CHAPTER 4

ANALYSIS AND INTERPRETATION

This chapter emphasizes the demographic details of the sample, focuses on the analysis part and summarize various statistics and draw results on the main purpose of the study. The analysis was done using descriptive statistics, ANOVA, correlation, regression, confirmatory factor analysis of the study variables, estimation of model fit by AMOS and testing the mediation effect using Process Macro. SPSS is used to find the level of magnitude of various factors using descriptive statistics, one way ANOVA is use to study the perceptional behaviour difference of study variables with regard to demographic factors. Correlation is used to study the association between different Independent variables with dependent factor. Regression is used to explore the impact of different Independent variable on dependent variables. AMOS is employed to validate the structural equation modeling in order to estimate the model fit. Mediating effect of Online flow experience between Online Apparel Purchase Behaviour and Re-purchase Intention of the Millennial is examined using SPSS Process Macro. Based on this result, interpretation and the explanations on the findings are specified by the researcher's viewpoint which supports or diverge with the earlier studies.

4.1 DESCRIPTIVE STATISTICS

A descriptive statistic is a summary that quantitatively explains the information collected. Descriptive statistics is the process of using and analyzing Samples. Descriptive measures that are universally used to explain a data set are measures of central tendency and measures of variability or dispersion. Mean is the widely used measures of Central tendency and standard deviation is used in measures of dispersion. Measures of variability is distribution analysis which is explained through Skewness and Kurtosis.

Descriptive statistics in the study was done using SPSS. 894 valid responses were collected from millennials of Coimbatore city. Descriptive statistics like mean, Standard deviation, Skewness and Kurtosis for all the study variables such as Perceived Usefulness, Perceived Ease of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behaviour, Online Flow Experience and Online Apparel Repurchase Intention are examined and presented in Table 4.1

VARIABLES	MEAN	STD DEVIATION	SKEWNESS	KURTOSIS
PERCEIVED USEFULNESS	3.84	0.932	-1.184	.187
PERCEIVED EASE OF USE	3.72	0.979	892	485
PERCEIVED TRUST	3.61	0.975	700	874
PERCEIVED ENJOYMENT	3.58	1.060	610	-1.140
ONLINE APPAREL PURCHASE INTENTION	3.75	0.955	919	453
ONLINE APPAREL PURCHASE BEHAVIOUR	3.75	0.921	786	634
ONLINE FLOW EXPEREINCE	3.81	0.866	-1.056	006
ONLINE APPAREL REPURCHASE INTENTION	3.86	0.909	-1.093	.127

TABLE NO. 4.1 SUMMARY OF DESCRIPTIVE STATISTICS

Table 4.1 shows distributional statistics for all the study constructs. It is noted that among all the variables, the mean score was highest for Online Apparel Repurchase Intention and lowest for Perceived Enjoyment. The above Table estimate that approximately 68% of the scores in the sample fall within one standard deviation of the mean for all the constructs. The standard deviation allows to conclude that the distribution of scores is normal or close to bell-shaped.

Hair et al. (2006) noted that normality tells the shape of the data distribution for an individual metric variable. Assessment of the variable's levels of skewness and kurtosis is one of the method to conclude normality (Hair et al., 2006). Skewness provides an indication of the

symmetry of the distribution and Kurtosis turns to the peakedness or flatness of the distribution (Hair et al., 2006). For determining skewness and kurtosis values, if the z value goes beyond the critical values of ± 1.96 at 0.05 significance level, the distribution of data is considered non-normal (Hair et al., 2006). The result of the descriptive analysis shows that none of the variables falls outside the ± 1.96 range of skewness and kurtosis in this study. Hence, the data of this study is normal in relation to Skewness and kurtosis. Table 4.1 summarizes the skewness and kurtosis values for the study's variables.

4.2 DEMOGRAPHIC PROFILE OF THE SAMPLE

This section reports the Demographic details of the study. The questionnaires included some insights to identify the characteristics of respondents participating in this study with respect to their demographic and socio-economic profiles. Demographic contents includes Age, Gender, Marital Status, Education, Occupation, Family Monthly Income. Psychographic information include E-retailers Preference, Hours spend weekly in surfing E-retailers website, Recent Purchase of apparels with E-retailer and Online Apparel Shopping Experience which were considered as significant factors in influencing the Millennial's online purchase behavior towards Apparel. These Psychographic details are considered as additional demographic data to identify the buying preferences and the behaviour of the millennials.

