CHAPTER 5

FACTORS INFLUENCE IMPULSE BUYING OF EXPERIENTIAL AND UTILITARIAN SERVICES

The previous chapter dealt with the first objective of the present research wherein the purpose was to investigate the respondent's scores on various internal attributes as well as their impulse buying tendency for different services. It also tested the formulated hypotheses using univariate and multivariate analyses of variance to see the interaction effects among the internal variables. The present chapter tries to examine the second objective of the research, which is an attempt to study the influence of various internal and external factors on impulse buying of experiential and utilitarian services. Analyses and results are explained in three sections. First section is about sample selection process. The second section contains descriptive statistics describing profile of the respondents, buying habit of the respondents in terms of frequency of buying the services, reasons of buying. This section also presented the results of standard error of difference test between internal factors and external stimuli with regards to impulse buying of experiential and utilitarian services. Finally, multiple regression analysis is conducted to find the predictive value of different internal factors and external stimuli. Last section concludes and summarizes the findings.

5.1 Selection of sample

As mentioned in the earlier chapter (Refer to Chapter 3) for the first phase of the study responses were collected from 1200 respondents on various items collectively measuring impulse buying of services. Average scores are then calculated for each of the respondents, thus, combined average scores for all the 1200 respondents are obtained. This average score is considered as respondent's average impulse buying tendency for services. The average score ranges from 1 (being lowest) to 4.7 (being highest). Considering the minimum and maximum scores as the basis of categorisation, a visual binning is performed using percentile cutpoint. The assumption is that higher the average scores, higher the tendency for impulse buying in services. This categorisation is performed to split the respondents on high, medium and low impulse buying.

In reference to Chapter 3, a total of 300 respondents are considered to compare the impulse buying tendency of the respondents before and after exposure to external

stimuli. The comparison is done to see if any difference is noticed in impulse buying tendency when exposed to external stimuli. Therefore, the study is conducted on the same respondents.

Since the aim of the research is to yield a fair comparison, an equal number of respondents are chosen from each category (High/Med/Low). As the total numbers of respondents are 300, therefore, 100 respondents from each category are to be interviewed.

	Table 24: Distribution of the respondents											
Categories	Score range	Number of	Score range of	Number of								
		respondents	final respondents	respondents in								
		(1200)		the final study								
Low	1.00 to 2.40	420	1.00 to 2.40	100								
Medium Above 2.40 to 2.80		395	2.50 to 2.90	100								
High	Above 2.80 to 4.70	385	3.00 to 4.70	100								

The following criteria have been used for selecting the respondents for the second phase.

a. The respondent's score range should be as dispersed as possible. For example, between two respondents, who scored 1.5 and 1.51 respectively, only one would be selected for participating in the second study, where the score range of the immediate and next participant also matters.

b. There should be a considerable gap in the scores of the respondents chosen from low, medium and high, so that the internal attribute of the respondents do not overlap. This is done to minimise the selection error and to maximise the gap between the respondents of all the three categories.

c. Next, on these three groups of respondents, the response accuracy towards the questionnaire is scrutinized such as response bias in terms of missing response and incessant response and accordingly selected for the second phase.

d. Finally, depending on the researcher's convenience those respondents are targeted who are willing to participate in the second study.

5.1.1 General profile of the respondents of the second phase

After extracting the 300 respondents for the second level of study where external stimuli are presented, a general profile of these respondents is presented. This gives the idea of the different demographic groups and their likelihood of impulse buying tendency in terms of low, medium and high.

5.1.1.1 Gender and impulse buying of services

Frequency distribution in Table 25 suggests that male respondents outnumbered in all the three categories than the female respondents. However, almost same number of male and female respondents are in the three categories (high, medium and low) are found.

Table 25: Distribution as per gender of the respondents and theirimpulse buying tendency									
Demographi	Demographic Variables Count (300)								
		Low	Med	High					
Gender	Gender Male		53	53					
	Female 46 47 47								

5.1.1.2 Age and impulse buying of services

Table 26 suggests that numbers of respondents in the three categories (high, medium and low) are different in size. Younger respondents are found to be more in high and medium category whereas adult respondents are more on the side of low impulse buying tendency.

