Professor-Senior Grade, Manipal Institute of Management, Manipal Academy of Higher Education (MAHE), Manipal, India, 576104
**Soujanya Koodamara,** Lecturer in Commerce, St. Francis College, Koramangala, Bangalore, 560034.
**Abhishek Serigara,** MBA Student, Manipal Institute of Management, Manipal Academy of Higher Education (MAHE), Manipal, India, 576104

**Abstract-** The purpose of this research was to examine attitude, usefulness, and satisfaction as antecedents of behavioral intentions of the students towards E-pad usage. The primary data was collected from the B-School students of Mangalore, Bangalore, and Udupi. A sample of 187 students in 10 various prestigious B-Schools was used to study the impact of attitude, usefulness, and satisfaction on behavioral intentions towards E-pad usage. The path coefficient value and the T statistics confirm the positive association between the attitude and behavioral intentions, usefulness and behavioral intentions, satisfaction, and behavioral intentions. The multi-group analysis through PLS also suggests that there is a perceptional difference among males and females on attitude, usefulness, satisfaction, and behavioral intentions of the students. The findings have many implications for present behavioral intentions models and promotion progress in the firm.

**Keywords: Student's Attitude, E-pad usage, Antecedents**

## I. INTRODUCTION

In recent years, higher and higher education institutes have shown their interest in E-learning, whereinternet-based technologies are used in the classroom as a part of the learning process. The adaption of the technology made the work faster and more efficient along with that analyzing the result also been made comparatively easy compared to the traditional system. The modern system of education also provided with some extra added benefits such as measurement of student behavior attitude and the level of satisfaction about the adaption of new technologies as a part of the education system and also helps in measuring the level of acceptance by the students towards adaption of E-pad as a part of their education system process.

The study is to analyze the role of B-School Students based on the three prospective, they are attitude, behavior, andsatisfaction. Now the world is running on the edge of change, where the attitude towards a particular product or service changes following the time and along with the attitude behavioral intension towards particular product or service also change. Technical advancement led people to more technology-driven, where technology has become a part of the life of every individual.Things change, along with time consumer behavior also changes, consumer behavior is broad-based research was in the world of advanced science and technology, where consumer behavior is observed by allowing the consumer to use and have a feel of the product based on that their moods emotions and experience are collected and measured(Luomala, 2014)Consumer behavior is the study of individual, group, or an organization and activities associated with the purchase, use, and disposal of the product or the service.Consumer satisfaction is one of the important concepts in modern marketing, where delivering the product is not just enough along with that emphasizing on overall benefits gained by a particular product or the service must be enhanced.Consumer satisfaction is nothing but how a particular consumer is happy with the product.The level of satisfaction is defined in terms of how a particular product or service serves the purpose.This research is helping to understand the relationship between student attitude and behavior,behavior and student satisfaction, and student attitude

and satisfaction towards the usage of e-pad in B-School and how an individual's reaction towards adaption of E-Pad.

The trend of E-Learning made many higher education systems more online-based with the application of technologies such as online portals like Moodle etc. The major problem faced by most of the universities is an adaption of new technology by the student i.e. new way of the education system(Park, An Analysis of the Technology Acceptance Model in Understanding University, 2019). This paper is mainly concentrating on understanding the behavioral intention of the students about the adaption of the E-Pad in the examination, also measure the level of satisfaction, usefulness, and attitude of different students towards the usage of E-pad in the examination.

## II. LITERATURE REVIEW

The theory of reasoned action says that there is a link between the positive attitude of the consumer towards the particular product or the company and purchase behavior.Which attempts to link purchase intention and past purchase behavior. Which helps to predict the purchase behavior of the consumer and the attitude towards the particular product/company(Carvalho , 2015).Company sustainability depends upon an increase in public interest towards the particular product or the service more positive attitude towards the product specifies an increase in the public interest which indirectly says that the consumer has positive behavior towards the product and the service provided by the company(verbeke & vermeir, 2006).It is said that values affect the consumer attitude and the behavior, values function as a ground for the behavioral decision. The values have external and internal die mentions,which has the influence on attitude which turns into a behavior. Values involve self-direction, enjoyment which has the favorable attitude towards the attitude e-shopping and buying behavior(Jayawardhena, 2004).