S.No	Age	Frequency	Percent
1	23-28 years	299	33.4
2	29-33 years	301	33.7
3	34-38 years	294	32.9
	Total	894	100.0
S.No	Gender	Frequency	Percent
1	Male	467	52.2
2	Female	427	47.8
	Total	894	100.0
S.No	Marital Status	Frequency	Percent
1		596	65.5

TABLE NO. 4.2 PERCENTAGE ANALYSIS OF DEMOGRAPHIC FACTORS

2	Single	305	34.1	
3	Others	3	.3	
	Total	894	100.0	
S.No	Education	Frequency	Percent	
1	Diploma	28	3.1	
2	Under Graduate	463	51.8	
3	Post Graduate	400	44.7	
4	School	3	.3	
	Total	894	100.0	
S.No	Occupation	Frequency	Percent	
1	Salaried	391	43.7	
2	Self-Employed	266	29.8	
3	Home Maker	221	24.7	
4	Others	16	1.8	
	Total	894	100.0	
S.No	Monthly Family Income	Frequency	Percent	
1	Less Than 20,000	64	7.2	
2	20,001-30,000	114	12.8	
3	30,001-40,000	246	27.5	
4	40,001-50,000	262	29.3	
5	Above 50,000	208	23.3	
	Total	894	100.0	

From the table no 4.2 shows that the study analyzed the age of the respondents under three categories namely, 23-28 Yrs, 29-33 Yrs, and 34-38 Yrs. The analysis of data gathered revealed that, out of 894 respondents, 299 respondents representing 33.4 percent are in the age category of 23-28 years, majority of 301 respondents (33.7%) are in the age category of 29-33 years, 294 respondents (32.9%) are in the age category of 34-38 year. Gender includes 52.2 % of male (467 respondents) and 47.8% of female (427 respondents). The Marital Status of the respondents encompasses of Married, Single and others. The Married category includes 586 respondents which comprises of 65.5% The single category includes 305 respondents (34.1%)

and 3 respondents (0.3%) belongs to other category. Educational qualification of the respondents studied under four segments namely Diploma, Under Graduate, Post Graduate and others. The analysis shows that notable portion of 463 respondents, representing 51.8 percent are having the education qualification of Under Graduate, followed by 400 respondents (44.7%) are having the education qualification of Post Graduate, 28 respondents (8%) are having the education qualification of Diploma and 3 respondents (0.03%) with schooling. Out of 894 respondents a majority of 391 respondents, representing 43.7 percent are salaried, followed by 266 respondents (29.8%) are Self - employed, 221 respondents (24.7%) are home makers and others include 16 respondents (1.8%).

The study examined monthly family income of the in Indian rupees under five segments. The segments are categorized as Less than 20,000, 20,001-30,000, 30,001-40,000, 40,001-50,000 and above 50,000. The majority of 262 respondents, representing 29.3 percent are having family monthly income INR 40,001-50,000, followed by 246 respondents (27.5%) are having family income of INR 30,001-40,000, 208 respondents (23.3%) are having family income above INR 50,000, 114 respondents (12.8%) are earning INR 20,001-30,000 and remaining 64 respondents are having family income less than INR 20,000.



Fig 4.1 Millennial's most preferred E-retailer for apparel purchase

In addition to socio-economic demographical information, Psychographic profiling of the respondents are also studied in this research. Psychographic factors focuses on activity, interest, opinion (Abbreviated as AIO variables) and behaviour of the individual. The Survey comprehended the preference of E-retailers among the millennials for Apparel products, Time spend in E-retailer website per week, recent purchase activity with E-retailers and Millennial's online experience. Millennials preferred to purchase apparels foremost from their preferred E-retailers. From Fig 4.1 result shows that Out of 894 respondents, majority of 366 Millennial's (40.94%) first choice for Apparel E-shopping is Amazon online store. Next to it, Myntra website which is preferred by 224 millennials (25.06%). Flipkart is positioned third in most preferred E-retailer by 214 Millennials (23.94%). Snapdeal E-Website is preferred by 72 millennials (8.05%). The least preferred E-retailer is Jabong which been chosen by 18 millennials (2.01%).



