# Mediating Role of Perceived Risks and Online Trust between Factors Influencing Online Shopping and Attitude towards Online Shopping

S.Jagan,

Associate Professor, Department of CSE, Agni College of Technology, Chennai, India

#### **Abstract**

Online shopping is a common phenomenon that is growing rapidly among customers in the recent years. The market potential for online shopping has been exponentially growing and larger number of retail businesses are venturing into online mode of selling at a faster rate. Online shopping is an emerging trend among Gen Y consumers that has numerous advantages when compared with traditional shopping. This study examines the mediating effect of consumers' perceived risk and trust on factors influencing online shopping and attitude towards online shopping. The study was conducted with random sample of customers who are frequently involved in online shopping in popular portals. Data from specially designed questionnaire were collected from 500 respondents in the Chennai Region, Tamilnadu, India. The data collected from the respondents were analyzed using SPSS version 25.0 and AMOS version 21.0. Structural Equation Modeling (SEM) was to examine the model fits and hypothesis testing. Finding revealed that attitude towards online shopping has significant positively influenced the purchasing behavior which in turn significantly influenced the purchase intention in online shopping. Findings also include evidence that perceived risk and trust mediates the relationship between influencing online shopping and attitude towards online shopping. The implications of the findings of this study for e-marketers are discussed.

**Keywords:** E market, Selling rate, Consumer Response Data, Structural Equation Modeling

#### 1. Introduction

Shopping through online mediums has witnessed explosive growth in the past decade. Consumers in general and Gen Y consumers in particular are finding online shopping as the more convenient and an easy option for purchases. The transformation of corporate business model from the brick-and-mortar formats to that of brick-and-click has accelerated rapidly in the recent years. Because of lack of physical interaction during the transactions, it becomes difficult to decode the behavior of consumer in online (Jiang, Chen, & Wang, 2008; Mukherjee &Nath, 2007). Understanding psychological variables like trust, perceived risks would provide more insights on the consumer attitude towards online shopping which in turn impacts the consumer attitude and purchase intentions. Online marketers should focus on designing their website in such a way that it makes them user-friendly. In addition, actively manage the social media marketing to channel traffic to their online website

#### 1.1 Purchase Intention and Consumer Behavior

Ajzen (1991) advocated that intentions are the main indicator of the presumed behavior of people. Intentions define the extent to which people are willing to approach certain behavior. Intentions also determine the number of attempts does a person tries to accomplish certain behavior. He et al. (2008) have identified that the lack of intention toward online purchasing has been considered as an important hurdle in the growth and development of electronic commerce (EC). Kim and Hong (2010) have suggested that online shops must understand the purchasing behavior of their customers to develop and maintain a positive relationship with them and also win over their trust toward the seller. Several authors have believed that that purchase intention might strongly influence the actual purchasing in online mediums (Jamil and Mat (2011) and further

recommended that detailed investigations are necessary to establish the relationship between purchase intention and actual purchasing actions.

## 2. Factors considered for Hypothesis based on Literature Review

## 2.1 Hypothesis

Based on the previous studies, the hypothesis was then developed

- H1: Factors influencing online shopping affects the attitude towards online shopping.
- H2: Perceived risks mediate the relationship between factors influencing online shopping and attitude towards online shopping.
- H3: Online Trust in online shopping mediates the relationship between factors influencing online shopping and attitude towards online shopping.
- H4: Attitude towards online shopping influences the online shopping behavior. H5: Online shopping behavior influences the purchase intention in online medium

Structural Equation Modeling (SEM) has been used to investigate the influence of difference factors in online shopping on consumers' attitude towards online shopping. In addition, mediation analysis was applied using AMOS 21.0 to explore the role of Perceived risk and Trust on the relationship between factors influencing online shopping and attitude towards online shopping.

## 3. Research Design

#### Methodology

The study used descriptive research design method (Creswell & Creswell, 2017) and a quantitative survey instrument was developed to investigate the mediating effect of Perceived risk and Trust on the relationship between factors influencing online shopping and attitude towards online shopping.