Table 26: Distribution of the respondents as per age and theirimpulse buying tendency												
Variable	VariableAge groupsLowMedHigh											
Age	18 to 25 yrs.	29	56	55								
	26 to 35 yrs.	36	30	38								
	36 to 45 yrs.	20	12	2								
	46 to 55 yrs. 7 2 5											
	56 yrs. And above	8	0	0								

5.1.1.3 Income and impulse buying of services

Income wise distribution of the respondents in Table 27 indicates that respondents with a monthly household income of Rs. 40,000 to Rs. 1,00,000 are more prone to make impulse buying of services.

Table 27: Distribution of the respondents as per income and their impulse buying tendency											
VariableIncome level (Per month)LowMedHigh											
Income	Up to Rs.20000	17	18	16							
	Rs.20,000 to Rs.40,000	21	29	31							
	Rs. 40,000 to Rs.1,00,000	38	39	28							
	More than Rs.1,00,000	24	14	25							

5.1.2 Frequency of buying services

In the second phase of the present study, frequency of buying a service is questioned to understand how purchasing habit influence impulse buying of services. Results presented in Figure 11 suggest that the frequently purchased services are restaurant, movie and mobile. Leisure travel is one service which is chosen yearly or randomly. Majority of the respondents don't buy leisure travel and banking services at all.

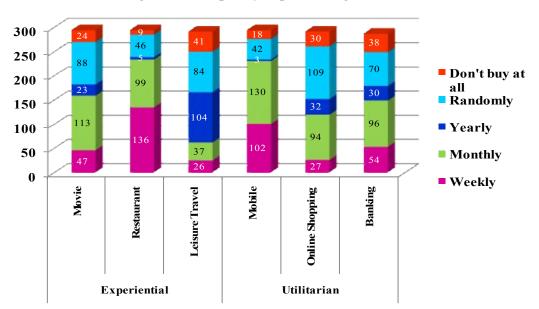


Figure 11: Frequency of purchasing a service

5.1.3 Reasons of buying services

If some services are frequently bought over others, it is important to know why those services are chosen over others. The analysis would give some idea about consumer behaviour in terms of their buying habit of services.

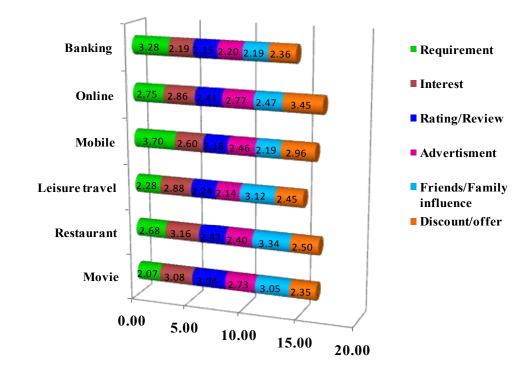


Figure 12 Reasons of buying services

Figure 12 depicts the average responses towards the reasons for buying of services. For leisure travel and restaurant services, friends/family and interest matter the most when purchasing such services. Requirement is the only reason that most of the respondents opted for banking. In case of online services, discount is the highest motivating factor. Though requirement is an important factor for buying mobile services, few respondents also buy it when there is a discount. Respondents reveal that interest, friends/family as well as rating are important reasons for buying movie services.

It is derived from the result that in case of experiential services (Leisure travel, Restaurant and Movie) influence of friends/family, rating and interest are the main reasons for buying. While requirement and discount are two main factors that influence the buying decisions of utilitarian services (Banking, Online shopping and Mobile).

5.1.4 Changes in impulse buying of experiential services before and after exposure to external stimuli

It is important to examine if any difference is found in impulse buying of the respondents when exposed to external stimuli. Standard error of difference formula (Fleiss, Levin and Paik, 2003; Gart and Nam, 1990; Newcombe, 1998b; Velleman, Veaux and Bock, 2005) is used to test the differences in the two proportions of responses which are before and after exposing to external stimuli and its effect on impulse buying tendency of the respondents.

Responses before exposure to external stimuli is taken from 300 respondents as already mentioned in section 5.1 of the present study. From these responses respondents are grouped into three categories high, medium and low. Another three categories are also found based on the responses of the same samples after exposure to external stimuli.

Finally, using standard error of differences, the differences in impulse buying (before and after exposure of external stimuli) among each of the three groups are tested.

The frequency of the respondents as per low, medium and high impulsive buying for experiential services before and after exposure to external stimuli is presented in Table 28.