Fig 4.2 Hours Surfing E-retailer website

To determine the psychographic attributes of the millennials, the respondents requested to share information regarding total hours spend in E-retailer's Website weekly in Questionnaire. The results obtained have been shown in Fig 4.2, which states that Majority of Millennials (27.74%) spend 15-20 hours per week in E-retailers website. 23.94% of Millennials surf E-retailer's website for 5- 10 hours every week. In next to that, 22.71% Millennial's use E-retailer's website for 10-15 hours. Around 10% of Millennials spend more than 20 hours in week surfing E-retailers Website. Millennials spending less than 5 Hours in E-retailers website is 15.66%.



Fig 4.3 Millennial's Recent Apparel Purchase with E-retailers

The research examined the recent apparel purchase of the respondents with E-retailers to comprehend whether the respondent will be able to answer the questionnaire accurately narrating their Perception and Online shopping experience. The results are depicted in Bar chart. From Fig 4.3, it is seen that majority of the respondents (31.32%) purchased Apparels from E-retailers Website between 3-5 months before participating in the survey. 24.7% of the millennials purchased apparel Online between 5-7 months limit. Around 21% Millennials did their apparel online shopping between 1-3 months before attending survey.

apparel purchase within 1 month is around 7.49%. About 11.52% Millennials purchase Apparel with E-retailers earlier period of 7-9 months. Only 4.36 % millennials reported that they purchase apparel with E-retailers almost 9 months to 1 year before.



Fig 4.4 Apparel E-shopping Experience of Millennials in Years

It is interpreted from the Fig 4.4 that out of the total respondents 0.89% are using the Eretailer's website less than a year for Apparel purchase and 6.6% are using it for 1-2 years. Majority of the respondents (33%) are using for the past 2-4 years. 30.98% of the respondents are doing apparel purchase in E-retailer's website for 4-6 years . 20.81% have been using the Eretailer's website for 6-8 years. 5.82% Millennials are having E-shopping Experience of 8-10 years with E-retailers whereas 1.90% of millennials have more than 10 years online shopping experience. The results shows that majority of the respondents have reasonably good Online Apparel shopping Experience with E-retailers. **OBJECTIVE 1:** To identify if there is any significant difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Repurchase Intention based on different demographics of the Millennials

4.3 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Age of the Millennials.

The one-way analysis of variance ANOVA is used to find the difference in variables based on demographics factors. ANOVA is applied in the research to conclude whether there are any statistically significant differences between the means of three or more independent groups. The null hypothesis for ANOVA is that all population means are exactly equal. ANOVA is used to evaluate group differences on single metric dependent variable (Hair et al., 2003). Researcher need to run a post-hoc test to find exactly which groups have a difference in means. Tukey Posthoc test is invoked to determine difference between pair of means.

In this study the Anova test is administered to find the difference in variables such as Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention with reference to the Millennial's age group. The study includes young millennials (aged 23 to 28 years in 2019) and older millennials (aged 29 to 38 years in 2019). Age is categorized into three sub groups such as 23-28 years, 29-33 years and 34-38 years in this study The researcher intends to know the significant difference in the Millennial's perception based on their age group and the hypothesis is formulated.

1. H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Age.

	Mean					
Factor	23-28	29-33	34- 38	F value	Sig	Result
	years	years	years			
Perceived Usefulness	3.84	3.83	3.85	.044	.957	Not Significant
Perceived Ease of use	3.65	3.74	3.78	1.274	.280	Not Significant
Perceived Trust	3.51	3.60	3.73	3.722	.025	Significant
Perceived Enjoyment	3.43	3.54	3.77	7.875	.000	Significant
Online Apparel Purchase Intention	3.59	3.81	3.84	6.029	.003	Significant
Online Apparel Purchase Behaviour	3.47	3.91	3.87	21.657	.000	Significant
Online Flow Experience	3.61	3.87	3.94	11.820	.000	Significant
Online Apparel Re-purchase Intention	3.70	3.88	4.01	9.066	.000	Significant

TABLE NO. 4.3 ANOVA RESULTS BASED ON AGE

Note: Statistically significant at 0.05 level

From Table 4.13 it can be observed that there is no statistically significant difference among Millennials in the factors Perceived Usefulness and Perceived Ease Of Use based on age. This indicates that all the millennials have same perception on the these variables and these factors do not have any effects. Therefore Null Hypothesis is accepted. But there is a statistically significant difference in Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on age, which indicates that the millennials perceive these factors differently. Therefore Null Hypothesis is rejected.

