Demographics and Preference for Online Buying: An Exploratory Study of University Students

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Abstract

Increased rate of internet penetration has tremendously impacted online buying in general and the corporate working in particular. Development of online retailing sets opportunity as well challenges for both the marketer and for consumers. Youngster have been specially reported as the major adopters of online buying. Insights into online buying as well as the impact of various consumer demographic characteristics have become important for the marketer as well as for the academician to understand and predict future of online purchase. In this context, this paper aims to investigate influence of demographic characteristics of university students on their online buying behaviors. This exploratory research is primarily oriented towards university students who have access to internet via any devices e.g. computers, mobile phones, tablet etc. Data were collected through survey method from Delhi NCR. IBM Statistical Package for the Social Sciences Statistics Ver. 20 was used for data analysis and interpretation of results. Students' characteristics, e.g. gender, stay-hostler vs. non-hostler, stream- technical vs. non-technical, studies level- undergraduate vs. post graduate were studied as significant factors under demographics. The insights from current study are useful for the online marketer developing digital marketing strategies designed specifically for growing young population in India. Results of the study show that the male students are positive about online buying. Education and pocket money too are positively and significantly associated factors with online buying.

Keywords: *Online Buying, Demographic Characteristics, University Students, India*

Introduction

Today, India has one of the fastest-growing e-commerce markets in the world, yet online sales still accounts for approx. 2.2 percent of the total retail sales (Statista, 2018). With improved infrastructure and the government encouragement, computer literacy enabled expansive technology adoption by the masses in the country, improvement in the literacy level and the government has promoted adoption of digital platforms in education sector. As a part of the government initiative for 'Made in India', IT platform "Swayam" has been launched in 2017 where hundreds of courses are offered free online 24X7 hours for Class IX to post-graduation through DTH channels, mobiles and tablets, that intended bridging the digital divide among students (Gohain, 2017).

While, there is tremendous growth in the research studies exploring online buying behavior, findings of research being on western countries, cannot be generalized for Indian consumers. Similarly, not many research has been done on influence of different demographic variables with online buying requires specific analysis in Indian context. Current study attempts to fill that gap by empirically investigating only the university students in India. Subsequent section covers concept of online buying

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and its importance. Next, a detailed review is presented on the current scenario of online retailing in India highlighting its importance. Then, detailed description of research methodology adopted, data analysis & hypotheses results are presented. In the end, discussion and conclusion section covers implications of the research findings and in brief suggestions for future research are presented.

Online Buying

Online buying is any act of buying goods or services over the internet (businessdictionary.com). One typical form of electronic commerce is termed as B2C or business to consumers. Another related important form of e-commerce is C2C i.e. consumer to consumer in which consumers can buy as well sell e.g. OLX.com where old articles are bought and sold by consumers. Moreover, internet has offered opportunities for consumers to get abundant information from sources such as company websites, online malls, social networking sites, i.e. Tweeter, Facebook, Google Chrome, etc., and also responses in online forums such as blogs, reviews and feedback from peer groups and facilitate easy comparison provided by e- stores (Sunil, 2015). Thus, resulting trends have brought in changes in the consumer buying behavior as well. ROBO principle (Knežević, Jaković and Strugar, 2014) i.e. product research-online and buy- offline is no longer valid in all the contexts. E-retailing has been dominated mainly in food and groceries; fashion and apparel; jewelry; consumer durables and kitchen appliances. Most growing segment has been reported to be specialty retailing which consist of books, gifts and stationary, eye-wear and time-wear (Gopalan and Ranganathan, 2014).

Online Retailing in India

Four major drivers of online retailing in India are- the government encouragement, increase in middle class and double-salaried families, improved technology and infrastructure e.g. improved internet penetration rate throughout the country and lastly more local players either starting or joining online platform for availability of their products and services.

Even private banks in India have started allowing free of cost transactions through RTGS (Real Time Gross Settlement) and NEFT (National Electronics Funds Transfer) to promote a digital economy (Tribuneindia.com, 2017). The Government initiatives and campaign like "Digital India", mandatory online GST filings (Nangia, 2017), have improved transparency and have brought down the tax burden on the online buyers. Reduction in paper work, approvals and permissions has fastened product deliveries and returns and dispute settlements. Moreover, pro-digital government policies, demonetization have triggered online payment and e-wallet usage; and reduced data cost. Thus, online commerce is making rapid strides (Purani, 2017).