Table 28: Differences in impulse buying of experiential servicesbefore and after exposure of external stimuli									
Level in impulse buying	Level in impulse buying Impulse Buying Tendency Total								
tendency before exposure		after		(Before)					
to external stimuli	Low	Low Medium High							
Low	66	28	29	123					
Medium	30	17	29	76					
High	18 26 57								
Total (After)	114	71	115	300					

To see the differences in how many respondents from low impulse buying changed to high, medium and low after exposure to external stimuli standard error of difference test is used. Same is done for medium and high as well. Following is the formula:

$$p_1 - p_2 = \sqrt{\frac{p(1-p)}{n_1} + \frac{p(1-p)}{n_2}}$$

Total sample size =300

5.1.4.1 Category: Low impulse buying for experiential services

Proportion of consumers before exposure (p₁): $\frac{123}{300} = 0.41$

Proportion of consumers after exposure (p₂): $\frac{114}{300} = 0.38$

Z value is 1.96 in 95% confidence level

$$(0.41 - .38) \pm 1.96 = \sqrt{\frac{0.41(1 - 0.41)}{300} + \frac{0.38(1 - 0.38)}{300}}$$

$$0.03 \pm 1.96 = 0.0398$$

Difference between the Sample Proportions $\pm z *$ (Standard Error for Difference)

The difference between the two sample proportions is 0.03. The margin of error is 0.078 or 7.8%. Therefore, for 95% confidence interval the difference between the percentage of consumers with low impulse buying before exposure to external stimuli and the change in impulse buying after exposure is 0.03 plus or minus 0.078. With 95% confidence, it can be estimated that the proportion of consumers with low impulsive buying when exposed to external stimuli will decrease in between 4.8% and 10.8%. In a detail note, the chances of increase in impulsive buying for experiential services is in between 4.8% to 10.8% for those consumers who were initially low in impulse buying tendency.

5.1.4.2 Category: Medium impulse buying for experiential services

With reference to formula 1 from section 5.1.4, the proportional difference in impulse buying for experiential services is found for those consumers who were moderate in

impulsive buying tendency. The difference between the two samples proportions i.e. before and after exposure to external stimuli is 0.017. The margin of error is 0.069 or 6.9%. With 95% confidence interval the difference in impulse buying tendency for experiential services of moderate impulsive buyers is 0.017 plus or minus 0.069 after exposure to external stimuli. The difference in proportion is somewhere in between - 0.052 to 0.086. It can be concluded that the impulse buying of medium impulse buyers are likely to increase in between 5.2% to 8.6% when exposed to external stimuli.

5.1.4.3 Category: High impulse buying for experiential services

Consumers with high impulsive buying tendency when exposed to external stimuli show a proportional difference of 0.046 in impulsive buying for experiential services. The margin of error is 0.076. Therefore, for 95% confidence interval the difference between the percentage of consumers with high impulse buying before exposure to external stimuli and their changes in impulse buying for experiential services after exposure is 0.076 plus or minus 0.046. The difference in percentage is somewhere between -0.122 or 12.2% to 0.03 or 3%. It can be interpreted that the proportions of consumers with high impulse buying for experiential services after experiential services is in between 3% to 12.2% when exposed to external stimuli.

5.1.5 Differences in impulse buying of utilitarian services before and after exposure to external stimuli

Following same procedure of respondents' selection, standard error of difference test is conducted for utilitarian services. This would give idea of how exposure to external stimuli brings changes in impulse buying of utilitarian services.

Table 29: Differences in impulse buying of utilitarian services before and after										
exposure to external stimuli										
Level in impulse buying tendency of	Level in impulse buying tendency of IBT Utilitarian after Total									
Utilitarian services before exposure to	Low Medium High (Before									
external stimuli										
Low	44	29	32	105						
Medium	26	26	49	101						
High	11	15	68	94						
Total (After)	81	70	149	300						

In the above table, the frequency for low, medium and high impulse buyer before and after exposure to external stimuli is presented. Test of difference is conducted to see the proportion of difference in impulse buying of utilitarian services between the respondents before and after exposure to external stimuli. The analysis is conducted using the same formula as used for experiential services.

