Relating Website Quality With Pure-Impulsive Buying Behavior In Online-Retail Segment Of Pakistan Through PLS-SEM Based Approach

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ABSTRACT

Recently technology is the base of each and every business and companies are using facility to reach business in better styles. However, importance of website remains in the top tier of channels that are considered significant in this regards. Therefore, website quality has been investigated severely in association with consumer buying behavior. Though there is a lacking of studies which are associated with website quality and impulsive buying behavior, especially in terms of Pakistan. Thus this study has been directed purposively towards relationship of website quality and impulsive buying behavior. Data was gathering through closed ended questionnaire from youth of Karachi having interest in online purchase. Results indicated that websites quality is highly related to impulsive buying behavior. Moreover, use of credit cards is also significantly related with intent to buy impulsively.

Key Words: Website Quality, Online Retail Segment, Pure-Impulsive Buying Behavior & PLS-SEM Technique.

INTRODUCTION

Recent decades are the evidence of significant development in the field of information technology. Phenomenon might be verified through launch of computers in 1980s and internet in 1990s. Then development has been supplemented with launch of different applications for users from different age brackets and cultures. Thus in recent times we have also observed launch of SMART-
technologies as well as artificial intelligence which paved the way for online communication and transactions (Tarabieh et al., 2020). On the other side consumer also prefer to purchase through online medium as the products are available 24/7 all over the time and provides significant convenience in purchase process. Moreover, websites also aids consumers in price comparison in a convenient manner (Akram et al., 2017). Thus websites are treated as the primary source for holding detailed sets of information and motivate consumers to make purchase decision through World Wide Web. However, the phenomenon is especially important for B2C business and hence characteristics of website are significantly important in shaping up consumer buying behavior. Hence several traditional retailers are also opting electronic medium to increase their sales of B2C segment (Akram et al., 2018). This also forces companies to use innovative marketing and purchases methods and also boosted the number of online buyers (Tarabieh et al., 2020). Hence legitimate to believe in Akram et al. (2017) which mentioned Technology Acceptance model (TAM), as the main source behind the shaping of impulsive buying in online scenario. However, to gain more insights regarding the online impulsive buying researcher must try to understand consumer’s personality and also about current state of mind of consumers.

**STATEMENT OF PROBLEM:**

Purchases of products are highly associated with impulsive buying and in online scenario 30%-50% purchases are the resultant of impulsive buying (Akram et al., 2018). Although most of the recent studies on impulsive buying are on bricks and mortars models and there is a severe scarcity of studies which are linked with impulsive behavior in online scenario (Turkyilmaz, Erdem & Uslu, 2015). Regardless of the fact that consumer’s wishes to purchase online is highly linked with thigh propensity to act impulsively. On the other side characteristics of website also induces the impulsive buying behavior (Akram et al., 2018). However, purchase of expensive products is not related with pure impulsive buying as this type of buying diminishes with the increase of price (Rook & Fisher, 1995). Therefore better to indicate that studies must focuses on specific type of impulsive buying in online retail segment which was not indicated in the previous studies like Akram et al. (2018) and Tarabieh et al., (2020) etc.

Neither these were in the scenario of Pakistan; hence the study is required to investigate the impact of website quality on pure impulsive buying in the context of online retailing. Moreover, in order to assess website quality there is a need to understand the importance of characteristics that are involved in devising of website quality (Turkyilmaz, Erdem & Uslu, 2015). Similar has also been indicated by Zhao et al (2021) that the impulsive buying is heavily based upon website related factors.
THEORETICAL FRAMEWORK

There is a positive correlation between website quality and increase of impulsive buying behavior. Similar has been indicated through several prior studies. Reason being impulsive buying is the resultant of hedonic or affective component and therefore ultimately resulting in purchase of the product (Tarabieh et al., 2020). However use of credit cards also moderates the relationship between website quality and impulsive buying behavior which was not used by the prior studies (Akram et al., 2018). Although website quality is based on several other variables like privacy and security (Tarabieh et al., 2020 & Kuan, Bock & Vathanophas, 2008) like usefulness, ease of use, complementary customer relationships (Akram et al., 2018 & Tarabieh et al., 2020) and entertainment (Akram et al., 2018 & Tarabieh et al., 2020).