The Ministry of Commerce & Industry, the Government of India allowed 100 percent foreign direct investment (FDI) in March, 2017 through the automatic route in e-commerce retailing (Hindu, 2016). International retail players are adapting their strategies for the local market by promoting local produced and skills. Increased focus of the world-wide major in online retailing Amazon.com on India is the result of gaining importance of India as a fertile ground for growth of online retail business. Snapdeal.com, one of the leading e-commerce players in India, offering 'Crafts of India' section has a special page for women ethnic wear section titled 'Weaves of Varanasi'. Moreover, Indian store based brands are also focusing on online availability of their products and services. Indian originated FMCG brand Patanjali, known for its 'Swadeshi' positioning, has entered into tie-ups for online-retailing with major e-commerce players Amazon, Paytm Mall, Grofers, Shopclues, Flipkart, 1mg, Netmeds and Bigbasket (Bureau, Dutta, 2018).

The share of 'online retail sales' in the total retail sales of the country is projected to increase to 4.4 percent from current 2 percent in 2019 (Statista, 2018). Similarly, the research and consultancy firm RNCOS predicted the Indian online retail market to grow over four times to touch over Rs. 88,000 crore by 2018. The range of products and services available online is also increasing day by day. In India, FMCG sales through online channel accounts for close to 5 percent of the total online sales and BCG Consulting projected it to grow to more than 40 percent by 2021(Dutta, 2018). Online retailers are personalising their marketing efforts through analysing buyers' purchasing history, search/ browsing behavior, cart and wish lists etc. (Chan, 2018).

'Indian retail industry is becoming more complex and changing at an ever-increasing speed'- PWC (Agarwal, 2016). The digital medium has offered myriad options for promotion to the marketers. Free online ad posting sites have emerged e.g. Sulekha, Quikr, ClickIndia. One of the largest online classified ads company in 2017 OLX India has reported 31% increase in its net profit via revenues generated from subscription and advertising money (Bhattacharyya, 2017). Social media like YouTube, Facebook, Twitter; have replaced tradition promotional tools- print, telecast (Dingra, 2018) thus, posing challenges for the marketers to integrate their efforts while avoiding multiplicity in the competitive market place, striving for even low margins. Moreover, there are other challenges, very specific to online market place as well, which includes low entry barriers leading to reduced competitive advantages, absence of e-commerce laws, rapidly changing business models, shortage of manpower, urban phenomenon and customer loyalty, product return, card abandonment, privacy and security to name a few. The product return rate was reported to increase by 50% in 2017(Banerjee, 2017; Purani, 2017).

Demographics of Indian online buyers can also be utilized as a predictor of their preferences. An ASSOCHAM-Resurgent India study predicted an increase of 65% in online retailing in 2018. Stastista.com (2018) reported that the number of Indians buying goods and services online will cross over 329 million in 2020. Online consumers were majorly from Delhi, Mumbai and Bangalore; moreover teens at a base age of 18 years were involved in online buying (Banerjee, 2017).

Significance of Study

Data about online buying behavior are utilised by the companies to develop their marketing strategies for digital marketing, market segmentation, website design, product assortment and inventory management along with distribution network management. Reliable and accurate prediction are very critical which should be based on the deeper insights on online buying behavior. Demographics exert a powerful influence over online buying preference in contrast with other market formats. In the light of these objectives, the current research is aimed to explore online buying of university students in India with respect to demographics characteristics. Empirical data from online buyers are collected and hypotheses are tested using survey data.

Literature Review

Online buyers have been investigated extensively in the recent past. Moreover, studies highlighting characteristics of adopters in terms of age, gender and other socio-demographical characteristics with different product bought have been examined. Initially, it was reported that online buyer were typically characterized with high income level (Hansen, 2005). Major factors what characterize the consumer demographic profile are age, gender, occupation, education level, family status, personal/ family income, living conditions.