The impact of social networking sites also hurts consumer attitudes towards the product. The comments which are put on the sites can lead towards tastes, desires, and needs of the users in the networking site towards a particular product, their usage, consumer behavior, and the levels of satisfaction/dissatisfaction towards the products and services purchased or used(Curra, Mafé, & Blas, 2013).The paperdiscusses the consumer attitude and satisfaction concerning the repeated purchase of a particular product or service.Here attitude determines the overall satisfaction of the consumer positive attitude determines consumers are satisfied with the product and vice versa(Abdul-Muhmin, 2010).The image of the product or the brand also influence the consumer attitude and satisfaction towards the product.

A positive attitude leads to repeated purchases, lower elasticity in demand, and brings consistency, positive word of mouth, and more brand loyal customers towards the brand(Haverila & Naumann, 2011). The perceived decision and freedom influence consumer satisfaction and behavior, availability of the alternative product in the market leads to comparison.The comparison may be due to product design or information or may be due to the product positioned in the marketplace(Reibstein, Youngblood, & Fromkin , 1975).The Technology Acceptance Model (TAM) (Davis, 1989) is the most frequently cited and influential model for understanding the acceptance of information technology and has received extensive empirical support (Venkatesh, Morris, Davis, & Davis, 2003). In this context, some extrinsic and intrinsic motivators of technology acceptance have been considered. Extrinsic motivators, such as perceived usefulness and ease of use (Lee, Cheung, & Chen, 2005) have been proved to be key determinants of the acceptance and use of e-learning systems, however, little is known about students' perceptions in a blended learning system.

Based on the above theoretical relationship among variables, the following hypothesis can be framed:

H1: Students' attitude positively impacts Behavioral Intention.

H2: Satisfaction positively impacts Behavioral Intention.

H3: Usefulness positively impacts Behavioral Intention.

## III. METHODS

### Sample and Procedures

The field research was conducted over 4 months from November 2018 to February 2019. This study is being conducted for the respondents who are of graduating students who are exposed to E-pad and the sample size consists of 187 respondents. The structured questionnaire was utilized as the survey instrument. The average age of the respondents was around 22 years and around 54.5 percent were female.

### Objectives of the Study

The main objectives of the study are as follows:

1. To find out the relationship between students' attitudes and behavioral intentions.

2. To investigate the impact of satisfaction on behavioral intentions.

3. To measure the impact of usefulness on behavioral intention.

### Measurement Scale

Usefulness and satisfaction were measured by using a scale developed by Christina Chung and David Ackerman( Chung & Ackermanb, 2015). The attitude of the students was measured by using a scale developed by Qimei Chen · Hong-Mei Chen · Rick Kazman(Chen, Chen, & Kazman, 2007). Behavioral intentions of the students were measured by using a scale modified by AgyapongAhmed (2017).

All the items in the questionnaire were administered by using 5 points Likert scale i.e., 5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree.