Furthermore, for examining the pair-wise differences among the age categories, Tukey's Post Hoc analysis was performed. It tests all possible groups pairing with the significance level of alpha 0.05 correspond to 95 % simultaneous Confidence interval. Tukey Test creates Homogenous subsets using Harmonic Mean sample size. Hypothesis test uses 5% error rate which applies to the entire comparison of mean groups.

1 00	N	Subse	t for alpha = 0.05	
Age	IN	1	2	
23-28	200	3 51		
years	233	5.51		
29-33	201	3 60	3 60	
years	501	3.00	5.00	
34-38	204		3 73	
years	<i>23</i> 4		5.75	

TABLE NO. 4.3.1 Tukey's Post hoc analysis based on age for Perceived Trust.

The Homogeneous subset table 4.3.1 shows that age group 23-28 years are significantly different from age group 34-38 years. Age group 29-33 years are not significant from both 23-28 years and 34-38 years. 23-28 age group had the lowest mean (3.51) and 34-38 age group had the highest mean (3.73). Post Hoc test concludes that age group 34-38 identified perceived Trust as important factor for online apparel shopping than other age groups.

TABLE NO. 4.3.2 Tukey's Post hoc analysis based on age for Perceived Enjoyment

1 90	N	Su	bset for alpha = 0.05		
Age	IN	1	2		
23-28 years	299	3.43			
29-33 years	301	3.54			
34-38 years	294		3.77		

Means for groups in homogeneous subsets are displayed.

From table 4.3.2, Post Hoc test shows that age group 34-38 years are significantly different from other age groups. Age group 23-28 years is significantly different from 34-38 years but not from age group29-33 years. 23-28 age group had the lowest mean (3.43) and 34-38 age group had the highest mean (3.77) in Homogeneous subset table. Tukey test concludes that age group 34-38 gave priority to perceived Enjoyment during online apparel shopping than other age groups.

Ago	N	Subse	et for alpha = 0.05
Age	IN	1	2
23-28	200	3 50	
years	277	5.57	
29-33	301		3.81
years	301		5.81
34-38	294		3.84
years	274		5.64

TABLE NO. 4.3.3 Tukey's Post hoc analysis based on age for Online ApparelPurchase Intention

Tukey Post Hoc results in table 4.3.3 shows that age group 34-38 years are significantly different from age group 23-28 years. Age group 29-33 years is significantly different from 23-28 years but not from age group 34-38 years. 23-28 age group had the lowest mean (3.59) and 34-38 age group had the highest mean (3.84) in Homogeneous subset table. Tukey test concludes that age groups 29-33 years and 34-38 years have high purchase intention during online apparel shopping.

 TABLE NO. 4.3.4 Tukey's Post hoc analysis based on age for Online Apparel

 Purchase Behaviour

1 90	N	Subset for alpha = 0.05				
Age	Age		2			
23-28 years	299	3.47				
34-38 years	294		3.87			
29-33 years	301		3.91			

Means for groups in homogeneous subsets are displayed.

Table 4.3.4 shows that age group 29-33 years are significantly different from age group 23-28 years but not from age group 34-38 years. 23-28 age group had the lowest mean (3.47) and 34-38 age group had the highest mean (3.91) in Homogeneous subset table. Tukey test confirms that age groups 29-33 years and 34-38 years have significant online apparel purchase behaviour.

1 00	A con N		Subset for $alpha = 0.05$				
Age	1	1	2				
23-28	200	3 61					
years	299	5.01					
29-33	301		3.87				
years	501		5.07				
34-38	294		3.0/				
years	274		5.94				

TABLE NO. 4.3.5 Tukey's Post hoc analysis based on age for Online Flow Experience

Tukey results in Table 4.3.5 confirms that age group 34-38 years are significantly different from age group 23-28 years but not from age group 29-33 years. 23-28 age group had the lowest mean (3.61) and 34-38 age group had the highest mean (3.94) in Homogeneous subset table. Post Hoc test confirms that age groups 29-33 years and 34-38 years have high online flow experience in Apparel shopping.

 TABLE NO. 4.3.6 Tukey's Post hoc analysis based on age for Online Apparel

 Re-Purchase Intention

1 90	N	Subs	et for alpha = 0.05
Age	IN	1	2
23-28	200	3 70	
years	239	5.70	
29-33	301		2.99
years	501		5.00
34-38	204		4 01
years	294		4.01

Means for groups in homogeneous subsets are displayed

Post Hoc results in Table 4.3.6 confirms that age group 34-38 years are significantly different from age group 23-28 years but not from age group 29-33 years. 23-28 age group had the lowest mean (3.70) and 34-38 age group had the highest mean (4.01) in Homogeneous subset table. Tukey's analysis confirms that age groups 29-33 years and 34-38 years have considerable online Apparel Re-purchase Intention.