Age, education and profession have been reported to have significant impact against other variables e.g. income, gender and ethnicity. Interestingly findings on the direct effects of age, education and Internet experience on consumers' intention to shop online are mixed (Zhou, Dai and Zhang, 2007). In case of India, in 2011 IAMAI reports that youngsters in India are the major Internet users and India has crossed 100 million Internet-users which includes young men, school and college going students who use more than 75% of Internet (Kumar and Kanchan, 2017). Since then usage of Internet for shopping has continuously increased. A recent ASSOCHAM-Resurgent (2017) study, 65% increase in the number of e-retail customers in the year 2018 was predicted. This growing trend has attracted lots of research studies on online buyer behavior. Since university students have been found to be frequent users of technology, they are likely to buy products online and actively participate in online shopping (Delafrooz et al., 2009). In a Turkish study (Kiyici, 2012), it was reported that students who have higher income or who own a credit card, have more internet familiarity; find Internet shopping more convenient. These students have more product selection perception and positive attitude, intension and their perceived consequences are high. It is also observed that financial independence is positively influencing online purchase intentions and experience of students. In the same study, male students are reported to favor online buying. In an Indian study, gender is reported to be significant for preference for product type buying online whereas age, income and occupation are insignificant (Nagra and Gopal, 2014). One more Indian study reports that while women like to buy more and family-size impact online buying yet gender, income, education and marital status do not influence online buying in India, (Richa, 2012). Thus, there is inconsistency in the research findings on demographic variables and online buying in India.

In another Indian research study, age among demographic factor is found to be significant (Deshmukh, Joseph and Sanskrity, 2016). These findings are not in conformity with findings of western world. US study with a sample of 425, undergraduate and MBA students, has found that Internet knowledge, income, and level of education are powerful predictors of online buying (Case, T. Burns, O.M. and Dick, 2001). Numbers of Indian researchers have taken students as the major sample for understanding online buying behavior in the country. This is based on the premise that firstly, more than fifty percent of Indian population is young or is below 35 years of age; secondly, their behavior would not be too dissimilar from general population (Sahi, Sekhon and Quareshi, 2016). Yet, there is lack of consistent findings and actual insights into online buying behavior of university students in India.

Objectives of the Study

Research objective of this study is to investigate differences in online buying behaviour of university students with reference to their demographic variables i.e. age, gender, stay- status, pocket money, current stream of education. Other major demographic variables like marital status and occupation are not relevant for the university students while pocket money is more relevant as economic status. Thus, objectives of the study are set as:

- To find out online buying behavior of university students in India.
- To investigate the association of demographic variables like- age groups, gender, staying-status, pocket money and current stream of education and online buying of university students in India.

Hypotheses of Study

H01: There is no significant association between university students of different age groups and their

preference for online buying.

H02: There is no significant association between university students of difference in gender and their preference for online buying.

H03: There is no significant association between staying-status of university students and their preference for online buying.

H04: There is no significant association between pocket money of university students and their preference for online buying.

H05: There is no significant association between education stream of university students and their preference for online buying.

Research Methodology

Exploratory research method is used to describe the characteristics of population of study i.e. university students in India. Data collection are done only in Delhi NCR i.e. north part of the country through both online and offline method. Details of sample and analysis have been presented in the below section.

Sample Design

Non-probabilistic convenience sampling technique is employed to study from the large population of internet users who buy online. Microsoft excel is used for data entry and evaluation of data and online google form is used to collect responses online. Total sample of 1113 responses are elicited using a reliable and validated questionnaire. SPSS version 20 (statistical package for social sciences) is used for the analysing collected data.

Descriptive Statistics

The questionnaire consisted of the different demographic variables, and responses collected are presented in the table 1 in Appenix. It is important that-

- Male students are more in the sample.
- The sample participants as a whole is relatively young.
- The major segment are of UG students and those of technical courses.
- Their average pocket money is on higher side i.e. close to Rs. 5000 p.m.
- Almost 50 percent students are outsider i.e. not living with their family but in hostel or PGs.

Table 1: Sample Demographics in Appendix

Out of total 1113, respondents 92 percent have reported to have bought online. Details of their buying is mentioned in the Table 2 (in Appendix).