## IV. RESULTS

### Result Summary of Reflective Outer Models

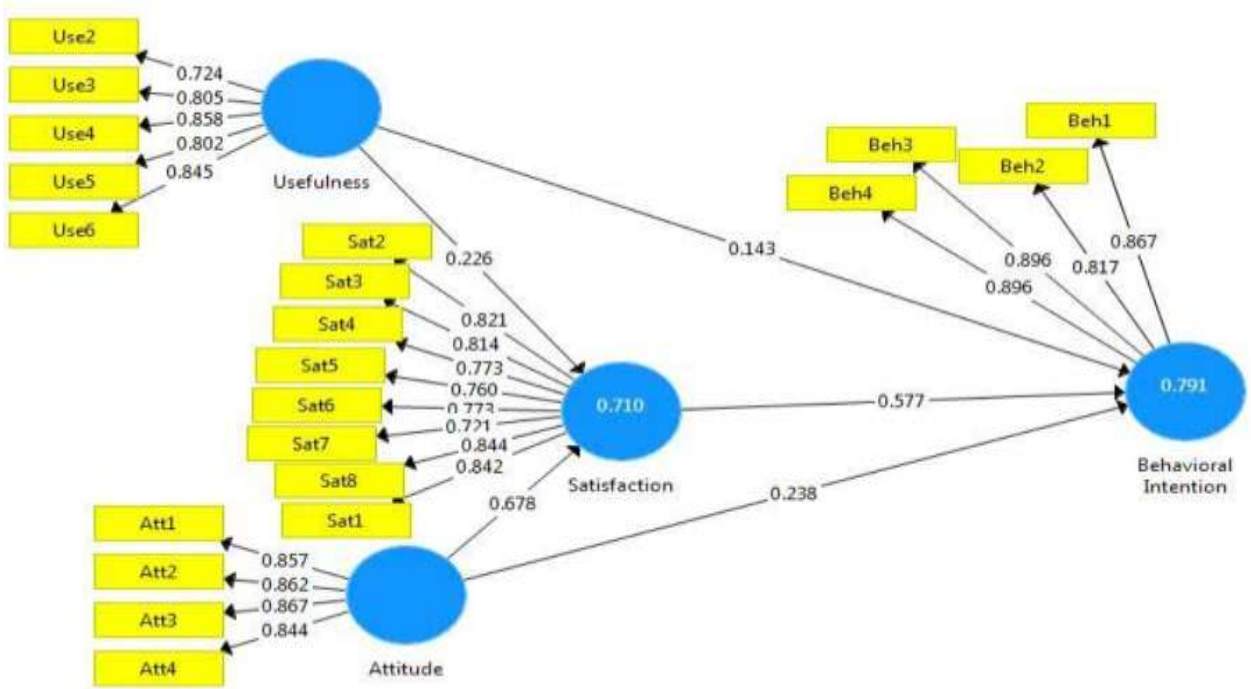
| Construct | Indicators | Outer Loadings | Indicator Reliability | Composite Reliability | Convergent Validity AVE | Discriminant validity | VIF |
|---|---|---|---|---|---|---|---|
| Usefulness | Use2 | 0.724 | 0.574 | 0.917 | 0.735 | 0.808 | 1.748 |
| | Use3 | 0.805 | 0.648 | | | | 2.212 |
| | Use4 | 0.858 | 0.736 | | | | 2.443 |
| | Use5 | 0.802 | 0.643 | | | | 2.076 |
| | Use6 | 0.845 | 0.714 | | | | 2.275 |
| Satisfaction | Sat1 | 0.842 | 0.709 | 0.925 | 0.756 | 0.795 | 2.797 |
| | Sat2 | 0.821 | 0.674 | | | | 2.554 |
| | Sat3 | 0.814 | 0.663 | | | | 2.472 |
| | Sat4 | 0.773 | 0.598 | | | | 2.304 |
| | Sat5 | 0.760 | 0.578 | | | | 2.040 |
| | Sat6 | 0.773 | 0.598 | | | | 2.080 |
| | Sat7 | 0.721 | 0.520 | | | | 2.035 |
| | Sat8 | 0.844 | 0.712 | | | | 2.692 |
| Attitude | Att1 | 0.857 | 0.734 | 0.932 | 0.631 | 0.857 | 2.395 |
| | Att2 | 0.862 | 0.743 | | | | 2.318 |
| | Att3 | 0.867 | 0.752 | | | | 2.470 |
| | Att4 | 0.844 | 0.712 | | | | 1.986 |
| Behavioral | Beh1 | 0.867 | 0.752 | 0.904 | 0.653 | 0.870 | 2.346 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Intention | Beh2 | 0.817 | 0.667 | | | | 1.922 |
| | Beh3 | 0.896 | 0.803 | | | | 3.031 |
| | Beh4 | 0.896 | 0.803 | | | | 2.968 |

The above table describes that the outer loading value of each indicator is above the threshold value i.e. 0.7, which is the adequate level of outer loadings for any reflective model (Henseler, Ringle, & Sarstedt, 2012). The indicator reliability value is the square of each of the outer loading values, the indicator reliability is equal to 0.4 or more than 0.4 is acceptable (Hulland, 1999). The above table specifies that allthe above indicators have separate indicator reliability values that are more than the minimum acceptable level i.e. 0.4. Further, it is very critical to establish the reliability and validity of the latent variables to complete the examination of the structural model. The composite reliability value is more than 0.7, which specifies that it is above the acceptable level (Bagozzi & Yi, 1988). To check the latent validity of each value of latent d variable, Average Variance Extracted (AVE) need to be calculated. The AVE value of each latent variable must be equal to 0.5 or higher than 0.5(Bagozzi & Yi, 1988). The above table proves that the AVE value of all latent variables is more than the acceptable threshold limit of 0.5, which indicates that the latent validity. Fornell & Larcker (1981) propose that the square root of AVE in each latent variable can be used to establish discriminant validity if this value is more than other values of correlation among the latent variables. The latent variable Usefulness discriminant value is larger than the correlation values in the column. A similar observation is made for the latent variable such as satisfaction, attitude, and behavioral intention. Thus, Discriminant validity is well established in the above table.

