Extending the TAM Model for Understanding Antecedents to Online Purchase Intentions

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Abstract
The advancement, growth and popularity of information has enabled consumers across the world to purchase products and services from electronic retailers. However, many consumers do not shop online. Online retailers need to understand the determinants of online purchase intentions to increase sales. Thus, the study has extended the Technology Acceptance Model (TAM) for understanding consumers’ attitude towards online shopping. This study has measured the effect of mood, prior online experience, trust, shopping enjoyment and impulsive buying behavior on online purchase intentions. The sample size of the study was 204 with a response rate of 95%. The study has focused on the students of local business schools in Karachi. The questionnaire was adapted from previous studies. The study found that mood is the strongest predictor of consumers online purchase intentions followed by trust and prior online experience. On the contrary, shopping enjoyment and impulsive buying behavior are negatively associated with online purchase intentions.

Keywords: Technology Acceptance Model; mood; prior online experience; trust; shopping enjoyment; impulsive buying behavior; online purchase intentions.

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Introduction

The advancement, growth and popularity of information technology has enabled consumers across the world to purchase products and services from electronic retailers (e-tailing) (Elbeltagi & Agag, 2016; Rao & Patro, 2017). Despite its popularity, electronic retailing is restricted to domains which includes e-banking (Leonardi, Bailey, Diniz, Sholler, & Nardi, 2016), technology gadgets (Hale, Khan, Thakur & Angriawan, 2018), airline tickets (Amaro & Duarte, 2015), cosmetics (Xu-Priour, Cliquet & Palmer, 2017) and clothing (Nadeem, Andreini, Salo & Laukkanen, 2015).

Rao (2017) asserts that in electronic retailing (e-tailing) consumers interact in a virtual environment from different parts of the world via website interface. Electronic retailing is considered risky, therefore, trust is an important aspect in online transactions (Lee², Lee¹, Jee, & Ahn, 2016). Past studies have found that the attitude and behavior of online shoppers are different than traditional shoppers, Thus, it is important for online marketers to have a clear understanding of the determinants that stimulate online purchase intentions (Amaro & Duarte, 2015). By understanding the antecedents that stimulate online purchase intentions, web marketers will be in a better position to develop marketing strategies for attracting new customers and retaining existing clients (Hsu, Chang, & Chuang, 2015).

Extant studies on online shopping have extended the Technology Acceptance Model (TAM) in their conceptual framework (Martins, Oliveira, & Popović, 2014; Ashraf, Thongpapanl & Auh, 2014). It has been argued that since consumer behavior is culture specific, therefore, TAM could be extended in Pakistan where uncertainty avoidance is high as compared to developed countries (Forsythe & Shi, 2003; Umar, Saleem & Majoka, 2017). Thus, the aim of this study is to extend the TAM model in Pakistan for measuring the effect of mood, prior online experience, online trust, shopping enjoyment and impulsive buying on online purchase intentions.

Literature Review

Theoretical Grounding

This study has extended the Technology Acceptance Model for measuring the effect of mood, prior online experience, online trust, shopping enjoyment and impulsive buying behavior on online purchase intentions. Technology acceptance model was developed for explaining and predicting consumers acceptance of information technology (Davis, 1989). It has two components which are perceived usefulness and perceived ease of use. Perceived usefulness directly and indirectly affects online purchase intentions. Perceived ease of use relates to consumer level of comfort in using and adopting a new technology (Davis, 1989). In this study, online purchase intentions are related to the acceptance of technology. In
addition, impulsive buying and moods have been explained through perceived ease of use. Perceived usefulness is used to explain online experience and trust. Figure 1 depicts the conceptual framework of the study.

**Online Purchase Intentions**

Social media and e-retailing have increased the popularity of online purchase intentions. Purchase intentions have been extensively used in previous research for predicting actual behavior. Online purchase intentions measure customers willingness to buy a product or brand (Hajli, Sims, Zadeh & Richard, 2017). The Theory of Reasoned Action (TRA) suggests that actual behavior strongly depends on consumer intentions (Ajzen & Fishbein, 1988). Many studies have reported a positive association between behavior intentions and actual behavior (Madden, Ellen & Ajzen, 1992). Past studies have also suggested that instead of measuring actual behavior directly it is more appropriate to measure it through intentional
behavior (Paul, Modi & Patel, 2016; Pentina, Bailey & Zhang, 2018). Purchase intentions also depict consumers’ cognitive behavior towards a brand or product. Consumers cognitive behavior explains how they intend to buy a specific brand (Pappas, Kourouthanassisis, Giannakos & Chrissikopoulos, 2016). Researchers have used factors including consideration and expectation for measuring purchase intentions (Hajli, Sims, Zadeh & Richard, 2017). Nash (2018) defines online purchase intentions as customers willingness and intentions to get involved in online transactions.