5.1.5.1 Category: Low impulse buying in utilitarian services

The difference between the two sample proportions is 0.08. The margin of error is 0.073. Therefore, for 95% confidence interval the difference between the percentage of consumers with low impulse buying before exposure to external stimuli and their changes in impulse buying for utilitarian services after exposure is 0.08 plus or minus 0.073. So, the difference would be from 0.007 or to 0.156. As the proportion of low impulse buyer is reduced to 0.35 from 0.27 when exposed to external stimuli, therefore, it can be concluded that there could be 7 to 15.6% decrease in the tendency for low impulsive buyers when exposed to external stimuli. So, there is a 95% confidence that the proportions of consumers with low impulse buying tendency for utilitarian services would decrease in between 7% to 15.6% when exposed to external stimuli.

5.1.5.2 Medium impulse buying in utilitarian services

The difference between the two sample proportions is 0.103. The margin of error is 0.071. Therefore, for 95% confidence interval the difference between the percentage of consumers with medium impulse buying of utilitarian services before exposure to external stimuli and the change in impulse buying after exposure is 0.103 plus or minus 0.071. The difference in percentage is somewhere in between 2.7% to 17.6%.

5.1.5.3 High impulse buying in utilitarian services

The difference between the two sample proportions is -0.183. The margin of error is 0.077. Therefore, for 95% confidence interval the difference between the percentage of consumers with high impulse buying before exposure to external stimuli and the change in impulse buying after exposure is -0.183 plus or minus 0.077. The difference in percentage is somewhere in between 10.6% to 26%. So, there is a 95% confidence that the proportions of consumers with high impulse buying tendency for utilitarian services would increase in impulse buying upto 10.6% to 26% when exposed to external stimuli.

5.2 Mean and SD of the external stimuli

Responses on each item corresponding to the influence of external stimuli are measured on a five point likert scale. Descriptive statistics is performed to see the average, standard deviation and score range of each of the external stimuli. Higher the mean score of a particular stimulus higher is the influence of it on impulse buying of the particular service. In a score range between 1 (strongly disagree) and 5 (strongly agree), below 2.5 may be considered as low in the dimension, a score between 2.5 to 3.5 may be considered as moderate and above 3.5 may be considered as high. A description of score on each variable is explained in the following paragraphs.

Table 30 presents the descriptive score of the external stimuli in terms of their influence on impulse buying of services. It is seen that advertisement has the highest influence with a mean score of 3.92 followed by discount (\bar{x} =3.74). Rating comes third in terms of its influence on impulsive buying of services. Reference is the last one among the four stimuli. Overall, it can be concluded from the mean scores that the external stimuli seem to have strong influence on impulsive buying of services.

Table 30: Mea	Table 30: Mean and SD of the External factors								
Variables (N=300)MeanSDMin-Max range									
Discount	3.74	0.82							
Advertisement	3.92	0.73	1-5						
Rating	Rating 3.59 0.74								
Reference	3.51	0.77							

5.3 Predictive value of external and internal stimuli in terms of Impulse buying of experiential and utilitarian services

Attempts are made to develop models using multiple regression analysis to predict the contribution of external and internal factors on impulse buying of experiential and utilitarian services. It is to understand the degree or intensity of various internal attributes and external stimuli and their combined effect on impulse buying behaviour of both the services.

5.3.1 Predictive value of external and internal stimuli regarding Impulse buying of experiential services

Multiple regression analysis presented in Table 31 provides the Model Summary where correlation coefficient (r) is 0.655. The coefficient of determination (r^2) value of 0.429 suggests almost 43% of variance in impulse buying of experiential services explained by both internal and external factors. The model summary suggests a fair prediction of both internal and external factors together on impulse buying of experiential services.

	Table 31: Model Summary ^b									
Model	R	R Square	Adjusted	Std. Error of	Change Statistics					
			R	the Estimate	R	F	df1	df2	Sig. F	
			Square		Square	Change			Change	
					Change					
1	0.655 ^a	0.429	0.411	0.58309	0.429	24.088	8	257	0.000	
a. Predi	a. Predictors: (Constant), GIB, Lifestyle, OSL, ISC, Discount, Advertisement, Reference, Rating									
b. Depe	ndent Var	iable: Impulse	buying in e	xperiential servi	ces					

The F-ratio presented in Anova Table 31 shows that independent variables are significantly predicting the dependent variable (F(8, 265) = 24.088, p<0.000), indicates that the regression model is a good fit for the current study.