Every set of latent variables in the inner model is patterned for possible collinearity problems to see if any variable in the inner model should be deleted or combined into one. As per the rule of thumb, it is necessary to have a variance inflated factor (VIF) value should be equal to 5 or less than 5 (the minimum tolerance level is 0.2 or higher) to avoid any collinearity problem (Hair, Ringle, & Sarstedt, PLS-SEM: Indeed a Silver Bullet, 2011). As per the above table, the variables are shown in the VIF level is less than that, which indicates that there is no collinearity problem in the structural model of the study.

**Measurement Model**



The values on the arrows are called path coefficients. The path coefficients describe how strong the effect of one variable over the other variables. The weight of different path coefficient helps us to rank as per their relative statistical importance. The path coefficient values between the two constructs of the structural model must be more than 0.20 to prove its significance (Wong, 2013). The above inner model proposes that satisfaction (0.577) has the moresignificant effect on Behavioral intention followed by attitude (0.238) andusefulness (0.143). The positive path coefficient value indicates that there is a direct relationship between the two constructs.

**Table showing Path Coefficient, T-Value and P-Values**

| Relationship | Path Coefficient | T-Statistics | P-Value |
|---|---|---|---|
| ATT-BI | 0.238 | 2.753 | 0.006 |
| ATT-SAT | 0.678 | 13.491 | 0.000 |
| SAT-BI | 0.577 | 6.857 | 0.000 |
| USE-BI | 0.143 | 2.576 | 0.010 |
| USE-SAT | 0.226 | 3.802 | 0.000 |

The above table presents the path value, t-value, and statistical significance value for all the variables, which are considered under the study. The positive path coefficient value of satisfaction and behavioral intentions (0.577) indicates a direct relationship between these two constructs.From the above table, we can infer that among the exogenous variables satisfaction is a strong predictor ofbehavioral intentions compared to attitude and usefulness. T-statistics are referred to to see if the path coefficient of the inner model is significant or not. The path coefficient will be significant if the T-statistics is higher than 1.96 by using a two-tailed T-test with a significance level of 5% (Wong, 2013). From the above table, we can infer that all T-statistics values are greater than 1.96, so we can conclude that the outer model loadings are highly significant.

**Multi-Group Analysis**

| | Path | Female | Male |
|---|---|---|---|
| Path Coefficient | ATT-BI | 0.204 | 0.272 |
| | ATT-SAT | 0.680 | 0.639 |
| | SAT-BI | 0.524 | 0.672 |
| | USE-BI | 0.261 | -0.032 |
| | USE-SAT | 0.234 | 0.265 |
| T-Statistics | ATT-BI | 1.750 | 2.123 |
| | ATT-SAT | 10.126 | 8.815 |
| | SAT-BI | 4.366 | 6.258 |
| | USE-BI | 4.175 | 0.351 |
| | USE-SAT | 2.981 | 3.101 |
| p-Values | ATT-BI | 0.080 | 0.034 |
| | ATT-SAT | 0.000 | 0.000 |
| | SAT-BI | 0.000 | 0.000 |
| | USE-BI | 0.000 | 0.725 |
| | USE-SAT | 0.003 | 0.002 |

The two clustersconsidered under demographic profiles are a female and male group. The above tabledemonstrates the results of group-specific PLS-SEM, which shows their difference. From the table, we can interpret that in the male segment, satisfaction has more impact on behavioral intention (0.672) as compared with the female segment (0.524). It was interesting to observe that user does not impact behavioral intentions in the male segment but in the female segment, usefulness has more impact on behavioral intentions (0.261). The T statistics also confirm that in the male segment, the usefulness is not a good predictor of behavioral intentions (T=0.351). It was evident from the above table that attitude is one of the best predictors of behavioral intentions both in the male (0.272) and female (0.204) segment.

## V. Conclusion

The test suggests that the attitude and satisfaction is the most important factor considered for evaluating the overall behavioral intension. The test gives a brief explanation about each factor and how they are most influential over the other factor when we make a comparison between them and also gives inference about how they are most influential when we make a comparison between men and the women segment. From the study, we can suggest that both males and females have a different opinion about each factor we considered for the study, which shows more differential in their opinion. The study helps to analyze how students are influenced by the e-learning system and to what extent it affects their study aspect such as reducing time, improving efficiency, ease of use, and also helps in monitoring their progress with the use of e-based education system. If we take the example of Moodle it helps the student's flexibility in timing and helps in evaluating the amount of work a particular student has done in a given framework of time gap. The classroom management software helps in analyzing the student improvement by evaluation of a particular student who spent time on answering a particular question by comparing with others and the quality of answer by each student can be evaluated.