**Mood and Online Purchase Intentions**

Online shopping is considered a complex and complicated task for three reasons (Park, Lennon & Stoel, 2005). First, consumers while shopping in conventional stores can physically examine the goods. This opportunity of physical examination is not possible in online shopping which makes online shopping more complicated (Park et al., 2005). Second, basic IT proficiency is also required for shopping through the internet. Consumers who lack computer knowledge face difficulties while shopping through the internet (Ekelund, Mixon, & Ressler, 1995). Third, uncertainties such as credit card security, merchant legitimacy and privacy make internet shopping more complex. Research has shown that consumers uncertainties has an effect on mood. In addition, mood has a positive correlation with internet shopping (Park et al., 2005; Seock & Bailey, 2008). Prior research has reported a direct association between mood and online purchase intentions (Adam, Astor, & Krämer, 2016; Chen, Xie & Wang, 2017). Thus, mood has a profound effect on purchase and repurchase intentions (Xiang, Zheng, Lee & Zhao, 2016). It has also been argued that happy consumers spend more time on online shopping. As a result, good mood positively affects online purchase intentions (Chen et al., 2017; Nash, 2018). Adam et al., (2016) found that online shoppers’ mood results in a favorable evaluation of virtual stores due to which customers buy more. Park (2005) and Adam et al., (2016) have also concluded that a positive mood will positively affect online purchase intentions. On the contrary, poorly designed websites will have a negative effect on customer mood and purchase intentions (Bridges & Florsheim, 2008; Pappas et al., 2016)

**H1:** Mood positively influences online purchase intentions.

**Prior Online Experience and Online Purchase Intentions**

Hsu (2015) has argued that an individual’s behavioral response depends on past experience, online stimuli and background. Online shopping is still a new activity for most consumers, therefore, it is still considered as risker than conventional shopping (Wu, Chen, Chen & Cheng, 2014). It has also been argued that online purchase intentions significantly depend on product information available on websites, trust, aesthetic appeal, ease of use and enjoyment (Martins et al., 2014). Past studies have found a positive correlation
between prior online experience and purchase intentions (Rose, Clark, Samouel, & Hair, 2012). Uncertainty has a negative relationship with online purchase intentions. Therefore, consumers with limited online purchase experience tend to avoid online shopping (Mollen & Wilson, 2010). On the other hand, consumers who frequently shop online have more trust and favorable purchase intentions (Grewal, Levy & Kumar, 2009; Seckler, 2000). Seckler (2000) argues that individuals initially make small purchases in online shopping. Moreover, confidence and trust also promotes ambitious online purchases. Consumers are generally risk-averse. Therefore, consumers with no past experience will avoid online shopping (Li & Huang, 2009). In addition, consumers prior online experience will promote online repurchase intentions (Wen, Prybutok & Xu, 2011).

**H2:** Prior online experience will positively affect online purchase intentions.

### Trust and Online Purchase Intentions

Consumers online connectivity has improved with the advancement of technology. Prior studies have found that consumer trust and online purchase intentions are influenced by accurate information of products and services on websites (Cheshire, 2011). Trust refers to consumer readiness to accept the inherent risks associated with online transactions. Consumer trust also depends on past online experience (Beldad, de Jong & Steehouder, 2010). While shopping online, consumers are required to disclose their personal and financial information. Therefore, only reputable and trustworthy websites will attract online shoppers (Cheshire, 2011). Extant studies also report a positive association between trust and online purchase intentions (Amaro & Duarte, 2015; Chiu, Hsu, Lai & Chang, 2012; Dabholkar & Sheng, 2012; Lien, Wen, Huang & Wu, 2015). In addition, Beldad (2010) has concluded that higher consumer trust will promote online purchases. Prior studies suggest that consumer trust depends on security, privacy and the reliability of websites (Hsu et al., 2015; Lu, Fan & Zhou, 2016). Thus, online purchase intentions are strongly associated with the dimensions of trust (Cheshire, 2011). Consumers prefer to shop in reputable and trustworthy websites (Gao, Waechter & Bai, 2015). Past studies have also found that consumer generated information positively effects trust and purchase intentions (Hajli, 2015).