	Table 32: ANOVA ^a										
Μ	odel	Sum of	df	Mean Square	F	Sig.					
		Squares									
1	Regression	65.519	8	8.190	24.088	0.000b					
	Residual	87.379	257	0.340							
	Total	152.898	265								
a.	Dependent Vari	able: Impul	se Buying	Tendency in Exp	eriential se	ervice					
b.	b. Predictors: (Constant), GIB, Lifestyle, OSL, ISC, Discount, Advertisement,										
Re	eference, Rating										

The estimated model coefficient is presented in Table 32. It is seen that the coefficient of most of the independent variables are significantly differed (p<0.05) except independent self construal and optimum stimulation (internal factors) and rating (external stimuli). Insignificant coefficient value suggests that these 3 variables do not have independent predictive value, therefore, excluded from the regression equation.

	Table 33: Coefficients ^a										
Μ	odel	Unstanda	urdized	Standardized	t	Sig.					
		Coefficie	ents	Coefficients							
		В	Std. Error	Beta							
1	(Constant)	-0.860	0.325		-2.645	0.009					
	Rating	0.254	0.062	0.238	4.085	0.000					
	GIB	0.186	0.088	0.126	2.116	0.035					
	OSL	0.034	0.076	0.025	0.441	0.660					
	Lifestyle	0.386	0.075	0.309	5.152	0.000					
	Advertisement	0.072	0.036	0.110	1.985	0.048					
	ISC	0.070	0.081	0.046	0.859	0.391					
	Discount	-0.039	0.034	-0.062	-1.151	0.251					
	Reference 0.112 0.052 0.120 2.142 0.033										
a.	Dependent Variab	le: Impulse	Buying Tend	ency in Experient	ial service	S					

For example, the unstandardized coefficient score, B_1 , for lifestyle variable is 0.386 (Table 33) which indicates that each unit increase in score for lifestyle variable, there is a resultant increase in impulse buying of experiential services. Same explanation can be offered for the other variables, namely, Rating, GIB, Advertisement and Reference. It is also seen that discount as external stimuli does not have significant predictive ability to influence on impulse buying of experiential services. Likewise, two internal factors, optimum stimulation level and independent self construal have no significant influence on such buying behaviour.

The regression equation for the external stimuli and internal factors is presented below in the form of

$y=c+b_1x_1+b_2x_2+b_3x_3...$

(Impulse buying tendency in experiential services) = -0.860+0.386*(Lifestyle) + 0.254*(Rating) +0.186*(GIB) +0.112*(Reference) +0.072*(Advertisement)

Interpretation of equations

The predictive value of each of the internal and external stimuli and their combined effect on dependent variable i.e. impulse buying in experiential services is presented in the above equation. Both internal and external factors are seen to have important influence here.

	Table 3	4: Equations	of Impulse buyin	ng in Exper	iential Servic	es	
Occurrence in		Threshold c	Threshold combined effect of independent variables				
Impulsive buyin	•	Internal stin	nuli	External st	timuli		
Experiential services (When impulse buying score is 3 or above)		Lifestyle	General impulsive buying behaviour	Rating	Reference	Advertisement	
Coefficient valu	Coefficient values \rightarrow		0.186	0.112	0.254	0.072	
Occurrence	4.07	5	5	5	5	5	
	3.84	5	4	5	5	4	
	3.43	4	5	5	4	5	
	3.04	4	4	4	4	3	
No occurrence	2.85	4	3	4	4	3	
	2.10	3	3	3	3	3	
	1.11	2	2	2	2	2	
	0.13	1	1	1	1	1	
	-0.86	0	0	0	0	0	

An equation presented in Table 34 which is computed using the predictive value of each external and internal stimulus that together contributes to the occurrence of impulse buying of experiential services. The predictive values are the rating for each of the response options presented in forms of questionnaire in the study. Each independent variable are measured with numbers of such items which are rated on a five point likert scale where 1 indicates strongly disagree and 5 denotes strongly agree to the response options that individuals find as the reason of their impulse buying of a particular service. The equation explains that the consumer shall take impulsive decision in experiential services when the combined effect of lifestyle, general impulsive buying behaviour, word of mouth, reference group and advertisement has a positive value. In a detail note, it can be understood that if the chosen response options for the items of internal and external stimuli mentioned in the equations are 5 or strongly agree then there is a greater likelihood of engaging in impulsive buying of experiential services. In that case the maximum value of the dependent variable obtained is 4.07 (Mostly happens to Always). The combined effect of all the independent variables mentioned in the equation could be ranged in between 5 and 1, where 5 denotes the highest occurrence and 1 indicates no occurrence of impulse buying. The middle value or 3, is considered as the threshold score which describes that impulse buying happens sometimes.