## References


1. Bouhlel , O., Mzoughi, N., & Sallem , M. W. (2009). Customers' evaluations after a bank renaming: effects of brand name change on brand personality, brand attitudes and customers' satisfaction. *Innovative Marketing, 5*, 58-65.
2. Chung , C., & Ackerman, D. (2015). Student Reactions to Classroom Management Technology: Learning Styles and Attitudes Toward Moodle. *Journal of Education for Business*, 2-7. doi:10.1080/08832323.2015.1019818
3. Chung, C., & Ackermanb, D. (2015). Student Reactions to Classroom Management Technology: Learning Styles and Attitudes Toward Moodle. *Journal of Education for Business*. doi:10.1080/08832323.2015.1019818
4. Eastman , J. K., Iyer , R., & Eastman , F. K. (2011). Business Students' Perceptions, Attitudes, and Satisfaction With Interactive Technology: An Exploratory Study. *JOURNAL OF EDUCATION FOR BUSINESS, 86*, 36-43.
5. Hsu , Y. (2019, october). CONSUMER PURCHASE BEHAVIORS IN RELATION TO DISTINCT CULTURAL FACTORS AND PRODUCT ENHANCEMENT TYPE. *The International Journal of Organizational Innovation, 12(2)*, 50-58.
6. White, K., Habib, R., & Rishad, D. J. (2019). How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework. *Journal of Marketing, 83(3)*, 22-49.
7. Abdul-Muhmin, A. G. (2010). Repeat Purchase Intentions in Online Shopping: The Role of Satisfaction, Attitude, and Online Retailers' Performance. *Journal of International Consumer Marketing*, 5-19.
8. Andreasen, A. V. (1977). A Taxonomy of Consumer SatisfactionIDissatisfaction Measures. *THE JOUKNAL OF CONSUMER AFFAIRS, 11(2)*, 11-24.
9. Bagozzi, R. P., & Yi, Y. (1988). On the Evalauation of Structural Equation Models. *Journal of the Academy of Marketing Science, 16*(1), 74-94.
10. Bearden, W. O., & Teel, J. E. (1983). Selected Determinants of Consumer Satisfaction and Complaint Reports. *Journal ofMarketing Research, 20*.
11. Carvalho , C. A. (2015). Impact of Consumer Attitude in Predicting Purchasing Behaviour.
12. Chen, Q., Chen, H.-M., & Kazman, R. (2007). Investigating antecedents of technology acceptance of initial eCRM users beyond generation X and the role of self-construal. *Electron Commerce*, 315-339. doi:10.1007/s10660-007-9009-2

13. Chiu, C. P., & Ko , W. -H. (2008). The Relationships Between Brand Attitude, Customers' Satisfaction and Revisiting Intentions of the University Students–A Case Study of Coffee Chain Stores in Taiwa. *JOURNAL OF FOODSERVICE BUSINESS RESEARCH, 1*, 79-95.

14. Claiborne , G., & Sirgy, M. J. (2014). SELF-IMAGE CONGRUENCE AS A MODEL OF CONSUMER ATTITUDE FORMATION AND BEHAVIOR:. *Journal of Proceedings of the Ecomomy of Marketing science*, 3-7.

15. Curra, R., Mafé, C. R., & Blas, S. S. (2013). Social network loyalty: evaluating the role of attitude, perceived risk and satisfaction. *Social network loyalty, 37(1)*, 61-82.

16. Fernandes, T., & Moreira, M. (2018). Consumerbrandengagement,satisfactionand brandloyalty:acomparativestudybetween functionalandemotionalbrandrelationships. *Journal of Product & Brand Management*.

17. Garg , R., & Chhikara, C. (2019). Power of the Scent: Exploring the Role of Sensory Appeals on Consumer Product Attitude. *Garg, Chhikara, 25(2)*, 25-41.

18. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice, 19*(2), 139-151.

19. Hair, J. F., Sarsterdt, M., Ringle, C. M., & Nena, J. A. (2012). An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *Journal of the Academy of Marketing Science, 40*(3), 414-433.

20. Halstead, D., & Page, T. J. (1992). The Effects of Satisfation And Complain Behaviour On Consumer Reprchase Intensions. *Journal of Consumer Satisfation,Dissatisfation and complaint behaviour., 5*, 1-11.