#### Sample

A total of 600 questionnaires were distributed among a stratified random sample of respondents from four zones of Chennai region, Tamilnadu. In each zone 150 questionnaires were distributed. The total number of filled questionnaires was computed to be 500. As few questionnaires were not returned at all and few other questionnaires were returned with incomplete and faulty data. Thus the effective sample size was reduced to 500. The overall response rate was 83.3%. The demographic distribution of the respondents represented in Table 1

Table 1: Demographic Profile of the Respondents (N=324)

Variable	Category	Frequency	Percent
	Male	244	48.8
Gender	Female	256	51.2
	Upto 20	59	11.8
	21 – 25	94	18.8
	26 – 30	118	23.6
	31 – 35	82	16.4
Age (years)	36 – 40	96	19.2

	Above 40	51	10.2
	Upto School level	25	5.00
	Diploma & Certificate Courses	41	8.20
Qualification	Under Graduation	274	54.80
Qualification	Post-Graduation & Above	160	32.00
	Student	54	10.80
	House wife	102	20.40
	Working professionals	216	43.20
Occupation	Business	128	25.60
	Below 10000	179	35.80
Income per month	10000 – 25000	55	11.00
(Rs)	25000 – 50000	68	13.60

The majority of the respondents were Female (N = 256, 51.2%) and Male constituted around 244(48.8%) respondents. In terms of age group, majority of the respondents were from the age group of 26-30 years (23.6%), followed by 36-40 years (19.2%) and 21-25 years (18.8%). Majority of the respondents have Under Graduation as educational qualification (54.80%) followed by Post-Graduation (32.0%). The study also included respondents with educational qualification of Diploma & Certificate Courses (8.20%) and School level (8.2%). The occupational profile of the respondents revealed that majority were Working Professionals (43.2%) and the next prominent occupation was Business (25.6%). Interestingly, the study also included housewife (20.40%) and Studentrespondents (10.8%). With respect to the income level of the respondents, majority have income below Rs. 10000 per month (35.8%). As the sample included large number of students and housewife's this income level group was predominant in the study. The study included 17.60% of respondents with income Rs. 75000 – Rs. 1 Lakh, 13.6% of respondents have income between Rs. 25000 – Rs. 50000 per month and another 13.40% of respondents have income between Rs. 50000 – Rs. 75000.

#### **Factors influencing online shopping**

The research instrument used in the study were developed by the author(s) based on the insights obtained from the extensive review of literature on factors influencing online shopping, attitude towards online shopping, risks and trust in online shopping, online shopping behavior and purchase intentions. The influencing factors in online shopping was measured using six factors like Quality Consciousness (Sproles& Kendell, 1986 - 2013; Cowart & Goldsmith, 2007), Brand Consciousness (Sproles& Kendell , 1986-2013; Cowart & Goldsmith, 2007), Fashion Consciousness (Sproles & Kendell , 1986 -2013; Cowart & Goldsmith, 2007), Hedonistic Orientation (Sproles& Kendell, 1986-2013; Cowart & Goldsmith, 2007), Price (Sproles& Kendell, 1986 - 2013; Ling et al., 2010) and Time Consciousness (Seock&Sauls, 2008). The mediating variables in the study included Perceived Risks (Javadi 2012), Online Trust (Ennew&Sekhon, 2007; Aiken et al. 2007). Online Shopping Attitude (Shim et al. 2001; Kim and Park 2005), Online Shopping Behavior (Bigné-Alcañiz et al., 2008; Cho & Jialin, 2008; Koo & Ju, 2010; Lee & Lin, 2005; Richard, 2005; Sorce et al., 2005) and Purchase Intention (Liu et al., 2004; Vazquez &Xu 2009) were used as outcome variables. The instrument was designed using fivepoint Likert scale, ranging from 1=strongly disagree, 2=disagree, 3=neither disagree nor agree, 4=agree, 5=strongly agree.

### **Analytical procedure**

The data collected from the respondents were subjected to statistical analysis using SPSS (25.0) software package. Descriptive Statistical analysis methods like descriptive statistics, reliability analysis and normality analysis analysis were performed. Further, Mediation analysis was performed using AMOS (21.0) software tool.

#### 4. Results and Discussion

#### **Descriptive Statistics**

From the data available in Table 3 the descriptive statistics of the study variables are preseted. The table also shows the result of reliability analysis using coefficient of reliability namely Cronbach's Alpha.