**H3:** Trust will positively effect online purchase intentions.

### Shopping Enjoyment and Online Purchase Intentions

Past studies have found that consumers tend to enjoy browsing and shopping on websites with aesthetic appeal (Nash, 2018; Van der Heijden & Verhagen, 2004). It has been argued that consumers enjoy online shopping and spend time browsing for products and services which enhances their purchase intentions (Cherrett et al., 2017). Amaro and
Duarte (2015) suggest that virtual stores should pay special attention to make consumers browsing experience pleasant and enjoyable. In addition, Chen et al., (2017) also concluded that consumers shopping enjoyment has a positive association with online purchase intentions. Likewise, it has also been found that enjoyment has a positive effect on online purchase intentions (Van der Heijden & Verhagen, 2004). Thus, virtual shops should make their websites more interactive. On the contrary, Verhoef and Langerak (2001) and Cai and Xu (2006) found that shopping enjoyment is not related with online shopping behavior and does not have a significant impact on online purchase intentions.

Previous research suggests that online shoppers’ perception of websites has a direct effect on consumer enjoyment and purchase intentions (Kim et al., 2007). Therefore, online shops should focus on making consumers shopping experience pleasant and enjoyable by making their website more interactive. Studies have found that entertaining and interactive websites not only attract online shoppers but also stimulates purchase intentions (Cai & Xu, 2006; Kim, Fiore & Lee, 2007; Seock & Bailey, 2008; Verhoef & Langerak, 2001). Moreover, Kim et al., (2007) recommends that websites using 3D technology will make consumers shopping experience more pleasant and enjoyable thereby stimulating online purchase intentions.

**H4:** Shopping enjoyment has a positive effect on online purchase intentions.

**Impulsive Buying Behavior and Online Purchase Intentions**

Impulsive buying refers to an unplanned response to a specific stimulus (Beatty & Ferrell, 1998; Piron, 1991). Impulsive buying behavior has been defined as a sudden urge to buy something without thinking and evaluating the consequences (Rook, 1987). Some studies have argued that consumers do not consider impulsive buying an irrational behavior (Dittmar, Beattie & Friese, 1996; Fu, Ko, Wu, Cherng & Cheng, 2007; Hausman, 2000). It is believed that impulsive buying is a rational behavioural response to a stimulus (Dittmar, Beattie & Friese, 1996; Fu, Ko, Wu, Cherng & Cheng, 2007; Hausman, 2000). In a similar vein, Fu et al., (2007) argues that impulsive buying could be considered as a reasonable unplanned behavior.

Beatty and Farrel (1998) observe that impulsive buyers are more emotional as compared to non-impulsive buyers. Thus, they argue that emotions moderate the relationship between impulsive buying and purchase intentions. Extant research suggests that online retailers can stimulate impulsive buying by offering special discounts and free gifts on their webpages (Beatty & Ferrel, 1998; Brohan, 1999). Brohan (1999) found that online retailers in the United States were able to attract impulsive buyers through the strategy of offering discounts and free gifts.
**H5:** Impulsive buying behavior positively influences online purchase intentions.

**Methodology**

**Respondents Profile**

The respondents comprise of business school students in Karachi. Business school students were selected as they are proficient in information technology. Using purposive sampling, the study used a sample of 204 respondents. The authors have personally collected the data by visiting leading business schools in Karachi between March and May, 2017. Table 1 shows the respondents profile.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number(No.)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 24 Years</td>
<td>60</td>
<td>29</td>
</tr>
<tr>
<td>25 to 34 Years</td>
<td>85</td>
<td>42</td>
</tr>
<tr>
<td>35 to 44 Years</td>
<td>45</td>
<td>22</td>
</tr>
<tr>
<td>45 Years or older</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>46</td>
<td>23</td>
</tr>
<tr>
<td>Married</td>
<td>158</td>
<td>77</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>90</td>
<td>44</td>
</tr>
<tr>
<td>Female</td>
<td>114</td>
<td>56</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBA Student</td>
<td>95</td>
<td>47</td>
</tr>
<tr>
<td>MBA Student</td>
<td>109</td>
<td>53</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part Time Student</td>
<td>60</td>
<td>29</td>
</tr>
<tr>
<td>Full Time Student</td>
<td>144</td>
<td>71</td>
</tr>
</tbody>
</table>

