



## “A study on Consumers’ demographic profile influences on online shopping behavior”

### KEYWORDS

online shopping behavior, demographic factors, influence, online retail strategy

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### ABSTRACT

Online consumer behaviour is a wide and appealing area of study that can grow firms involved in marketing of products and service through new media such as Internet. It is very vital to study that how socio demographic factors of consumers influence the online shopping behavior of consumers. The result of the study assists the online retail organizations in targeting consumers and framing online marketing strategies. The purpose of this study is to examine the influence of demographic factors on consumers’ online shopping behaviour. However, examining consumers’ online shopping behavior with reference to demographic variables Indian context is very limited. The results of study of 150 online consumers in Gujarat reveal that there is no significance difference among gender of respondents and online shopping behavior, while respondents belong to different age, income and education behave differently in online shopping. In this study collected data is tested using ANOVA statistical tool.

### Introduction

The development of the internet has significantly evolves particularly in the advanced and developed countries. Over there, majority of consumers use Internet as a shopping medium. In line with same trends, consumers in developing countries like India are attracted towards Internet as a medium to shop products or services. Because of availability of resources, education and income, many people in India metro have adopted online shopping because of its convenience, reduction in time and cost, and enjoyment. This trend has been seen in non metro cities of India now. Such scenario raises an issue to what could be the factors that could consumers to do online shopping. Since online shopping is higher associated with consumers, one possible factor could be attributed by their demographic profile. This study examines whether demographic profile of consumers affect their online shopping behavior. Four demographic profile variables that could be linked to shopping behavior were chosen such as gender, age, income and education.

### Review of Literature

Shalini and Kamalaveni (2013) demonstrated that online shoppers are young, highly educated active, intensive and expert users of the internet. Particularly on demographic profile, the studies that have examined the link between demographic profile and online shopping found that demographic profile of a consumer determines online shopping behavior (Khatibi et al., 2006). The influence of gender upon decision-making and shopping behaviour has been a subject of special interest in the field of marketing. Despite many past researches focused on similar gender online shopping behavior, Eurostat, (2009) pointed out that an increasing number of women use the internet and that the gender gap in this medium is decreasing. Moreover, recent study has found no statistically significant differences between males and females consumers with regard to online shopping (Shin, 2009). A review of the traditional literature underlines the importance of consumers’ age in the analysis of their behaviour (Hubona and Kenrick, 1996). Age is a relevant variable in the explanation of online shopping behaviour (Zhang, 2009). McCloskey

(2006) proposed that age influences the decision regarding whether to shop online. The moderating effect of income as a variable that may encourage or prevent the use of e-commerce, income is another characteristic that has attracted considerable research attention in the field of technology acceptance (Allard et al., 2009). Several studies have included it as an explanatory variable of shopping behaviour, yet the results concerning its significance are contradictory (Al-Somali et al., 2009). Researcher considers that user income has an effect on the consumers who shop online initially and previous research has demonstrated, consumers with high incomes perceive less risk in the adoption of online shopping (Lu et al., 2003). Another body of literature also suggested that education level may play a significant factor in influencing online shopping behavior as well (Sulaiman et al., 2008). However, Haque et al. (2006) found that education of consumers is an important determinant of online shopping behaviour.

### Objective of the study

The objective of the research is to study the relationship between socio demographic factors and online shopping behavior.

### Hypothesis

Following are the hypothesis of the study.

- H<sub>1</sub>: There is a significance difference between gender of respondents and online shopping behavior.
- H<sub>2</sub>: There is a significance difference between age of respondents and online shopping behavior.
- H<sub>3</sub>: There is a significance difference between income of respondents and online shopping behavior.
- H<sub>4</sub>: There is a significance difference between education of respondents and online shopping behavior.

### Research Methodology

The present study collected relevant primary data with the help of structured questionnaire. The instrument includes data on demographic information of the respondents. Considering the fact that online shopping is at its infancy stage in our country, it was decided to target those

consumes who have shopped products or service at least once in last six months.

A quantitative study, involving the administration of a survey was conducted in order to empirically validate the identified factors of online shopping behavior. In this study the sample has been selected by snowball sampling method as there is no define list of individual who shop online. A total of 150 useable surveys were collected. The data were analyzed by using SPSS 16.0 software. The primary data were conducted by 150 respondents who were residing in Ahmedabad city of Gujarat. As the purpose of the study was exploration, sample was deemed fit as they would represent the population Ahmedabad market- a mini metro in western part of India. Also nature of such activities is not likely to vary across different buyers. The collected data was processed and analyzed in accordance with the objectives and requirement of the study. In study, collected data were tested with the help of ANOVA statistical tool.

**Analysis and Result**

**Analysis of Variance (ANOVA)**

To examine the differences with respect to online shopping behaviour and demographic factors, one-way analysis of variance is performed. In fact, ANOVA is used when the objective is to assess group differences on single metric dependent variable (Hair et al., 2008).

**(1) Online shopping Behaviour v/s Gender of respondents**

Here, Homogeneity of Variances assumption is met. But, Gender is not found to be in significant for online shopping Behavior. An ANOVA result revealed that there is not a significance difference between Online shopping behaviour and Gender of Respondents,  $F = 0.280, p > 0.05$ .

**(2) Online shopping Behaviour v/s Age of respondents**

Here, Homogeneity of Variances assumption is met. Age of respondent is found to be significant for online shopping Behavior. An ANOVA result revealed that there is a significance difference between Online shopping behaviour and Age of respondents ( $F = 4.949, p < 0.05$ ).