Table 2: Descriptive Statistics (N=500)

Variable	Minimum	Maximu m	Mean	Std. Deviation	Skewn ess	Kurtosi s	Cronbac h 's Alpha
Quality Consciousness	1.00	5.00	3.74	0.87	-1.25	0.77	0.88
Brand Consciousness	1.75	5.00	3.76	0.82	-0.53	-0.34	0.78
Fashion Consciousness	1.75	5.00	3.67	0.89	-0.54	-0.93	0.89
Hedonistic Orientation	1.75	5.00	3.56	0.94	-0.29	-1.10	0.81
Price	1.67	5.00	3.90	0.67	-1.45	1.16	0.92
Time Consciousness	1.00	5.00	3.81	1.06	-1.07	0.37	0.86
Perceived Risks	1.00	5.00	3.76	0.70	-1.17	1.32	0.76
Online Trust	1.00	5.00	3.66	0.94	-0.88	-0.07	0.78
Online Shopping Attitude	1.00	5.00	3.65	0.85	-0.87	0.23	0.76
Online Shopping Behavior	1.00	5.00	3.58	0.90	-0.80	0.05	0.72
Purchase Intention	1.00	5.00	3.65	0.89	-0.96	0.46	0.94

From Table 2, it is inferred that the mean value for all the variables ranged between 3.2 and 3.7. The values of Skewness and Kurtosis indicate that the measured values are within the threshold

limit of  $\pm 0.3$  (Hair et al. 2011) indicating that the data is normal and suitable for parametric tests. The reliability of all the factors was measured using Cronbach's alpha coefficient. The value of Cronbach's alpha for all the variables is above the cut-off value of 0.7(Hair et al. 2011). This shows that the items used in the instrument were reliable for conducting further measurements.

#### **Mediation Analysis Using SEM**

#### H1: Factors influencing online shopping affects the attitude towards online shopping:

Mediation analysis was conducted to examine the mediating effect of Perceived Risk and Online Trust towards online shopping on the relationship between Factors Influencing Online Shopping and Attitude towards Online Shopping.

Initially, direct effect was measured with Online Shopping Attitude as the dependent variable and Factors influencing online Shopping like Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness as the predictor variables (Figure 1).

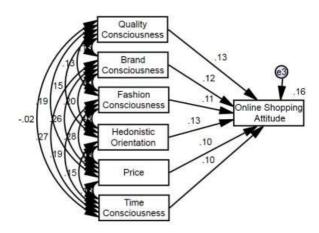


Figure 1: Direct Effect of Factors Influencing Online Shopping on Attitude towards Online Shopping

Table 3 shows the value of beta estimate for each predictor variable like Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness on the dependent variable (Online Shopping Attitude).

Table 3: Direct Effect of Factors Influencing Online Shopping on Attitude towards Online Shopping

Dependent Variable		Independent Variable	Beta Estimate	S.E.	C.R.	p – value	Result
Online Shopping Attitude	<	Brand Consciousness	0.120	0.047	2.664	0.008	Significant

Dependent Variable		Independent Variable	Beta Estimate	S.E.	C.R.	p – value	Result
Online Shopping Attitude	<	Fashion Consciousness	0.112	0.048	2.257	0.024	Significant
Online Shopping Attitude	<	Price	0.103	0.056	2.316	0.021	Significant
Online Shopping Attitude	<	Hedonistic Orientation	0.128	0.043	2.709	0.007	Significant
Online Shopping Attitude	<	Quality Consciousness	0.131	0.041	3.088	0.002	Significant
Online Shopping Attitude	<	Time Consciousness	0.103	0.035	2.371	0.018	Significant

Based on the path coefficients for each variable of Factors influencing online Shopping as shown in the Table 3, it is inferred that the model is significant as all the path coefficient is significant as the p-value is less than 0.05. Thus the hypothesis "H1:

Factors influencing online shopping affects the attitude towards online shopping" was accepted for all the variables like Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness as the p-value is less than 0.05.

# Indirect Effect of Perceived Risk on the Factors Influencing Online Shopping on Attitude towards Online Shopping

# H2: Perceived risks mediate the relationship between factors influencing online shopping and attitude towards online shopping:

Indirect effect was measured by introducing the mediating variable "Perceived Risks" between Factors influencing online shopping (Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness) and Online shopping Attitude (Figure 2).