**Scale and Measures**

The study has adapted a questionnaire from the previous literature. The questionnaire had two parts. Part 1 was related to demographics and all the items were based on the nominal scale. Part 2 had six constructs (32 items) based on the five point Likert scale. Five represents strongly agree and one represents strongly disagree. A summary of constructs is presented in Table 2. The constructs and items in the questionnaire are attached as Appendix 1.
Table 2: Summary of Constructs

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Authors Name</th>
<th>Items</th>
<th>Cronbach Alpha in past studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>(Adam et al., 2016)</td>
<td>6</td>
<td>.75 to .87</td>
</tr>
<tr>
<td>Prior Online Experience</td>
<td>(Brunelle &amp; Lapierre, 2008)</td>
<td>4</td>
<td>.80 to .85</td>
</tr>
<tr>
<td>Online Trust</td>
<td>(Chen &amp; Barnes, 2007)</td>
<td>9</td>
<td>.79 to .87</td>
</tr>
<tr>
<td>Shopping Enjoyment</td>
<td>(Kotzé, North, Stols, &amp; Venter, 2012)</td>
<td>6</td>
<td>.78 to .84</td>
</tr>
<tr>
<td>Impulsive Buying Behavior</td>
<td>(Gehrt, Onzo, Fujita &amp; Rajan, 2007)</td>
<td>4</td>
<td>.74 to .88</td>
</tr>
<tr>
<td>Online Purchase Intentions</td>
<td>(Brunelle &amp; Lapierre, 2008)</td>
<td>3</td>
<td>.79 to .87</td>
</tr>
</tbody>
</table>

Data Analysis

The results related to univariate normality and internal consistency are presented in Table 3.

Table 3: Descriptive Summary

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>4.28</td>
<td>1.57</td>
<td>0.13</td>
<td>-1.05</td>
<td>.87</td>
</tr>
<tr>
<td>Prior Online Experience</td>
<td>4.04</td>
<td>1.81</td>
<td>0.15</td>
<td>-0.97</td>
<td>.81</td>
</tr>
<tr>
<td>Trust</td>
<td>3.97</td>
<td>1.13</td>
<td>0.35</td>
<td>-0.21</td>
<td>.83</td>
</tr>
<tr>
<td>Shopping Enjoyment</td>
<td>4.24</td>
<td>1.62</td>
<td>-0.57</td>
<td>-0.56</td>
<td>.79</td>
</tr>
<tr>
<td>Impulsive Buying Behavior</td>
<td>4.36</td>
<td>1.86</td>
<td>-0.29</td>
<td>-0.92</td>
<td>.74</td>
</tr>
<tr>
<td>Online Purchase Intentions</td>
<td>4.30</td>
<td>1.60</td>
<td>0.12</td>
<td>-1.09</td>
<td>.88</td>
</tr>
</tbody>
</table>

Table 3 shows that the Skewness values ranged between -0.57 to 0.12. It is the highest for shopping enjoyment (Mean= 4.24, SD= 1.62) and lowest for online purchase intentions (Mean= 4.30, SD= 1.67). Moreover, the Kurtosis values ranged between -1.09 to -0.21. It is the highest for online purchase intentions (Mean= 4.30, SD= 1.60) and the lowest for trust (Mean= 3.97, SD= 1.13). The results indicate that the constructs fulfill the requirements of univariate normality.
In addition, the Cronbach's Alpha values ranged from 0.74 to 0.88. It is the highest for online purchase intentions (Mean=4.30, SD=1.60) and the lowest for impulsive buying (Mean=4.36, SD=1.86). As all the Cronbach's alpha values are at least 0.70, therefore, the constructs satisfy the requirements of internal consistency (Hair Jr et al., 2015).