A graphical format of the equations is presented in Figure 13. It is seen from the figure that almost all the curves representing the variables are overlapped towards the lower end. Differences are only visible towards the higher end or a threshold point of 3 from where impulse buying has started to occur. This can be interpreted that impulse buying behaviour in experiential services can be predicted only when the studied factors have relatively higher influence. A negative estimation reveals that impulse buying would be adversely affected if the studied factors have no influence or are absent.

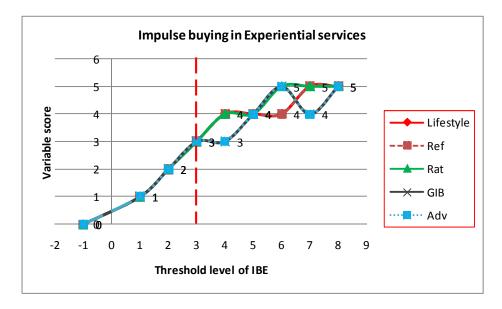


Figure 13: Impulse buying in experiential services

From Table 34, certain patterns of impulse buying in experiential services could be delineated. These are mentioned below:

i. For the occurrence of impulse buying in experiential services the minimum score has to be four in the all independent factors except advertisement which requires a minimum score of 3. In this way, the combined score of all the factors would be the minimum threshold level for impulse buying which is 3.04.

ii. A score below 4 in general impulsive buying behaviour and advertisement would lead to no occurrence of impulse buying in experiential services keeping the scores of other factors as 4.

iii. There would be negative impulse buying in experiential services when the scores of independent variables are 0. It can be interpreted that the tendency to indulge in impulse buying of experiential services goes down in absence of the factors used in the study.

iv. Rating is seen to be the strong predictor among the entire external factors whereas advertisement has minimum predictive value.

v. Lifestyle as an internal factor has important influence on impulse buying of experiential services.

Overall, it can be concluded that lifestyle and popularity of a service are two of the crucial factors to generate impulse buying in experiential services. For the minimum threshold level of impulse buying in experiential services, at least a score of 3 and above in all the independent variables are required suggesting more or less all the factors carry an equal importance.

5.3.2 Predictive value of external and internal stimuli in terms of impulse buying of utilitarian services

Multiple linear regression analysis is used to develop model for predicting impulse buying in utilitarian services using various external and internal stimuli. It is to examine how different internal attribute and external stimuli affect impulse buying in utilitarian services.

The Model Summary in table 35 provides the correlation coefficient (r) and coefficient of determination (r^2) for the regression model. A correlation coefficient value (r) of 0.615 indicates a good prediction. The coefficient of determination (r^2) value of 0.379 suggests 38% of variance in impulse buying of utilitarian services explained by both internal and external factors. The reason to found a relatively moderate variance may be that since it's a behavioural study there are fair chances of response discrepancies among individuals. However, an overall variance (38%) of external and internal stimuli for the service with a significant P value (Table 35) can be considered as a good model in relation to present study (Nau, 2017; Spiess and Neumeyer, 2010; Nagelkerke, 2008; Anderson and Bollerslev, 1998).

	Table 35: Model Summary ^b										
Model	Model R R Square Adjusted Std. Error Change Statistics										
			R Square	of the	R Square	F	df1	df2	Sig. F		
Estimate Change Change Change								Change			
1	0.615 ^a	0.379	0.355	0.67291	0.379	15.627	8	205	0.000		
a. Predi	a. Predictors: (Constant), GIB, Lifestyle, OSL, ISC, Discount, Advertisement, Reference, Rating										
b. Depe	b. Dependent Variable: Impulse buying of Utilitarian services										

The F-ratio presented in Anova Table 36 shows that independent variables statistically significantly predict the dependent variable, F(8, 213) = 15.627, *p*<0.000 indicates that the regression model is a good fit.

Table 36: ANOVA ^a							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	56.607	8	7.076	15.627	0.000b	
	Residual	92.825	205	0.453			
	Total	149.432	213				
a. Dependent Variable: IBT_Utilitarian							
b. Predictors: (Constant), GIB, Lifestyle, OSL, ISC, Discount, Advertisement, Reference,							
Rating							

The estimated model coefficient is presented in Table 37. It is seen from the table that most of the independent variables are significantly differed (p<0.05) except independent self construal and optimum stimulation (internal factors) and rating (external stimuli) which are excluded from the regression equation.