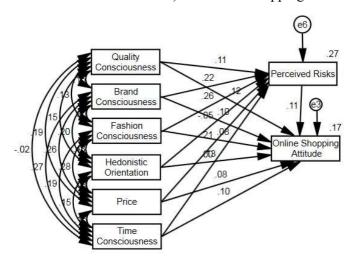


Figure 2: Indirect Effect of Perceived Risk on the Factors Influencing Online Shopping on Attitude towards Online Shopping

Table 4 shows the results of the indirect effect of the mediating variable on the relationship between Factors Influencing Online Shopping on Attitude towards Online Shopping.

Table 4: Indirect Effect of Perceived Risks on the Factors Influencing Online Shopping on Attitude towards Online Shopping

Dependent Variable		Independent Variable	Beta Estimate	S.E	C.R.	p – value	Result
Perceived Risk	<	Quality Consciousness	.109	.032	2.729	.006	Significant
Perceived Risk	<	Brand Consciousness	.215	.036	5.100	***	Significant
Perceived Risk	<	Fashion Consciousness	.263	.037	5.679	***	Significant
Perceived Risk	<	Hedonistic Orientation	050	.033	-1.131	.258	Non- Significant
Perceived Risk	<	Price	.210	.043	5.062	***	Significant
Perceived Risk	<	Time Consciousness	.003	.027	.084	.933	Non- Significant
Online Shopping	<	Brand Consciousness	.097	.048	2.107	.035	Significant

Dependent Variable		Independent Variable	Beta Estimate	S.E	C.R.	p – value	Result
Attitude							
Online Shopping Attitude	<	Fashion Consciousness	.083	.049	1.642	.101	Non- Significant
Online Shopping Attitude	<	Price	.080	.057	1.771	.077	Non- Significant
Online Shopping Attitude	<	Hedonistic Orientation	.134	.043	2.834	.005	Significant
Online Shopping Attitude	<	Quality Consciousness	.120	.041	2.807	.005	Significant
Online Shopping Attitude	<	Time Consciousness	.102	.034	2.375	.018	Significant
Online Shopping Attitude	<	Perceived Risk	.107	.058	2.258	.024	Significant

From Table 4, it is clear that the introduction of mediating variable "Perceived Risks" has significantly impacted the influence of predictor variables (Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness) on the dependent variable (Online shopping Attitude). There has been significant reduction in the value of Beta Estimate because of the introduction of the mediating variable "Perceived Risks". The results show that Partial Mediation is reported for Brand Consciousness, Hedonistic Orientation, Quality Consciousness and Time Consciousness as the p-value is less than 0.05. On the other hand, Full mediation is reported for the predictor variables like Fashion Consciousness and Price as the p-value ids higher than 0.05. Based on the mediation results, the hypothesis "Perceived risks mediate the relationship between factors influencing online shopping and attitude towards online shopping" was accepted.

**Indirect Effect of Online Trust on the Factors Influencing Online Shopping on Attitude towards Online Shopping** 

# H3: Online Trust in online shopping mediates the relationship between factors influencing online shopping and attitude towards online shopping:

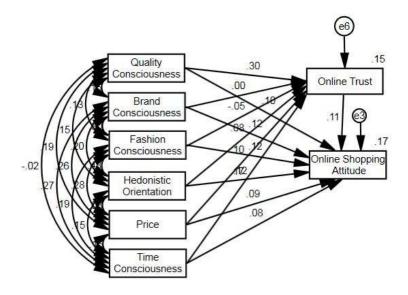


Figure 3: Indirect Effect of Online Trust on the Factors Influencing Online Shopping on Attitude towards Online Shopping

Table 5 shows the results of the indirect effect of the mediating variable "Online Trust" on the relationship between Factors Influencing Online Shopping on Attitude towards Online Shopping.