Table 2: Sample Descriptive statistics: Online Buying Behavior in Appendix

Data Interpretation and Analysis

Non parametric test have been undertaken for hypotheses testing as data are nominal or ordinal in nature.

Bi-variate Analysis- Pearson's chi-square test

The Chi-square test of homogeneity introduced by Karl Pearson is used to determine whether frequency counts are associated across different sub-groups of the same population (Bolboacă et al., 2011). Two important assumptions of the test have been met in this study. First, both the variables under study are measured either on ordinal or nominal level. And second, two variables consist of minimum two categorical independent groups. As data of 1113 are sufficiently large, each cell with expected values has frequency greater than five and there is no cell with zero count in big tables.

Hypotheses Testing

H01: There is no significant association between university students of different age groups and their preference for online buying

Table 3: Age* Have you shopped online during last SIX months? Cross tabulation in Appendix

The value of the Pearson Chi-square parameter, $\chi 2 = 9.181$. This value was not significant ($p > .05$), indicating that there was no association between age and online buying.

H02: There is no significant association between university students of different gender and their preference for online buying

Table 4: Gender* Have you shopped online during last SIX months? Cross tabulation

The value of the Pearson Chi-square parameter, $\chi 2 = 5.471$. This value was highly significant ($p < .05$), indicating that the gender has a significant effect on whether they buy online or not.

Phi statistic was also significant and is 0.07 out of a possible maximum value of 1, i.e. a very low association between gender and online buying.

H03: There is no significant association between university students' staying-status and their preference for online buying

Table 5: Current Living Status * Have you shopped online during last SIX months? Cross tabulation

The value of the Pearson Chi-square parameter, $\chi 2 = 5.953$. This value is not significant ($p > .05$), indicating that living status and online buying are not association or there was no difference in online buying due to living status of university students.

H04: There is no significant association between university students' pocket money and their preference for online buying

Table 6: Pocket Money * Have you shopped online during last SIX months? Crosstabulation

The value of the Pearson Chi-square parameter, $\chi 2 = 11.959$. This value is highly significant ($p < .05$), indicating that the pocket-money had significant effect on whether students buy online or not.

Cramer's statistic is also significant and is 0.104 out of a possible maximum value of 1, i.e. a low association between the gender and online buying.

H05: There is no significant association between university students' education stream and their preference for online buying

Table 7: Current Education * Have you shopped online during last SIX months? Cross tabulation

The value of the Pearson Chi-square parameter, $\chi 2 = 15.392$. This value was highly significant ($p < .05$), indicating that the education stream and online buying are not associated.

Phi statistic was also significant and was 0.118, i.e. a low association between the stream of education and online buying.

Table 8: EDU-TECHANAL OR NOT * Have you shopped online during last SIX months?

The value of the Pearson Chi-square parameter, $\chi 2 = 8.378$. This value was highly significant ($p < .05$), indicating that the education stream and online buying are not associated.

Phi statistic was also significant and was 0.087, i.e. a low association between Technical or non-technical stream of education and online buying.

Table 9: EDU-LEVEL* Have you shopped online during last SIX months? Cross tabulation

The value of the Pearson Chi-square parameter, $\chi 2 = 181$. This value was not significant ($p > .05$), indicating that the education level as UG or PG and online buying were not associated. In other words there are difference between under gradate and post graduate students of university.

Discussion

Findings and results of statistical tests of the present study require further understanding in terms of its interpretations and application. Present research has

focused only on university students and the insights have been gained. Descriptive statistics revealed 93.7% of university students bought online in the last six months. This can be used as an indicator of the improved situation against the earlier studies wherein university students are found as browser and not involved in buying (Deepal & Sarla, 2016; Nwosu, 2017). The research findings of this study are in line with other research suggesting that majority of online buyers are male (Statista, 2018). As per the responses, more than one quarter (29.8%) have been buying for the last one year, 26.4% for the last 1 to 2 years, 27% for the last 2 to 4 years and rest (16.8%) have been buying for more than the last 4 years. This study reveals that students are still not frequently online buyers. Only 38.5% of university students have bought online once in two-months, 36% of them have bought only 1 to 2 times in a month and almost 10% have bought five or more times monthly. These 10% can be termed as regular online-buyers, which is a relatively small number as compared to the other western world university student community (Motwani, Haryani, & Matharu, 2013). Further as per the statistical test results pocket money is found to be not positively associated with online buying. Differences between university students of different age groups and of different living status are found as per the statistical analysis of the data. However, education is found as significantly related to online buying. It is important to notice that there are difference between university students of different education stream - technical vs. non-technical but education level - undergraduate vs. post graduate is not found to be associated with online buying. Following Table 10 presents summary of the results:

Table 10: Summary of Bi-variate Analysis- Pearson's chi-square test

The major contribution of the findings of this research is in terms of practical guidelines or managerial implications for online retailers in positioning, in the competitive virtual market place, among the huge and growing online buyer segment of university students. These insights can be utilized by the online retailers in building their brands- online as well offline. Important application of the findings is demographical differences explored in the present study. Economic status and preference for spending online were found to be interrelated. Thus, marketers can segment university students based upon their paying capacity. Further other important differentiation can be based upon age and gender.

Conclusion & Future Research Direction

This research study was an attempt to extend knowledge of the role of demographic characteristics and online buying of university students. The present study investigated differences in shopping preference for online buying based on differences in the demographic characteristics of university students. Primary data collection were consistent with the objectives of this exploratory study. Test results indicated that not all the demographic variables were related online buying preference of the university students. There is a huge scope to further investigate role of demographic variables in the frequency, amount of money spent online and types of products preferred by university. Further this research can be extended by analyzing the buying behavior through identification of different determinant of online buying and degree of their influence on online buying of university students can be studied so that the future intention of university students to continue with online can be predicted.

References

Agarwal, S. (2016). Buyers do mix of online, offline shopping, *Livemint*, 20 January. Available at: https://www.livemint.com/Industry/aYeF7H62bnY5xGuf3osdJL/Buyers-do-mix-of-online-offline-shopping.html?utm_source=scroll&utm_medium=referral&utm_campaign=scroll (Accessed: 6 April 2018).

Banerjee, N. (2017). Online retail consumers to cross 100 million by 2017: ASSOCHAM-Resurgent India study, *The Economic Times*. New Delhi, 2016–2017. Available at: https://economictimes.indiatimes.com/industry/services/retail/online-retail-consumers-to-cross-100-million-by-2017-assocham-resurgent-india-study/articleshow/56417797.cms (Accessed: 6 April 2018).

Bhattacharyya, A. (2017). OLX India posts 31% rise in its FY17 profit, *Financial Express*, 24 October. Available at: http://www.financialexpress.com/industry/olx-india-posts-31-rise-in-its-fy17-profit/903891/ (Accessed: 2 April 2018).

Bolboacă, S. D. et al. (2011). Pearson-Fisher Chi-Square Statistic Revisited, *Information*, 2. 528–545. doi: 10.3390/info2030528.

Bureau, F. (2018). Patanjali announces partnership with 8 e-commerce companies - The Financial Express, *Financial Express*, 17 January. Available at: http://www.financialexpress.com/industry/patanjali-announces-partnership-with-8-e-commerce-companies/1018215/ (Accessed: 2 April 2018).

Case, T. Burns, O.M. and Dick, G. N. (2001). Drivers of On- Line Purchasing Among U.S. University Students, in *AMCIS 2001 Proceedings*. 873–878.

Chan, R. (2018). Defining advertising and marketing in 2018', *Financial Express*, 18 January. Available at: http://www.financialexpress.com/industry/defining-advertising-and-marketing-in-2018/1014085/ (Accessed: 5 April 2018).

Delafrooz, N. et al. (2009). Factors affecting students' attitude toward online shopping, *African Journal of Business Management*, 3(May). 200–209. Available at: http://www.academicjournals.org/AJBM (Accessed: 20 January 2017).

Deshmukh, G.K., Joseph, S. & Sanskrity, J.(2016). Online Shopping In India: An Enquiry of Consumers World, *IOSR Journal of Business and Management* Ver. 3. 18(1), 2319–7668. doi: 10.9790/487X-18132833.