Table 37: Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	-0.948	0.436		-2.173	0.031		
	Rating	0.101	0.068	0.119	1.498	0.136		
	GIB	0.273	0.114	0.164	2.396	0.017		
	OSL	-0.159	0.095	-0.108	-1.671	0.096		
	Lifestyle	0.222	0.098	0.156	2.266	0.024		
	Advertisement	0.119	0.046	0.157	2.583	0.011		
	ISC	0.194	0.115	0.108	1.685	0.094		
	Discount	0.164	0.072	0.158	2.273	0.024		
	Reference	0.151	0.066	0.167	2.283	0.023		
a. Dependent Variable: IBT_Utilitarian								

The unstandardized coefficient, B_1 , for general impulsive buying behaviour is 0.273 (Table 37) means that each one unit increase in general impulsive buying behaviour, there is an increase in impulse buying of utilitarian services. Same applies for all other independent variables. Rating as external stimuli have no significant impact on impulse buying of utilitarian services. Likewise, other two internal factors, optimum stimulation and independent self construal have no influence on impulse buying of utilitarian services.

The regression equation for the internal factors and external stimuli is presented below in the form of

$$y=c+b_1x_1+b_2x_2+b_3x_3...$$

(Impulse buying tendency in utilitarian services) = -0.948 + 0.273*(GIB) + 0.222*(Lifestyle) + 0.164*(Discount) + 0.151*(Reference) + 0.119*(Advertisement))

Interpretation of equations

The predictive value of internal and external stimuli together on impulse buying in utilitarian services is presented in the above equation. Internal factors are seen to have important influence on impulse buying to happen. Discount among the entire external factor play important role in impulse buying of utilitarian services whereas advertisement has least minimum predictive ability.

Table 38: Equations of Impulse buying in Utilitarian services								
Occurrence in Impulsive buying of Utilitarian services (When impulse buying score is 3 or above)		Threshold combined effect of independent variables						
		Internal stimuli		External stimuli				
		General impulsive buying behaviour	Lifestyle	Discount	Reference	Advertisement		
Occurrence	3.70	5	5	5	5	5		
	3.04	5	4	4	4	4		
No occurrence	2.77	4	4	4	4	4		
	1.84	3	3	3	3	3		
	-0.02	1	1	1	1	1		
	-0.95	0	0	0	0	0		

A graphical format of the equations is presented in Figure 14. The equations are computed using the predictive value of each external and internal stimulus which together contributes to the occurrence of dependent variable. The predictive values are the rating against each response options used to measure the independent variables. These ratings are based on a five point likert scale where 1 indicates strongly disagree and 5 means strongly agree.

An equation explains that the consumer shall take impulsive decision in buying utilitarian services if the combining effect of general impulsive buying behaviour, lifestyle, discount, reference group and advertisement are favourable. In a detail note, if the chosen response options for the items of internal and external stimuli mentioned in the equations are 5 or strongly agree then there is a greater likelihood of engaging in impulsive buying of utilitarian services. In that case the maximum threshold value of the dependent variable is 3.70 (sometimes to mostly happen). The maximum value of impulse buying in utilitarian services could be 5 and minimum could be 1, which suggests high occurrence and no occurrence of impulse buying respectively. A score of 4 and above assume the occurrence of impulse buying in utilitarian services.

From Table 38, certain patterns of impulse buying in utilitarian services can be noticed. These are mentioned below:

i. Maximum 5 in general impulsive buying behaviour is the threshold score to predict impulse buying in utilitarian services keeping the scores of other four factors as 4.

ii. There would be negative impulse buying or no impulse buying of utilitarian services when the scores of independent variables are minimum i.e 1 or 0.

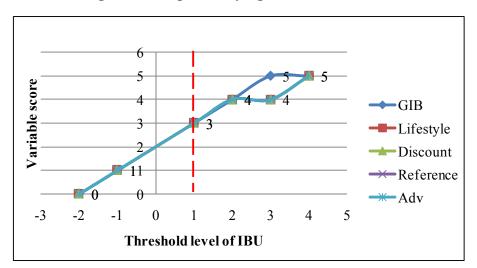


Figure 14: Impulse buying of utilitarian services

Overall, it can be predicted that general impulsive buying behaviour is an important factor for impulse buying to happen in utilitarian services. It can also be concluded that other four factors are also equally important for impulse buying to occur. Maximum threshold level (3.70) in impulse buying of utilitarian services indicates a rare occurrence of impulse buying in utilitarian services which may be situation and individual specific. The strong contributions of all the factors studied here may lead to such buying behaviour.