**Correlations Analysis**

Correlation analysis was performed to ascertain the uniqueness, distinctiveness and multi-collinearity among the constructs. The results are reported in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood (I)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Online Experience (II)</td>
<td>-.31</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust (III)</td>
<td>.73</td>
<td>-.70</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping Enjoyment (IV)</td>
<td>-.39</td>
<td>.30</td>
<td>.55</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impulsive Buying Behavior (V)</td>
<td>-.37</td>
<td>.43</td>
<td>-.63</td>
<td>-.35</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Online Purchase Intentions (VI)</td>
<td>.71</td>
<td>.31</td>
<td>.69</td>
<td>-.33</td>
<td>-.31</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4 shows that the correlations ranged between -.70 to .73. The lowest correlation is between shopping enjoyment (Mean= 4.24, SD= 1.62) and prior online experience (Mean= 4.04, SD= 1.81). The highest correlation is between trust (Mean= 3.97, SD= 1.13) and mood (Mean= 4.28, SD= 1.57). These results indicate that the constructs are unique, distinct and do not suffer from multi-collinearity (Hair Jr et al., 2015).

**Convergent Validity**

Convergent validity explains how appropriately indicator variables explain the respective constructs. The results are presented in Table 5.
Table 5: Convergent Validity

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Cronbach Alpha</th>
<th>Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>4.28</td>
<td>1.57</td>
<td>.87</td>
<td>0.65</td>
</tr>
<tr>
<td>Prior Online Experience</td>
<td>4.04</td>
<td>1.81</td>
<td>.81</td>
<td>0.71</td>
</tr>
<tr>
<td>Trust</td>
<td>3.97</td>
<td>1.13</td>
<td>.83</td>
<td>0.78</td>
</tr>
<tr>
<td>Shopping Enjoyment</td>
<td>4.24</td>
<td>1.62</td>
<td>.79</td>
<td>0.81</td>
</tr>
<tr>
<td>Impulsive Buying Behavior</td>
<td>4.36</td>
<td>1.86</td>
<td>.74</td>
<td>0.76</td>
</tr>
<tr>
<td>Online Purchase Intentions</td>
<td>4.30</td>
<td>1.60</td>
<td>.88</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Table 5 shows that the variance explained for each construct is greater than 0.60. It also shows that Cronbach’s alpha values are greater than 0.60. Thus, the constructs satisfy the requirements of convergent validity (Hair Jr et al., 2015).

**Discriminant Validity**

Discriminant validity measures the uniqueness and distinctiveness of the constructs. The results are presented in Table 6.

Table 6: Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood (I)</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Online Experience (II)</td>
<td>0.10</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust (III)</td>
<td>0.53</td>
<td>0.49</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping Enjoyment (IV)</td>
<td>0.15</td>
<td>0.09</td>
<td>0.30</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impulsive Buying Behavior (V)</td>
<td>0.14</td>
<td>0.18</td>
<td>0.40</td>
<td>0.12</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Online Purchase Intentions (VI)</td>
<td>0.50</td>
<td>0.09</td>
<td>0.48</td>
<td>0.11</td>
<td>0.10</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Table 6 shows that the square roots of variance explained are greater than the square of each pair of correlation. Thus, the constructs are unique and distinct (Hair Jr et al., 2015).

**Multiple Regression Analysis**

The results from multiple regression analysis suggest that the predictor variables (i.e. impulsive buying behavior, prior online experience, shopping enjoyment, mood and trust) explain 71.9% of the variance in online purchase intentions ($R^2=.719$, $F = 105.056$, $p<0.05$). The subsequent sections present the results and discussion from simple regression analysis.
Hypothesis 1
The first hypothesis states that mood positively influences online purchase intentions. Table 7 depicts summary of results.

Table 7: Simple Regression Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>1.233</td>
<td>.231</td>
</tr>
<tr>
<td>Mood</td>
<td>.716</td>
<td>.051</td>
</tr>
</tbody>
</table>

Dependent Variable: Online Purchase Intentions, $R^2 = .498$, Adjusted $R^2 = .495$, F = 200.081, p < 0.05.