**Table I: Tukey's Post hoc analysis for Age**

Dependent Variable	Age (I)	Age (J)	Mean Difference (I-J)	Sig.
Online Shopping Behavior	Under 20	21-40	-.23011*	0.030
		41-60	-.25799*	0.045
		above 60	.11992	0.859
	21-40	Under 20	.23011*	0.030
		41-60	-.02788	0.971
		above 60	.35003*	0.040
	41-60	Under 20	.25799*	0.045
		21-40	.02788	0.971
		above 60	.37791*	0.039
	above 60	Under 20	-.11992	0.859
		21-40	-.35003*	0.040
		41-60	-.37791*	0.039

\*. The mean difference is significant at the 0.05 level.

Furthermore, for examining the pair-wise differences among the age categories, Turkey's Post Hoc analysis is performed. The results revealed that significant differences exist in the behaviour of online shoppers for various age categories. It is observed that people with age group of 41-60 (Mean diff=0.258,  $p < 0.05$ ) and 21-40 (Mean

diff=0.230,  $p < 0.01$ ) are highly influenced by online shopping than those in age group of under 20.

**(3) Online shopping Behaviour v/s Income of respondents**

HOV (Homogeneity of Variances) assumption is met. Income of respondent is found to be in significant for online shopping Behavior. An ANOVA result revealed that there is a significance difference between Online shopping behaviour and income of respondents  $F = 3.405, p < 0.05$ .

**Table II: Tukey's Post hoc analysis for Income**

Dependent Variable	Income (I)	Income (J)	Mean Difference (I-J)	Sig.
Online Shopping Behavior	< than 2,00,000	2,00,001 to 5,00,000	.19101	.235
		5,00,001 to 10,00,000	-.31735*	.028
		> than 10,00,000	.20227	.593
	2,00,001 to 5,00,000	< than 2,00,000	-.19101	.235
		5,00,001 to 10,00,000	-.32034*	.045
		> than 10,00,000	.01126	.971
	5,00,001 to 10,00,000	< than 2,00,000	.31735*	.028
		2,00,001 to 5,00,000	.32034*	.045
		> than 10,00,000	-.32508*	.032
	> than 10,00,000	< than 2,00,000	-.20227	.593
		2,00,001 to 5,00,000	-.01126	.971
		5,00,001 to 10,00,000	.32508*	.032

\*. The mean difference is significant at the 0.05 level.

As HOV assumption is satisfied, Tukey post hoc tests is performed. It is observed that people having a higher income are highly influenced by online shopping than people who belong to lower income group.

**(4) Online shopping Behaviour v/s Education of respondents**

Here, Homogeneity of Variances assumption is met. Education of respondent is found to be significant for online shopping Behavior. An ANOVA result revealed that there is a significance difference between Online shopping behaviour and education of respondents  $F = 6.300, p < 0.05$ .

**Table III: Tukey's Post hoc analysis for Education**

Dependent Variable	Education (I)	Education (J)	Mean Difference (I-J)	Sig.
Online Shopping Behavior	Up to High School	College/Univ. Graduate	-.26068	.385
		Post-Graduate	-.52453*	.005
		Other	-.61449	.121
	College/Univ. Graduate	Up to High School	.26068	.385
		Post-Graduate	-.26385*	.001
		Other	-.35381	.451
	Post-Graduate	Up to High School	.52453*	.005
		College/Univ. Graduate	.26385*	.001
		Other	-.08996	.981
	Other	Up to High School	.61449	.121
		College/Univ. Graduate	.35381	.451
		Post-Graduate	.08996	.981

\*. The mean difference is significant at the 0.05 level.

As HOV assumption is satisfied, Tukey post hoc tests is

performed. It is observed that respondents having higher education are highly influenced by online shopping than respondents who are having lower level of education.

### Discussion

The results of the hypotheses testing are discussed here. Out of four hypotheses, H1 hypothesis is found to be insignificant while H2, H3 and H4 are found to be significant.

It is revealed from the result of H1 that both male and female consumers behave similarly with respect to online shopping. Therefore, H1 is not supported. This is consistent with the study of Shin (2009). Hypothesis H2 proposes that there is a significance difference between age of respondents and online shopping behavior. Result of H2 is supported and it reveals that younger consumers are more likely to shop online rather than respondents having higher age. This conclusion is supported with the result of Zhang, 2009. Result of H3 indicates that income of respondents significantly vary with online shopping behavior. Result of H3 is supported which implies that consumers having higher income tend to influence high towards online shopping behavior. This result is consistent with the study of Lu et al., 2003. Finally, it is proved that education of respondents and online shopping behavior have positive significant. This is supported with the result of H4. It is revealed that respondents who possess higher level of education are more likely to shop online than that of having lesser level of education. This is consistent with the study of Haque et al., (2006).

### Conclusion and Implications

This study examines whether consumers' demographic profile could influence online shopping behavior. Four variables relate to demographic profile were chosen such as gender, age, income and education of respondents. The results show that all the variables do affect the consumers' online shopping behavior. Such findings support Fishbein's theory that implicate demographic profile as an important variable that influence tendency of consumers to shop online. Finally the result of the study reveals that there is no influence of gender of respondents on online shopping behavior while age, income and education of respondents influence online shopping behavior of consumers. The findings of this study would provide some insight to online retailers on the effect of demographic profile on online shopping. This assists firms involved in online trading in targeting specific group of consumers and formulating marketing strategies to attract them.

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