5.4 Conclusion

The analyses and findings presented in the current chapter are an attempt to examine the second objective of the study. The buying habits of the consumers with regards to various services are deciphered from the study. It also offers some knowledge about the contributory factors to such buying habit. Through the analysis, it has been established that exposure to external stimuli bring changes in impulse buying of experiential and utilitarian services among the consumers. Lastly, the chapter identifies the predictive value of different contributory factors towards impulse buying of experiential and utilitarian services.

From the study it is observed that three services are frequently used by consumers that are movie, restaurant and mobile services under experiential and utilitarian category. These services are mostly bought on weekly and monthly basis. Consumers are less likely to go for leisure travel, they hardly make a trip once in a year or few of them have never travelled even. Online services are randomly purchased while banking services are purchased once in a year or never.

When it comes to identify the factors influence consumers buying habit of experiential and utilitarian services, it is found that experiential services are mostly purchased out of interest and on influence of friends/family. On the other hand, utilitarian services are bought on the basis of requirement and discounts. Mobile services are more often bought on requirement as well as when there is a discount offers while buying of online services are mostly influenced by discount offers and interest. Interest, good rating and friends/family are almost equally important for watching a movie, while interest and friends/family both are important for eating out and planning for a leisure travel. Banking services are used for requirement purposes only.

Tendency for impulse buying in services changes with exposure to external stimuli. Such changes are seen to be more in utilitarian services. It is interesting to note that when exposed to external stimuli, respondents who are initially low in impulsive buying tendency showed some level of interest in impulsive buying of experiential services. Likewise, after presentation of external stimuli, impulsive buying for services again increases for consumers who have already high level of impulsive buying tendency. Such increases in tendency are also visible for consumers who had initially medium level of impulsive buying.

As a predictor of impulsive buying of services, lifestyle is commonly observed an important factor. Advertisement, rating and discount are important triggering factors for impulsive buying of experiential and utilitarian services. Regarding the influence of external stimuli, discount is an important predictor for utilitarian services whereas advertisement is crucial for experiential services. General impulsive buying as an internal factor has important role in impulsive buying of utilitarian services. The presence of this factor has to be very strong along with the other contributory factors to trigger impulsive buying in utilitarian services. In absence of sufficient level of this factor, impulsive buying for utilitarian services could go down or become negative. In a nutshell, whether experiential or utilitarian services, impulse buying is almost impossible in absence of the sufficient level of internal factors and external stimuli.

Considering the analysis already presented, it can be concluded that impulsive buying in utilitarian services is less likely to happen. Moreover, a consumer's internal impulsive attributes are very important for impulsive buying of utilitarian services. However, appealing external stimuli along with some level of internal factors may drive impulsive buying of experiential services. The next chapter attempts to understand how different factors in presence of moderating factors influence impulsive buying of experiential and utilitarian services by testing a theoretical framework offered in context of present study.

References

- Anderson, T. G., Bollerslev, T., and Das, A. (1998). Testing for market microstructure effects in intraday volatility: a reassessment of the Tokyo FX experiment. Working paper No. 66666. National bureau of economic research.
- Gart, J. J., and Nam, J. M. (1990). Approximate interval estimation of the difference in binomial parameters: correction for skewness and extension to multiple tables. *Biometrics*, *46*(3), 637-643.
- Nagelkerke, N. J. (1991). A note on a general definition of the coefficient of determination. *Biometrika*, 78(3), 691-692.
- Nau, R. F. (2017). Regression diagnostics: Testing the assumptions of linear regression. Last modified January, 10. Retrieved from http://people.duke.edu/~rnau/testing.htm.
- Newcombe, R. G. (1998). Two sided confidence intervals for the single proportion: comparison of seven methods. *Statistics in Medicine*, *17*(8), 857-872.
- Spiess, A. N., and Neumeyer, N. (2010). An evaluation of R 2 as an inadequate measure for nonlinear models in pharmacological and biochemical research: a Monte Carlo approach. *BMC pharmacology*, 10(1), 6.