The results suggest that the hypothesis examining the effect of mood on online purchase intentions was accepted. Mood explains 49.5% of the variance in online purchase intentions. Adjusted $R^2 = .495$, F = 200.081, p < 0.05. Thus, mood ($\beta = .716$ p < .05) significantly influences online purchase intentions.

Hypothesis 2
The second hypothesis examining the effect of prior online experience on online purchase intentions was tested through simple regression. Table 8 depicts a summary of the results.

Table 8: Simple Regression Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>5.117</td>
<td>.267</td>
</tr>
<tr>
<td>Prior Online Experience</td>
<td>.202</td>
<td>.060</td>
</tr>
</tbody>
</table>

Dependent Variable: Online Purchase Intentions, $R^2 = .053$, Adjusted $R^2 = .048$, F = 11.229, p < 0.05

Table 8 shows the hypothesis on the influence of prior online experience on online purchase intentions was accepted. Prior online experience explains 4.8% of the variance in online purchase intentions. Adjusted $R^2 = .048$, F = 11.229, p < 0.05. Thus, prior online
experience ($\beta = .229$ $p<.05$) significantly influences online purchase intentions.

**Hypothesis 3**

Simple Regression analysis was used to measure the effect of trust on online purchase intentions. Table 9 presents a summary of results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>.484</td>
<td>.299</td>
</tr>
<tr>
<td>Trust</td>
<td>.961</td>
<td>.073</td>
</tr>
</tbody>
</table>

Dependent Variable: Online Purchase Intentions, $R^2=.465$, Adjusted $R^2=.462$, $F=175.615$, $p<0.05$

The results suggest that the hypothesis examining the effect of trust on purchase intention was accepted. Online trust explains 46.2% of the variance in online purchase intentions. Adjusted $R^2=.462$, $F = 17.612$, $p<0.05$. Thus, trust ($\beta = .682$, $p<.05$) significantly influences online purchase intentions.

**Hypothesis 4**

Simple Regression analysis was used to measure the effect of shopping enjoyment on online purchase intentions. Table 10 presents a summary of results.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
<td>5.680</td>
<td>.296</td>
</tr>
<tr>
<td>Shopping Enjoyment</td>
<td>-.326</td>
<td>.065</td>
</tr>
</tbody>
</table>

Dependent Variable: Online Purchase Intentions, $R^2=.110$, Adjusted $R^2=.106$, $F=24.790$, $p<0.05$

The results in Table 4 shows that the hypothesis examining the influence of shopping enjoyment on online purchase intentions was not accepted. Shopping enjoyment explains 10.6% of the variance in online purchase intentions. Adjusted $R^2=.106$, $F = 24.790$, $p<0.05$. Thus, shopping enjoyment ($\beta =-.332 p<.05$) negatively influences online purchase intentions.
Hypothesis 5
The fifth hypothesis examining the effect of impulsive buying on online purchase intentions was tested through simple regression. Table 11 depicts the results of simple regression.

Table No. 11: Simple Regression Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Constant</td>
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<td>.280</td>
</tr>
<tr>
<td>Impulsive Buying Behavior</td>
<td>-.169</td>
<td>.059</td>
</tr>
</tbody>
</table>

Dependent Variable: Online Purchase Intentions, R² = .039, Adjusted R² = .034, F = 8.210, p < 0.05

The results suggest that the hypothesis examining the effect of impulsive buying on online purchase intentions was not accepted. Impulsive buying explains 3.40% of the variance in online purchase intentions. Adjusted R² = .034, F = -8.210, p < 0.05. Thus, impulsive buying behavior (β = -.198 p < .05) negatively influences online purchase intentions.

Discussion and Conclusion

Discussion

Mood and Online Purchase Intentions

The first hypothesis states that mood positively influences online purchase intentions. The regression results suggest that the hypothesis was accepted (refer to Table 7). Research has shown that consumers uncertainties such as credit card security, merchant legitimacy and privacy make internet shopping more complex. These complexities affect consumers’ mood. In addition, mood has a positive correlation with internet shopping (Park et al., 2005; Seock & Bailey, 2008). Prior literature suggests a direct association between mood and online purchase intentions (Adam, Astor & Krämer, 2016; Chen, Xie & Wang, 2017). Thus, mood has a profound effect on purchase and repurchase intentions (Xiang, Zheng, Lee & Zhao, 2016). It has also been argued happy consumers spend more time on online shopping. As a result, good mood positively affects online purchase intentions (Chen et al., 2017; Nash, 2018). Adam (2016) found that online shoppers’ mood results in a favorable evaluation of virtual stores due to which customers buy more. Park et al., (2005) and Adam et al., (2016) have also
concluded that positive mood is positively associated with online purchase intentions. On the contrary, poorly designed websites will have a negative effect on customer mood and purchase intentions (Bridges & Florsheim, 2008; Pappas et al., 2016).