Dingra, R. (2018). Digital Marketing: blaming the medium for the message, *Financial Express*, 30 January. Available at: http://www.financialexpress.com/industry/technology/digital-marketing-blaming-the-medium-for-the-message/1035398/ (Accessed: 5 April 2018).

Dutta, A. (2018). From swadeshi to a little videshi: Patanjali ties up with Amazon, others | *Business Standard* News, business-Standard. Available at: http://www.business-standard.com/article/companies/from-swadeshi-to-a-little-videshi-patanjali-ties-up-with-amazon-others-118011700023_1.html (Accessed: 2 April 2018).

Gohain, M. P. (2017). Swayam: Education to go digital with "Swayam", *Times of India*, 9 July. Available at: https://timesofindia.indiatimes.com/home/education/education-to-go-digital-with-swayam/

articleshow/59509319.cms (Accessed: 5 April 2018).

Gopalan, R. and Ranganathan, S. S. (2014). *India Retail Trends*, TATA Business Support Services Ltd.

Hansen, T. (2005). Consumer adoption of online grocery buying: a discriminant analysis, *International Journal of Retail & Distribution Management*, 33(2/3). 101–121. Available at: http://www.emeraldinsight.com/journals.htm?articleid=1464115&show=abstract (Accessed: 18 December 2014).

Hindu (2016). Government permits 100 per cent FDI in e-commerce, *The Hindu*, 29 March. Available at: http://www.thehindu.com/business/Industry/govt-permits-100-per-cent-fdi-in-online-market-places/article8409495.ece?homepage=true (Accessed: 5 April 2018)

Kiyici, M. (2012). Internet shopping behavior of college of education students, *Turkish Online Journal of Educational Technology*, 11(3). 202–214. Available at: http://www.scopus.com/inward/record.url?eid=2-s2.0-84863660022&partnerID=40&md5=10bcea5ff7413b2d302f6eebd3a43950.

Knežević, B., Jaković, B. and Strugar, I. (2014). Potentials and Problems of Internet as a Source of Purchasing Information – Experiences and Attitudes of University Students in Croatia, *Business, Management and Education*, 12(1). 138–158. doi: 10.3846/bme.2014.10.

Kumar, P. and Kanchan (2017). Online Shopping Behaviour among Students with Special Reference to Ludhiana, Punjab, India, *Journal of Marketing and Consumer Research Journal*, 33(November 2016), 19–24. Available at: http://www.iiste.org/Journals/index.php/JMCR/article/viewFile/36179/37175 (Accessed: 7 June 2017).

Nagra, G. K. and Gopal, R. (2014). Consumer Online Shopping Attitudes and Behavior: An Assessment towards Product Category, *International Journal of Marketing and Technology*, 4(5), 54–63. Available at: http://search.proquest.com/business/docview/1526125230#top (Accessed: 12 December 2014).

Nangia, S. (2017). GST impact on online shopping, tax breaks: All you to know about the changed rules in 7 brief points, *Financial Express*, 5 July. Available at: http://www.financialexpress.com/money/gst-impact-on-online-shopping-tax-breaks-all-you-to-know-about-the-changed-rules-in-7-brief-points/749411/ (Accessed: 5 April 2018).

Purani, K. (2017). Online retailers beware! For consumers there is great disappointment on this particular parameter, *Financial Express*, 4 September. Available at: http://www.financialexpress.com/opinion/online-retailers-beware-for-consumers-there-is-great-disappointment-on-this-particular-parameter/839789/ (Accessed: 2 April 2018).

Richa, D. (2012). Impact Of Demographic Factors Of Consumers On Online Shopping Behaviour: A Study Of Consumers In India, *International Journal of Engineering and Management Sciences*, 3(1). 43–52. Available at: http://www.scienceandnature.org/IJEMS-Vol3(1)-Jan2012/IJEMS_V3(1)7.pdf (Accessed: 5 June 2017).

Sahi, G.K., Sekhon, H.S. and Quareshi, T.K. (2016). Role of trusting beliefs in predicting

purchase intentions', *International Journal of Retail & Distribution Management*, 44(8). 860–880. doi: 10.1108/IJRDM-10-2015-0157.