Table 5: Indirect Effect of Online Trust on the Factors Influencing Online Shopping on Attitude towards Online Shopping

Dependent Variable		Independent Variable	Beta Estimate	S.E.	C.R.	p – value	Result
Online Trust	<b>&lt;</b>	Quality Consciousness	.304	.046	7.131	***	Significant
Online Trust	<	Brand Consciousness	.003	.052	.072	.943	Non- Significant
Online Trust	<	Fashion Consciousness	054	.053	-1.082	.279	Non- Significant
Online Trust	<	Hedonistic Orientation	.076	.047	1.593	.111	Non- Significant
Online Trust	<	Price	.104	.062	2.337	.019	Significant
Online Trust	<	Time Consciousness	.172	.038	3.957	***	Significant

Dependent Variable		Independent Variable	Beta Estimate		S.E.	C.R.	p – value	Result
Online Shopping Attitude	<	Brand Consciousness	.120	0.120	.047	2.672	.008	Significant
Online Shopping Attitude	<	Fashion Consciousness	.118	0.112	.047	2.386	.017	Significant
Online Shopping Attitude	<	Price	.091	0.103	.056	2.063	.039	Significant
Online Shopping Attitude	<	Hedonistic Orientation	.120	0.128	.043	2.545	.011	Significant
Online Shopping Attitude	<b>&lt;</b>	Quality Consciousness	.098	0.131	.043	2.216	.027	Significant
Online Shopping Attitude	<b></b>	Time Consciousness	.084	0.103	.035	1.922	.055	Non- Significant
Online Shopping Attitude	<	Online Trust	.108		.040	2.444	.015	Significant

From Table 5, it is clear that the introduction of mediating variable "Online Trust" has significantly impacted the influence of predictor variables (Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness) on the dependent variable (Online shopping Attitude). There has been significant reduction in the value of Beta Estimate because of the introduction of the mediating variable "Online Trust". The results show that Partial Mediation is reported for all the variables as the p-value less than 0.05 like Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation and Quality Consciousness. However, Full mediation is reported for the predictor variable "Time Consciousness" as the p-value ids higher than 0.05. Based on the mediation results, the hypothesis "Online Trust mediates the relationship between factors influencing online shopping and attitude towards online shopping" was accepted.

# Overall SEM Model: Indirect Effect of Perceived Risk and Online Trust on the Factors Influencing Online Shopping on Attitude towards Online Shopping

Indirect effect was measured by introducing mediating variables namely "Perceived Risks" and "Online Trust" between Factors influencing online shopping (Brand Consciousness, Fashion Consciousness, Price, Hedonistic Orientation, Quality Consciousness and Time Consciousness) and Online shopping Attitude (Figure 4).

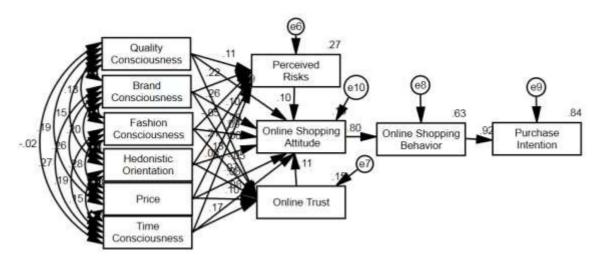


Figure 4: Indirect Effect of Perceived Risks and Online Trust on the Factors Influencing Online Shopping and Attitude towards Online Shopping

Table 6 shows the variation in the value of Beta Estimate of the dependent variable because of the introduction of mediation variables like Perceived Risks and Online Trust.

Table 6: Indirect Effect of Perceived Risks and Online Trust on the Factors Influencing Online Shopping and Attitude towards Online Shopping

Dependent Variable		Independent Variable	Beta Estimate	S.E	C.R.	p – value	Result
Perceived Risk	<	Quality Consciousness	0.109	0.032	2.729	0.006	Significan t
Perceived Risk	<	Brand Consciousness	0.215	0.036	5.100	***	Significan t
Perceived Risk	<	Fashion Consciousness	0.263	0.037	5.679	***	Significan t
Perceived Risk	<	Hedonistic Orientation	-0.050	0.033	-1.131	0.258	Non- Significan t