**Prior Online Experience and Online Purchase Intentions**

The second hypothesis states that prior online experience will positively affect online purchase intentions. The regression results suggest that the hypothesis was accepted (refer to Table 8). It has also been argued that online purchase intentions significantly depend on product information available on websites, trust, aesthetic appeal and enjoyment (Martin et al., 2014). Past studies have found a positive association between prior online experience and online purchase intentions (Rose, Clark, Samouel & Hair, 2012). Uncertainty has a negative relationship with online purchase intentions. Therefore, consumers with limited online purchase experience tend to avoid online shopping (Mollen & Wilson, 2010). On the other hand, consumers who frequently shop online have more trust and favorable purchase intentions (Grewal, Levy & Kumar, 2009; Seckler, 2000). Seckler (2000) argues that individuals initially make small purchases in online shopping. Moreover, confidence and trust also promote ambitious online purchases. Consumers are generally risk-averse. Therefore, consumers with no past experience will avoid online shopping (Li & Huang, 2009). In addition, consumers prior online experience will promote online repurchase intentions (Wen, Prybutok & Xu, 2011).

**Trust and Online Purchase Intentions**

The third hypothesis states that trust positively influences online purchase intentions. The results support the hypothesis (refer to Table 9). Prior literature suggests that consumer trust and online purchase intentions are influenced by accurate information of products and services on websites (Cheshire, 2011). Trust refers to consumer readiness to accept the inherent risks associated with online transactions. Consumer trust also depends on their past online experience (Beldad, De Jong & Steehouder, 2010). While shopping online, consumers are required to disclose their personal and financial information. Therefore, only reputable and trustworthy websites will attract online shoppers (Cheshire, 2011). Extant studies report a positive association between trust and online purchase intentions (Amaro & Duarte, 2015; Chiu, Hsu, Lai & Chang, 2012; Dabholkar & Sheng, 2012; Lien, Wen, Huang & Wu, 2015). In addition, Beldad (2010) has concluded that consumer trust will promote online purchases. Prior studies suggest that consumer trust depends on security, privacy and reliability of websites (Hsu et al., 2015; Lu, Fan & Zhou, 2016). Thus, online purchase intentions are strongly associated with the dimensions of trust (Cheshire, 2011). Consumers prefer to shop in reputable and trustworthy websites (Gao, Waechter & Bai, 2015). Past studies have also found that consumer generated information positively affects trust and
purchase intentions (Hajli, 2015).

**Shopping Enjoyment and Online Purchase Intentions**

The fourth hypothesis states that shopping enjoyment positively influences online purchase intentions. The results support the hypothesis (refer to Table 10). Past literature also suggests that consumers tend to enjoy browsing and shopping on websites with aesthetic appeal and ease of use (Nash, 2018; Van der Heijden & Verhagen, 2004). It has been argued that consumers enjoy online shopping and spend time browsing for products and services which enhances their purchase intentions (Cherrett et al., 2017). Cai and Xu (2006) suggest that online stores should pay special attention to make consumers browsing experience pleasant and enjoyable. In addition, Chen et al., (2017) also concluded that consumers shopping enjoyment positively influences online purchase intentions. Likewise, Van der Heijden and Verhagen (2004) also found that enjoyment has a positive effect on online purchase intentions. Thus, virtual shops should make their websites more interactive. On the contrary, Verhoef and Langerak (2001) and Cai and Xu (2006) found that shopping enjoyment is not related with online shopping behavior and does not have a significant impact on online purchase intentions.