Statista (2018). *E-commerce sales in India 2012-2022,* Statista. Available at: https://www.statista.com/statistics/289770/india-retail-e-commerce-sales/ (Accessed: 6 April 2018).

Sunil (2015). Trends and practices of consumers buying online and offline', *International Journal of Commerce and Management*, 25(4). 442–455. doi: 10.1108/IJCoMA-02-2013-0012.

Tribuneindia.com (2017). HDFC Bank makes RTGS, NEFT online transactions free from Nov 1, *Tribune India*, 6 November. Available at: http://www.tribuneindia.com/news/business/hdfc-bank-makes-rtgs-neft-online-transactions-free-from-nov-1/493398.html (Accessed: 2 April 2018).

Zhou, L., Dai, L. and Zhang, D. (2007). Online Shopping Acceptance Model - A Critical Survey of Consumer Factors in Online Shopping, *Journal of Electronic Commerce Research*,8(1).41–62.doi:10.1086/209376, http://dx.doi.org/10.1086/209376 10.1089/109493104322820156.

Appendix

Table 1: Sample Demographics

Characteristic	Group	Cases	Percentages
Gender	Male	749	67.30
	Female	364	32.70
Age	Below 18 years	25	2.20
	18 to 20 years	603	54.18
	21 to 23 years	356	31.99
	24 to 26 years	78	7.01
	27 years and above	51	4.58
Current Living Status	Own/ family house	641	57.59
	Hostel	282	25.34
	In friend's house	9	0.81
	Sharing a room or in a PG	181	16.26
Personal monthly average pocket money/ Income	Less than Rs 1000	135	12.13
	Rs 1001 - Rs 3000	337	30.28
	Rs 3001 –Rs 5000	253	22.73
	More than Rs 5001	388	34.86
Current Education stream	BA/ BBA/ BCom/ Other Non Technical Courses	443	39.80
	BTech/ BE/ Other Technical Courses	309	27.76
	MA/ MBA/ MCom/ Other Non Technical Courses	333	29.92
	MTech/ ME/ Other Technical Courses	28	2.52
Current Education (Division)	TECHNICAL	337	30.28
	NON TECHNICAL	776	69.72
	UG	752	67.57
	PG	361	32.43

Table 2: Sample Descriptive statistics: Online Buying Behavior

Characteristic	Group/ Categories	Cases	Percentages
Online buying	Yes	1032	92.7
	No	81	7.3
Length of Online buying	For Less than 6 months	176	15.8
	Between 6 months to 1 year	101	9.1
	1 to 2 years	286	25.7
	2 to 4 years	287	25.8
	For more than 4 years	182	16.4
Frequency (monthly) of Online buying	Once in two months	396	35.6
	1 to 2 times	351	31.5
	3 to 4 times	175	15.7
	5 to 6 times	49	4.4
	More than 6 times	61	5.5
Preferred Device Online buying	Mobile	549	49.3
	Laptop	129	11.6
	Personal Computer	21	1.9
	Tablet	13	1.2
	More than one device	320	28.8
Spending (In the last 6 months) Online buying	Less than Rs.5,000	348	31.3
	Rs. 5,001- Rs.10,000	306	27.5
	Rs. 10,001- Rs.15,000	150	13.5
	Rs. 15,001- Rs.20,000	94	8.4
	Above Rs.20,001	134	12.0
Payment Method in Online buying	Cash on Delivery	654	58.8
	Net Banking	47	4.2
	Debit Card	93	8.4
	Credit Card	37	3.3
	More than One Mode	201	18.1

Table 3: Age* Have you shopped online during last SIX months? Cross tabulation

			Have you shopped online during last SIX months?		Total
			Yes	No	
Age	BELOW 18years	Count	23	2	25
		% within Age	92.0%	8.0%	100.0%
	18 to 20 years	Count	571	32	603
		% within Age	94.7%	5.3%	100.0%
	21 to 23 years	Count	319	37	356
		% within Age	89.6%	10.4%	100.0%
	24 to 26 years	Count	73	5	78
		% within Age	93.6%	6.4%	100.0%
	27 years and above	Count	46	5	51
		% within Age	90.2%	9.8%	100.0%
Total		Count	1032	81	1113
		% within Age	92.7%	7.3%	100.0%