However, there are some other variables e.g. system quality etc (Kuan et al., 2008) and research also observes difference in the impact of website characteristics on the probability (Wells, Parboteeah & Valacich, 2011). However, recent studies of Akram et al. (2018) & Tarabieh et al. (2020) highlighted inventory of variables deemed potent in this regards. Though neither of these recent studies evaluated the impact of formulating (IVs) on website quality & based their analysis on effect of website quality on impulsive buying behavior. Thus the prime purpose of this study is to gauge the impact of formulating variables used by Akram et al (2018) on website quality and also to assess the mediating role on website quality with all of these mediating variables over dependent variable. Hence the methodology and analytical method of this study is bit different as compared to the prior studies and legitimate to treat the study as the theory building approach. Thus study only uses the use of credit card as the moderating variable.

LITERATURE REVIEW

Examining the grocery purchase trends revealed that consumers tends to purchase more than the list they maintained for shopping (Akram et al., 2017). Website Quality is one of the most effective tools in shaping impulsive buying behavior which ultimately cultivates positive sentiments and diminishing the risks associated the business. These criterions are also the main source for the increase of website quality which is the main tool to assess level of quality provided by retailers (Tarabieh et al., 2020).

Website Quality:
Website Quality is based upon different set of website characteristics and if the characteristics are optimal to satisfy customers in online interface the website is perceived to have higher quality and vice versa. Increase in level of website quality is positively associated with the increase probability of impulsive buying (Turkyilmaz et al., 2015).
Ease of Use:
It is the parameter which indicate level of convenience that website is referring to the users. The characteristic has significant impact on the consumer attitudes and behavior and according to study increase in the level of ease of use more will be the chances of impulsive buying through the website (Zhao et al., 2021). The characteristic are also termed as usability and is related to fulfillment of necessary and related tasks and it can be gauged through the level of effectiveness and satisfaction website provides to the users (Tarafdar & Zhang, 2005). Similar has been indicated by the study based on impulsive buying from Pakistan that ease of use resulted in the increase of ratio to use website (Hashmi, Attiq & Rasheed, 2019)

Usefulness:
Contents used by the website must be consistent with the prime purpose of the website and these contents must be detailed, adequate, sufficient and recent (Tarafdar & Zhang, 2005). Relationship of the contents is also known as navigability which indicates the pattern in which website pages are related with each other. This will increase positive impact on user’s experience and that may also cause increase in the probability of online impulsive buying

Entertainment:
Website business as well as its impact might be magnified through inducement of visual and fun effects which are also treated as the potent formulator of positive consumer emotions. Thus marketers try to use most of these emotions through cartoons comics, pictures. Moreover, online impulsive buying behavior might also be induced by adding innovation to the website design through adding emotional and visuals appeals. This inclination towards creativity increases positive feeling among viewers and resulted in pleasure, creativity, cheerful customers and hence increases the online impulsive buying (Akram et al. 2017). Thus, legitimately indicated by Turleyilmaz et al (2015) and that quality of experience, especially in the case of online scenario will foster impulsive buying (Hasim, Shamsudin & Hassan, 2018).

Complementary Customer Relationships:
It has been indicated online buying might became more significant if website provides the provision of quick response to customer’s complaints, ease to contact retailers and online feedback during purchase (Akram et al., 2017). Thus the addition of the variable has been based on the philosophy of relationship marketing and the purpose is to increase level of customer’s loyalty and also to convert indifferent customers in to loyal customers (Chung & Shin, 2010).

Use of Credit Card:
Use of credit card most of the time resulted in significant increase in the ratio of spending (Akram et al., 2018) and this can be evident through Badgaiyan and Verma (2015). A credit card fulfills the abrupt needs of money and therefore produces significantly positive impact on impulsive buying (Akram et al., 2018).
Thus, buyer feels more convenient as use of credit card reduces the impact of perceived cost and therefore it is also anticipated that the use will became more intensive in coming future. However, most of the times use of credit card found to be associated with purchase of expensive products though for impulsive buying the relationship are found to be more significant with impulsive purchase of apparels (Akram et al., 2017).

METHODOLOGY

Study of Tarabieh et al. (2020) uses structural equation modeling to reflect the effect of website quality on impulsive buying behavior. Although this study is bit different in methodology as mentioned in theoretical framework thus to check impact of formulating variables and mediation of website design with of the formulating variables the PLS SEM (correlation–based) is suited best (Astrachan, Patel & Wanzenried, 2014). Moreover study uses online format for data collection which was also used by Akram et al (2018), though authors do not prefer the method over the paper questionnaire.

However, during the times of COVID-19 this study only uses online data collection technique and it looks adequate as the data analysis has been conducted through SMART-PLS which is used for theory building approach (Hwang et al., 2010) and therefore issues pertaining to reliability of data mentioned by Akram et al (2018) might be resolved adequately. Hence data has been collected from youth of Karachi through convenience sampling approach and population includes all the students of bachelor’s level studying bachelors program related with management. The sample size is of 500 students of bachelors program from well-known higher educational institutes of Karachi. The sample is legitimate enough as the model has 43 arrows through 10-10 rule (Aggarwal & Kapoor, 2020) sample of 430 would be effective for the purpose of analysis. However, in order to increase authenticity the study uses sample of 500 respondents.