**Impulsive Buying Behavior and Online Purchase Intentions**

The fifth hypothesis states that impulsive buying behavior has a positive effect on online purchase intentions. The regression results suggest that the hypothesis was not supported. The results show that the effect was negative (refer to Table 11). It is believed that impulsive buying is a rational behavioral response to a stimulus (Dittmar, Beattie & Friese, 1996; Fu, Ko, Wu, Cherng & Cheng, 2007; Hausman, 2000). In a similar vein, Fu et al., (2007) argues that impulsive buying could be considered as a reasonable unplanned behavior. Beatty and Farrel (1998) observe that impulsive buyers are more emotional as compared to non-impulsive buyers. Thus, they argue that emotions moderate the relationship between impulsive buying and purchase intentions. Extant research suggests that online retailers can stimulate impulsive buying by offering special discounts and free gifts on their websites (Beatty & Ferrell, 1998; Brohan, 1999). Brohan (1999) found that online retailers in the United States were able to attract impulsive buyers through the strategy of offering discounts and free gifts.

**Conclusion**

The aim of this study was to extend the TAM model in Pakistan for understanding the effect of predictors (i.e. Mood, prior online experience, online trust, shopping enjoyment, and impulsive buying behavior) on online purchase intentions. The model fitted very well and helped in understanding the effects of antecedents on online purchase intentions.
Three hypotheses were accepted. In this context, it was found that mood ($R^2 = .495$) has the strongest effect on online purchase intentions followed by trust ($R^2 = .465$) and shopping enjoyment ($R^2 = .110$). Earlier studies have found that the strongest predictor of online purchase intentions is online purchase experience (Ling et al., 2010). Additionally, the study found that shopping enjoyment and impulsive buying behavior have a negative effect on online purchase intentions which are inconsistent with earlier research (Ling et al., 2010).

The study has several implications for managers and policymakers. For example, this study has found a strong effect of mood and trust on online purchase intentions. Therefore, e-retailers need to make their websites more aesthetic and interesting by adopting 3D technology. Additionally, they should enhance customers trust on their websites. This study found a negative effect of impulsive buying behavior and shopping enjoyment on online purchase intentions. E-retailers also need to make their websites more interactive. For attracting impulsive buyers, e-retailers may also adopt different promotional strategies including price discounts, small gifts and giveaways.

This study has several limitations. This study was restricted to the business students of one city, that is Karachi. Future studies can analyze other cities and social strata. Online shopping varies from one product category to other. Future studies could measure the antecedents of different product categories.
Appendix 1

Constructs and items in the questionnaire

**Mood Scale (6 items)**

1. Presently I am in a lively mood  
2. Presently I am in a happy mood  
3. Presently I am in a pleasant mood  
4. Presently I am in a gloomy mood  
5. Presently I am in a content mood  
6. Presently I am in a jittery mood.

**Prior online experience (4 items)**

1. I am experienced with the use of the web site.  
2. I feel competent of using the web site.  
3. I feel comfortable of using the web site.  
4. I feel that the web site is easy to use

**Trust (9 items)**

1. The web site of this web-retailer is trustworthy and honest.  
2. The web site of this web-retailer wants to keep promises and obligations.  
3. The information provided by the web-retailer is plentiful and of sufficient quality.  
4. The infrastructure of the web site of this web-retailer is dependable.  
5. The web site of this web-retailer offers secure personal privacy.  
6. The web site of this web-retailer keeps my best interests in mind.  
7. Compared to other web site offered, the web site of this web-retailer is secure and reliable.  
8. The web site of this web-retailer would not behave opportunistically (e.g., gaining money illegally).  
9. The performance of the web site of this web-retailer fulfills my expectation.
Shopping Enjoyment (6 items)
1. I enjoy online shopping
2. I do online shopping for bargain
3. I do online shopping for gratification
4. I do online shopping for entertainment
5. I like online shopping for browsing
6. I do online shopping for entertainment purpose

Impulsive Buying Behavior (4 items)
1. I am impulsive when purchasing products/services through web-retailer.
2. When my intention is to merely browse through the web site, I sometimes make a purchase.
3. When I purchase products/services spontaneously from the web-retailer, I feel released.
4. I plan my online purchase carefully

Online Purchase Intentions (3 items)
1. It is likely that I will transact with this web retailer in the near future.
2. Given the chance, I intend to use this retailer’s web site.
3. Given the chance, I predict that I should use this retailer’s web site in the future.
References