Table 4: Gender* Have you shopped online during last SIX months? Cross tabulation

			Have you shopped online during last SIX months?		Total
			Yes	No	
Gender	Male	Count	704	45	749
		% within Gender	94.0%	6.0%	100.0%
	Female	Count	328	36	364
		% within Gender	90.1%	9.9%	100.0%
Total		Count	1032	81	1113
		% within Gender	92.7%	7.3%	100.0%

Table 5: Current Living Status* Have you shopped online during last SIX months? Cross tabulation

			Have you shopped online during last SIX months?		Total
			Yes	No	
Current Living Status	Own/ family house	Count	589	52	641
		% within Current Living Status	91.9%	8.1%	100.0%
	Hostel	Count	263	19	282
		% within Current Living Status	93.3%	6.7%	100.0%
	In friend's house	Count	7	2	9
		% within Current Living Status	77.8%	22.2%	100.0%
	Sharing a room or in a PG	Count	173	8	181
		% within Current Living Status	95.6%	4.4%	100.0%
Total		Count	1032	81	1113
		% within Current Living Status	92.7%	7.3%	100.0%

Table 6: Pocket Money* Have you shopped online during last SIX months? Cross tabulation

			Have you shopped online during last SIX months?		Total
			Yes	No	
Pocket Money	Less than Rs 1000	Count	116	19	135
		% within Pocket Money	85.9%	14.1%	100.0%
	Rs 1001 - Rs 3000	Count	312	25	337
		% within Pocket Money	92.6%	7.4%	100.0%
	Rs 3001 –Rs 5000	Count	236	17	253
		% within Pocket Money	93.3%	6.7%	100.0%
	More than Rs 5001	Count	368	20	388
		% within Pocket Money	94.8%	5.2%	100.0%
Total		Count	1032	81	1113
		% within Pocket Money	92.7%	7.3%	100.0%

Table 7: Current Education* Have you shopped online during last SIX months? Cross tabulation

			Have you shopped online during last SIX months?		Total
			Yes	No	
Current Education	BA/ BBA/ BCom/ Other Non Technical Courses	Count	399	44	443
		% within Current Education	90.1%	9.9%	100.0%
	BTech/ BE/ Other Technical Courses	Count	300	9	309
		% within Current Education	97.1%	2.9%	100.0%
	MA/ MBA/ MCom/ Other Non Technical Courses	Count	309	24	333
		% within Current Education	92.8%	7.2%	100.0%
	MTech/ ME/ Other Technical Courses	Count	24	4	28
		% within Current Education	85.7%	14.3%	100.0%
Total		Count	1032	81	1113
		% within Current Education	92.7%	7.3%	100.0%

Table 8: EDU-TECHANAL OR NOT* Have you shopped online during last SIX months?

			Have you shopped online during last SIX months?		Total
			Yes	No	
EDU-TECHANAL OR NOT	Technical	Count	324	13	337
		% within EDU-TECHANAL OR NOT	96.1%	3.9%	100.0%
	Non technical	Count	708	68	776
		% within EDU-TECHANAL OR NOT	91.2%	8.8%	100.0%
		Count	1032	81	1113
		% within EDU-TECHANAL OR NOT	92.7%	7.3%	100.0%

Table 9: EDU-LEVEL* Have you shopped online during last SIX months? Cross tabulation

			Have you shopped online during last SIX months?		Total
			Yes	No	
EDU-LEVEL	UG	Count	699	53	752
		% within EDU-LEVEL	93.0%	7.0%	100.0%
	PG	Count	333	28	361
		% within EDU-LEVEL	92.2%	7.8%	100.0%
		Count	1032	81	1113
		% within EDU-LEVEL	92.7%	7.3%	100.0%

Table 10: Summary of Bi-variate Analysis- Pearson's chi-square test

Online Buying	Group/ Categories	%	Gender	Age	Living Status (Hostel/ Day Sch.)	Living Status (Family/Not)	Economic Status	Education -level (UG/ PG)
Online buying Status	Yes	92.7	Very weak	Very weak	No Association	No Association	Very Weak	No Association