Questionnaire:

The instrument used to collect data for this study is based on five-points Likert Scale in order analyze effect of website quality on impulsive buying behavior. Similar pattern was used by the studies of Akram et al (2018) and Tarabieh et al. (2020). However in comparison to Akram et al (2018) the elements used for predictive variables are different in comparison to the outcome variable (website quality). Thus study incorporates Turkyilmaz et al (2015) to gauge four major formulating variables i.e. usefulness, ease of use, complementary customer relationships & entertainment. However, for measuring these variables indication of Tarafdar and Zhang, (2005) has also been used in addition to the above mentioned studies. Though for measuring impulsive buying, indication of Hashmi Attiq and Rasheed (2019) are also incorporated.

Initially 750 questionnaires were circulated and we have received 602 questionnaires back though 102 questionnaires were found to have some errors. Thus after passing through various checks 102 questionnaires were eliminated & valid percentage remains 0.80%.
STATISTICAL TESTING ANALYSIS

Figure 1 is used to indicate outer loading in order to highlight adequacy of series of element used to measure variable. According to the figure all the elements used for range of variables are indicating values higher than 0.708 which is the threshold value for legitimizing outer loading as indicated by Hair Sarstedt Ringle and Mena (2012). Therefore, in the light of these parameters it is optimal to declare all the elements in the research model.

<table>
<thead>
<tr>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Impulsive Buying</td>
<td>0.572</td>
</tr>
<tr>
<td>Website Quality</td>
<td>0.774</td>
</tr>
</tbody>
</table>

Table 1: Predictive Accuracy (Quality Criteria)

Table 1 is indicating variance caused by independent variable in dependent variable (Ringle, Da Silva & Bido, 2015). The impact is gauged through same method used for the analysis of regression (Benitez et al., 2020). Minimum value required to indicate the impact 0.26 while 0.5 and 0.75 are treated as moderate and substantial values for relationship (Hair, Ringle & Sarstedt, 2011).

Construct Reliability and Validity

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complementary customer relationship</td>
<td>0.893</td>
<td>0.919</td>
<td>0.919</td>
<td>0.694</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>0.908</td>
<td>0.917</td>
<td>0.931</td>
<td>0.732</td>
</tr>
<tr>
<td>Entertainment</td>
<td>0.934</td>
<td>0.938</td>
<td>0.948</td>
<td>0.753</td>
</tr>
<tr>
<td>Moderating Effect 1</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Online Impulsive Buying</td>
<td>0.948</td>
<td>0.951</td>
<td>0.957</td>
<td>0.762</td>
</tr>
<tr>
<td>Use of Credit Card</td>
<td>0.882</td>
<td>0.920</td>
<td>0.926</td>
<td>0.807</td>
</tr>
<tr>
<td>Usefulness</td>
<td>0.893</td>
<td>0.897</td>
<td>0.921</td>
<td>0.701</td>
</tr>
<tr>
<td>Website Quality</td>
<td>0.931</td>
<td>0.933</td>
<td>0.948</td>
<td>0.785</td>
</tr>
</tbody>
</table>

Table 2: Construct Reliability & Convergent Validity
Figure 1: CFA and outer loadings

Table 2 is reflecting construct reliability and convergent validity. Both of the parameters have one element in common that is composite reliability as according to Ab Hamid Sami and Sidek, (2017) outer loadings, composite reliability and AVE are the main elements to reflect convergent validity. Although AVE alone is sufficient to indicate convergent validity with values of 0.5 or above (Benitez et al., 2020). On the other hand table also has Cronbach’s Alpha and Goldstein rho to reflect construct reliability. However, according to Ravan & Baghaei (2016) rho is better reliability evaluator than Cronbach’s alpha (α). Thus according to the values table ensures construct reliability as well as convergent validity, as reliability indicators has values 0.7 or above and AVE is indicating values of 0.5 or above.
Table 3: Discriminant Validity (HTMT-Ratio)

Table 3 is indicating discriminant validity through HTMT ratio which is perceived as the best tool to analyze discriminant validity (Benitez, et al., 2020. The tool is significant when loading of variable with any other variable does not yield above than 0.85 (Hair Jr., Sarstedt, Ringle & Gudergan, 2017). Thus the analysis fulfills the criterion as there is no variable which is indicating value of 0.85 or more when loaded with any other variable.