21. Harding, R. D., Hildebrand, D., Kramer, T., & Lasaleta, J. D. (2019). The Impact of Acquisition Mode on Expected Speed of Product Mastery and Subsequent Consumer Behavior. *JOURNAL OF CONSUMER RESEARCH, 49*, 140-158.

22. Haverila, M., & Naumann, E. (2011). CUSTOMER COMPLAINT BEHAVIOR AND SATISFACTION IN A B2B CONTEXT: A LONGITUDINAL ANALYSIS. *Journal of Services Research, 12*.

23. Henseler, J., Ringle, C. M., & Sarstedt, M. (2012). Using Partial Least Squares Path Modeling in Adversting Research: Basic Concepts and Recent Issues. In S. Okazaki, & S. Okazaki (Ed.), *Hand Book of Research on International Advertising* (pp. 252-276). Edward Elgar.

24. Hulland, J. (1999). Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies. *Strategic Management Journal, 20*(1), 195-204.

25. Jayawardhena, C. (2004). Personal values' influence on e-shopping attitude and behaviour. *Internet Research, 14*, 127-138.

26. Kitapci , O., Yetkin Özbük1 , R. M., Sakarya , A., & Sarıyıldız, A. (2019). Consumer Complaint Behavior: A Literature Review and Research Agenda. *Journal of Applied Economics and Business Research, 9(3)*, 141-165.

27. Kopaničová2, J., & Klepochová3, D. (2016). Consumers in New Millennium: Attitudes towards Adoption of New Technologies in Purchasing Process1. *Studia commercialia Bratislavensia, 9*, 67-74.

28. Liu, P. J., McFerran, B., & Haws, K. L. (2020). Mindful Matching: Ordinal Versus Nominal Attributes. *Liu et al, Vol. 57(1)* , 134-155.

29. Luomala, H. T. (2014). A Mood-Alleviative Perspective On Self-Gift Behaviours: Stimulating Consumer Behaviour Theory Development. *Journal of Marketing Management, 14*, 109-132.

30. Mamman, M., Ogunbado, A. F., & Abu-Bak, A. S. (2019). Factors Influencing Customer's Behavioral Intention to Adopt Islamic Banking in Northern Nigeria: a Proposed Framework. *Journal of Economics and Finance, 12*, 150-162.

31. Maxham III, J. G. (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research, 54*, 11-24.

32. McLean, Graeme, Osei-Frimpong, Kofi Al-Nabhani, Al-Nabhani, Marriott, Hannah. (2020). Examiningconsumerattitudestowardsretailers'm-commercemobile applications–Aninitialadoptionvs.continuoususeperspective. *Journal of Business Research, 106*, 139-157.

33. Nelson , P. (2000). Information and Consumer Behavior. *JOURNAL OF POLITICAL ECONOMY*, 311-329.

34. Park, S. Y. (2009). An Analysis of the Technology Acceptance Model in Understanding University Students' Behavioral Intention to Use e-Learning . *Journal of Educational Technology & Society, 12*, 150-162.

35. Park, S. Y. (2019). An Analysis of the Technology Acceptance Model in Understanding University. *Journal of Educational Technology & Society, 12*, 150-162.

36. Pasricha, D., Jain , K., & Gautam, D. (2019). Attitude Of Indian Consumer Towards Counterfeit Luxury Brand. *The IUO Journal of Management Research, 18*(1), 79-101.

37. Reibstein, D. J., Youngblood, A. D., & Fromkin , H. L. (1975). Number of Choices and Perceived Decision Freedom as a Determinant of Satisfaction and Consumer Behavior. *journal 0} Applied Psychology, 60*, 434-437.

38. Reibstein, D. J., Youngblood, S. A., & Fromkin , H. L. (1975). Number of Choices and Perceived Decision Freedom as a Determinant of Satisfaction and Consumer Behavior. *journal 0f Applied Psychology, 60*, 434-437.

39. Verbeke, W., & Vermeir , I. (2006). SUSTAINABLE FOOD CONSUMPTION: EXPLORING THE CONSUMER ''ATTITUDE – BEHAVIORAL INTENTION'' GAP. *Journal of Agricultural and Environmental Ethics*, 169-194.

40. verbeke, w., & vermeir, i. (2006). SUSTAINABLE FOOD CONSUMPTION: EXPLORING THE CONSUMER ''ATTITUDE – BEHAVIORAL INTENTION'' GAP. *Journal of Agricultural and Environmental Ethics*, 170-194.

41. Wong, K. K.-K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin, 24*(1), 1-32.