Dependent Variable		Independent Variable	Beta Estimate	S.E	C.R.	p – value	Result
Perceived Risk	<	Price	0.210	0.043	5.062	***	Significan t
Perceived Risk	<	Time Consciousness	0.003	0.027	0.084	0.933	Non- Significan t
Online Trust	<	Quality Consciousness	0.304	0.046	7.131	***	Significan t
Online Trust	<	Brand Consciousness	0.003	0.052	0.072	0.943	Non- Significan t
Online Trust	<b>&lt;</b>	Fashion Consciousness	-0.054	0.053	-1.082	0.279	Non- Significan t
Online Trust	<	Hedonistic Orientation	0.076	0.047	1.593	0.111	Non- Significan t
Online Trust	<	Price	0.104	0.062	2.337	0.019	Non- Significan t
Online Trust	<	Time Consciousness	0.172	0.038	3.957	***	Significan t
Online Shopping Attitude	<b>&lt;</b>	Brand Consciousness	0.098	0.048	2.130	0.033	Significan t
Online Shopping Attitude	<	Fashion Consciousness	0.090	0.049	1.781	0.075	Non- Significan t
Online Shopping Attitude	<b></b>	Price	0.070	0.057	1.549	0.121	Non- Significan t
Online Shopping Attitude	<	Hedonistic Orientation	0.125	0.042	2.669	0.008	Significan t
Online Shopping Attitude	<	Quality Consciousness	0.088	0.043	1.982	0.048	Significan t
Online Shopping	<	Time Consciousness	0.084	0.035	1.937	0.053	Non- Significan t

Dependent Variable		Independent Variable	Beta Estimate	S.E	C.R.	p – value	Result
Attitude							
Online Shopping Attitude	<	Perceived Risk	0.104	0.058	2.187	0.029	Significan t
Online Shopping Attitude	<	Online Trust	0.105	0.040	2.380	0.017	Significan t
Online Shopping behavior	<	Online Shopping Attitude	0.796	0.029	29.375	***	Significan t
Purchase Intention	<	Online Shopping behavior	0.918	0.018	51.645	***	Significan t

From the above table, it is very clear that the mediating variables "Perceived Risks" and "Online Trust" have significant positive impact on the dependent variable (Online Shopping Attitude). The path coefficient between Perceived Risks and Online Shopping Attitude was 0.104 with p-value less than 0.05. Similarly, the path coefficient between Online Trust and Online Shopping Attitude was 0.105 with p-value less than 0.05.

However, because of the introduction of mediating variables "Perceived Risks" and "Online Trust",

- The value of path coefficient between Brand Consciousness and Online Shopping Attitudehas decreased from 0.120 to 0.098,
- The value of path coefficient between Fashion Consciousness and Online Shopping Attitudehas decreased from 0.112 to 0.090
- The value of path coefficient between Price and Online Shopping Attitudehas decreased from 0.103 to 0.070
- The value of path coefficient between Hedonistic Orientation and Online Shopping Attitudehas decreased from 0.128 to 0.125
- The value of path coefficient between Quality Consciousness and Online Shopping Attitudehas decreased from 0.131 to 0.088
- The value of path coefficient between Time Consciousness and Online Shopping Attitudehas decreased from 0.103 to 0.084.

Based on the variations in the value of beta estimate and p-value, it is inferred that Partial Mediation is reported between the influencing factors like Brand Consciousness, Hedonistic Orientation, Quality Consciousness and Online Shopping Attitude. On the other hand, Complete Mediation is reported between the influencing factors like Fashion Consciousness, Price, Time Consciousness and Online Shopping Attitude. Further, bootstrapping procedure was performed to confirm the result of mediation analysis and a bootstrap sample of 5000 with bias corrected 95% was used. The results of the bootstrap analysis were found to be consistent with the results of the mediation.

## H4: Attitude towards online shopping influences the online shopping behavior:

Based on the results of the Overall SEM Model (Table 6), it is inferred that the Attitude towards online shopping has strong positive influence on online shopping behavior with beta value of 0.796 and p-value less than 0.05. Thus the hypothesis "Attitude towards online shopping influences the online shopping behavior" was accepted.

#### H5: Online shopping behavior influences the purchase intention in online medium:

Based on the results of the Overall SEM Model (Table 6), it is inferred that the online shopping behavior has strong positive impact on the purchase intention with beta value of 0.918 and p-value less than 0.05. Thus the hypothesis "Online shopping behavior influences the purchase intention in online medium" was accepted.

#### **SEM Model Evaluation – Goodness of Fit**

Table 7 presents the Goodness of FIT indices for the Overall AMOS Model developed in this work.