Table 4 is indicating path coefficient to reflect the relationship of variables through inferential statistics and the research model (structural model) for the study is reflective in nature. Therefore it is appropriate to use the inferential statistics as indicated by the pattern to analyze reflective models (Afthanorhan, 2014). Table is using to measure to indicate the relationship among the variables that are t-statistics and p-values. Though p-values must not be greater than 0.05 (Kock & Hadaya, 2018) and t-statistics must be equal to or greater than 1.97 (Durate & Amaro 2018)
| Path-Coefficients | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|-------------------|---------------------|----------------|---------------------------|--------------------------|----------|
| Complementary customer relationship -> Website Quality | 0.195 | 0.191 | 0.102 | 1.909 | 0.057 |
| Ease of Use -> Website Quality | 0.711 | 0.709 | 0.096 | 7.447 | 0.000 |
| Entertainment -> Website Quality | 0.127 | 0.128 | 0.093 | 1.365 | 0.173 |
| Moderating Effect 1 -> Online Impulsive Buying | 0.076 | 0.077 | 0.075 | 1.003 | 0.316 |
| Use of Credit Card -> Online Impulsive Buying | 0.431 | 0.434 | 0.081 | 5.328 | 0.000 |
| Usefulness -> Website Quality | 0.143 | 0.135 | 0.082 | 1.745 | 0.082 |
| Website Quality -> Online Impulsive Buying | 0.134 | 0.310 | 0.056 | 2.392 | 0.048 |

Table 4: Path-coefficient

| Path-Coefficients | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|-------------------|---------------------|----------------|---------------------------|--------------------------|----------|
| Complementary customer relationship -> Website Quality -> Online Impulsive Buying | 0.026 | 0.027 | 0.022 | 1.203 | 0.230 |
| Ease of Use -> Website Quality -> Online Impulsive Buying | 0.085 | 0.099 | 0.046 | 1.847 | 0.050 |
| Entertainment -> Website Quality -> Online Impulsive Buying | 0.017 | 0.017 | 0.017 | 0.999 | 0.318 |
| Usefulness -> Website Quality -> Online Impulsive Buying | 0.019 | 0.020 | 0.017 | 1.156 | 0.248 |

Table 5: Specific Indirect Effect
Table 5 is also a part of inferential statistics and reflecting mediating relationships. However, there is only one relationship that is found to be potent in this regard is for i.e. Ease of Use -> Website Quality -> Online Impulsive Buying. This has been concluded on the bases of t-statistics and p-values as indicated for the illustration of table 4.

**CONCLUSION AND DISCUSSION**

Analysis of results revealed that there is a mix pattern results as far as their symmetry is concerned with the prior studies under this vein. Potent to indicate the postulate as prior studies e.g. Akram et al (2017) and Tarabieh et al (2020), reflected the impact of quality of website design with the impulsive buying behavior. Similar is found to be true in this study where there is a significant relationship found between website design and impulsive buying behavior. However, when the variable has been tested as the mediator between predicting variables of website quality then the mediation is found to be potent only with ease of use. Similarly the moderation of use of credit card is found to be potent variable when it is tested between website quality and impulsive buying behavior.

However, the moderation of use of credit cards is found to be insignificant which is the major asymmetry found with respect to Akram et al (2017) and Tarabieh et al (2020). Some other distinctiveness of the study are the relationship of predicting variables with the website design which was not the case for Akram et al (2017) and Tarabieh et al (2020). Though there was a need to find the relationship as this study is not only different with respect to the buying behavior and industry but also with the country. Therefore, the impact of variables might be varied with respect to findings of studies of other industries and locations. Similar has been indicated that trust towards online marketing channels varied significantly with respect to culture, countries and continents. Hence social media marketing activities must be gauged separately for different cultures and countries (Dwivedi et al., 2021). Moreover results of Turkyilmaz et al (2015) are mostly different from the findings of this study as the current study related these four variables with website quality rather than with impulsive buying. Moreover, among the four predictor variables, only one variable i.e. ease of use is creating effect through the mediation of website quality.

**AREA FOR FUTURE RESEARCH**

This has been mentioned previously there is lacking of studies regarding online impulsive buying behavior with the reference of Pakistan. However, this study has only conducted with the reference of pure impulsive buying. Therefore further studies might check the relationship of website quality in the context of reminder impulsive buying, suggestion impulsive and planned impulsive buying. Although for these form of impulsive buying website quality might be gauged through some other variables. Similarly serial mediation of hedonic or affective component might also be evaluated in relation with the elements used to determine website quality.
REFERENCES