4.4 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Gender of the Millennials.

2. H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Gender.

Factor	Mean		E voluo	Sig	Docult	
F actor	Male	Female	r value	Big	Kesun	
Perceived Usefulness	3.84	3.85	.023	.878	Not Significant	
Perceived Ease of use	3.72	3.73	.037	.848	Not Significant	
Perceived Trust	3.61	3.61	.001	.971	Not Significant	
Perceived Enjoyment	3.60	3.56	.302	.583	Not Significant	
Online Apparel Purchase Intention	3.68	3.82	4.711	.030	Significant	
Online Apparel Purchase Behaviour	3.72	3.78	.760	.383	Not Significant	
Online Flow Experience	3.82	3.79	.206	.650	Not Significant	
Online Apparel Re-purchase Intention	3.87	3.85	.058	.810	Not Significant	

TABLE NO. 4.4 ANOVA RESULTS BASED ON GENDER

Note: Statistically significant at 0.05 level

Analysis of Variance results in Table 4.4 shows that there is statistically no significant difference in the factors such as perceived usefulness, perceived ease of use, perceived trust, Perceived Enjoyment, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on gender except Online Apparel Purchase Intention. Therefore Null Hypothesis is accepted for all factors except Online apparel purchase Intention.

4.5 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Marital status of the Millennials.

3. H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Marital Status.

Factor	Mean			Euclas	S !~	Degult	
Factor	Married	Single	Others	F value	Sig	Kesun	
Perceived Usefulness	3.95	3.64	2.83	12.730	.000	Significant	
Perceived Ease of use	3.82	3.53	3.83	9.225	.000	Significant	
Perceived Trust	3.71	3.42	4.00	9.144	.000	Significant	
Perceived Enjoyment	3.66	3.43	3.13	5.087	.006	Significant	
Online Apparel Purchase Intention	3.84	3.57	3.73	7.896	.000	Significant	
Online Apparel Purchase Behaviour	3.87	3.51	4.25	16.994	.000	Significant	
Online Flow Experience	3.95	3.53	4.00	24.558	.000	Significant	
Online Apparel Re-purchase Intention	4.00	3.58	4.40	23.352	.000	Significant	

TABLE NO. 4.5 ANOVA RESULTS BASED ON MARITAL STATUS

Note: Statistically significant at 0.05 level

From Table 4.5 it can be observed that there is statistically significant difference among the Perceived Usefulness, Perceived Ease of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Marital Status. This indicates that the Millennials have different perception on these factors. Therefore Null Hypothesis is rejected. 4.6 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Education.

4.H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Education.

		Me	an				
Factor	Diploma	Under Graduate	Post Graduate	School	F value	Sig	Result
Perceived Usefulness	3.39	3.86	3.85	2.94	3.210	.022	Significant
Perceived Ease of use	3.42	3.70	3.78	2.67	2.664	.047	Significant
Perceived Trust	3.38	3.65	3.60	2.61	1.798	.146	Not Significant
Perceived Enjoyment	3.47	3.59	3.58	2.87	.565	.638	Not Significant
Online Apparel Purchase Intention	3.55	3.78	3.74	3.33	.737	.530	Not Significant
Online Apparel Purchase Behaviour	3.31	3.75	3.78	3.75	2.239	.082	Not Significant
Online Flow Experience	3.69	3.78	3.84	3.89	.574	.633	Not Significant
Online Apparel Re-purchase Intention	3.90	3.86	3.85	4.20	.166	.919	Not Significant

TABLE NO. 4.6 ANOVA RESULTS BASED ON EDUCATION

Note: Statistically significant at 0.05 level

Anova results in Table 4.6 shows that there is statistically significant difference in the factors such as Perceived Usefulness and Perceived Ease Of use based on Millennial's Education. Therefore Null Hypothesis is rejected. As there is no significance difference in Remaining Factors such as Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Repurchase Intention based on Millennial's Education, Null hypothesis is accepted for these factors.

4.7 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Occupation

5.H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Occupation.