Table 7: Goodness of FIT - AMOS Model

Parameter	Recommended Value	Obtained Value
Chi-square value	-	38.816
P value	-	0.003
RMSEA	< 0.09 (Hair et al 2006)	0.048
RMR	<0.02 (Hair et al 2006)	0.012
GFI	> 0.90 (Hair et al 2006)	0.986
AGFI	> 0.90 (Hair et al 2006)	0.950
CFI	> 0.90 (Hu &Bentler 1999)	0.990
TLI	> 0.90 (Hooperet al 2008)	0.969
RFI	> 0.90 (Hair et al 2009)	0.9441
NFI	> 0.90 (Hu &Bentler 1999)	0.982

Chisq/df	< 5.0 (Lomax &Schumacker 2004)	2.156

From the Table 6, it is evident that the values obtained for different indices like GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), CFI (Comparative Fit Index) are greater than the recommended value of 0.9. This indicates that the model is perfectly fit (Hooper et al. 2008; Hu &Bentler, 1999). Similarly, RMSEA (Root Mean Square Error of Approximation) value was less than the recommended value of 0.09 (Hair et al 2011). Overall; the values for model fit indices obtained in the study are within the recommended level (Hu &Bentler 1999; Hooperet al 2008; Lomax &Schumacker 2004; Hair et al 2006; Hair et al 2009). Hence, it can be concluded that the SEM model is perfectly fit.

### References

- [1] Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C., Multivariate data analysis. Englewood Cliff. New Jersey, USA, 5(3), (1998). 207-2019.
- [2] Hair, J. F., Ringle, C. M., & Sarstedt, M. PLS-SEM: Indeed a silver bullet. The Journal of Marketing Theory and Practice, 19(2), (2011), 139-152.
- [3] Lomax, R. G., &Schumacker, R. E.. A beginner's guide to structural equation modeling. psychology press (2004).
- [4] Hu, L. T., &Bentler, P. M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural equation modeling: a multidisciplinary journal, 6(1), (1999), 1-55.
- [5] Hooper, D., Coughlan, J., & Mullen, M. R Structural equation modelling: Guidelines for determining model fit. Electronic journal of business research methods, 6(1), (2008), 53-60
- [6] Hair, J. F., Ringle, C. M., &Sarstedt, M. PLS-SEM: Indeed a silver bullet. The Journal of Marketing Theory and Practice, 19(2), (2011), 139-152.
- [7] Cowart, K. O., & Goldsmith, R. E. The influence of consumer decision-making styles on online apparel consumption by college students. International Journal of Consumer Studies, 31(6), (2007), 639-647.
- [8] Javadi, M. H.. An analysis of factors affecting online shopping behavior of consumers. International Journal of Marketing Studies 4: (2012)81–98.
- [9] Sproles, G. B., & Kendall, E. L. Amethodology for profiling consumers' decision-making styles. Journal of Consumer Affairs, 20(2), (1986), 267–279.
- [10] Shim, S., M. A. Eastlick, S. L. Lotz, and P. Warrington.. An online prepurhcase intentions model: The role of intention of search. Journal of Retailing 77, (2001), 397–416.
- [11] Kim, J., and J. Park. A consumer shopping channel extension model: Attitude shift toward online store. Journal of Fashion Marketing and Management 9 (1): (2005)106–121.
- [12] Liu, C., J. T. Marchewka, J. Lu, and C.-S. Yu. Beyond concern: A privacy- trustbehavioral intention model of electronic commerce. Information & Management 42 (1), (2004) 127–142. doi:10.1016=j.im.2004.01.002
- [13] Ennew, C., and H. Sekhon.. Measuring trust in financial services: The trust index. Consumer Policy Review 17 (2), (2007) 62–68.

# International Research Journal in Global Engineering and Sciences. (IRJGES) ISSN: 2456-172X | Vol. 3, No. 3, September - November, 2018 | Pages 90-105

- [14] Aiken, K. D., R. Mackoy, B. S.-C. Liu, R. Fetter, and G. Osland.. Dimensions of Internet commerce trust. Journal of Internet Commerce 6 (4): (2007), 1–25.
- [15] Jayashree, R. A study on online shopping behavior of working women in Bengaluru with special reference to grocery. Doctoral Dissertation, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya University, (2016).
- [16] Li, N., & Zhang, P. Consumer online shopping attitudes and behavior: An assessment of research. AMCIS 2002 Proceedings, 74, (2002).