		Mean				Sig	Result
Factor					value		
ractor		Self -	Home				
	Salaried	Employed	Maker	Others			
Perceived Usefulness	3.88	3.77	3.84	4.04	.986	.399	Not Significant
Perceived Ease of use	3.75	3.64	3.76	3.99	1.200	.309	Not Significant
Perceived Trust	3.58	3.57	3.70	3.89	1.337	.261	Not Significant
Perceived Enjoyment	3.57	3.55	3.60	3.93	.647	.585	Not Significant
Online Apparel Purchase Intention	3.68	3.71	3.89	4.09	2.924	.033	Significant
Online Apparel Purchase Behaviour	3.67	3.79	3.83	3.83	1.639	.179	Not Significant
Online Flow Experience	3.79	3.81	3.82	3.85	.072	.975	Not Significant
Online Apparel Re-purchase Intention	3.87	3.87	3.84	3.73	.182	.909	Not Significant

TABLE NO. 4.7 ANOVA RESULTS BASED ON OCCUPATION

Note: Statistically significant at 0.05 level

From Table 4.7 shows that there is statistically no significant difference in the factors such as perceived usefulness, perceived ease of use, perceived trust, Perceived Enjoyment, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Occupation except Online Apparel Purchase Intention. Therefore Null Hypothesis is accepted for all factors except Online apparel purchase Intention.

4.8 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Family Monthly Income of the Millennials.

6.H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on family monthly income of the Millennials.

			Mean					
Factor	Less than 20,000	20,001- 30,000	30,001- 40,000	40,001- 50,000	Above 50,000	F value	Sig	Result
Perceived Usefulness	3.85	3.58	3.70	3.94	4.02	6.699	.000	Significant
Perceived Ease of use	3.42	3.55	3.60	3.83	3.92	6.575	.000	Significant
Perceived Trust	3.32	3.30	3.39	3.81	3.88	15.176	.000	Significant
Perceived Enjoyment	3.28	3.32	3.39	3.77	3.80	9.920	.000	Significant
Online Apparel Purchase Intention	3.26	3.53	3.68	3.87	3.95	9.911	.000	Significant
Online Apparel Purchase Behaviour	3.24	3.28	3.65	3.97	4.00	22.741	.000	Significant
Online Flow Experience	3.53	3.31	3.68	3.98	4.10	23.155	.000	Significant
Online Apparel Re-purchase Intention	3.69	3.36	3.70	4.10	4.08	20.323	.000	Significant

TABLE NO. 4.8 ANOVA RESULTS BASED ON FAMILY MONTHLY INCOME

Note: Statistically significant at 0.05 level

Analysis of Variance results in Table 4.8 reveals that there is statistically significant difference in all the factors such as perceived usefulness, perceived ease of use, perceived trust, Perceived Enjoyment, Online Apparel Purchase Intention ,Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on family monthly income of the Millennials. Additionally, for exploring the pair-wise differences among the Income categories, Tukey's Post Hoc analysis was performed.

Family Monthly	N	Subset for $alpha = 0.05$					
Income	IN	1	2	3			
20,001-30,000	114	3.58					
30,001-40,000	246	3.70	3.70				
Less than 20,000	64	3.85	3.85	3.85			
40,001-50,000	262		3.94	3.94			
More than 50,000	208			4.02			

TABLE NO. 4.8.1 Tukey's Post hoc analysis based on Family monthly income for Perceived Usefulness

Post-hoc test results in Table 4.8.1 reveals that the mean score for the Millennials whose Family monthly income is 20,001-30,000 (3.58) is significantly different from the Millennials whose Family monthly income above 50,000 (4.02). Millennials with Family Income above 50,000 (4.02) focus on the factor Perceived Usefulness while purchasing apparel online.

TABLE NO. 4.8.2 Tukey's Post hoc analysis based on Family monthly income for Perceived Ease of Use

Family Monthly	N	Subset for $alpha = 0.05$					
Income	IN	1 2		3			
Less than 20,000	64	3.42					
20,001-30,000	114	3.55	3.55				
30,001-40,000	246	3.60	3.60				
40,001-50,000	262		3.83	3.83			
More than 50,000	208			3.92			

Means for groups in homogeneous subsets are displayed.

Tukey's Post-hoc results in Table 4.8.2 reveals that the mean score for the Millennials whose Family monthly income less than 20,000 (3.42) is significantly different from the Millennials whose Family monthly income above 50,000 (3.92). Millennials with Family Income above 50,000 (4.02) esteemed on the factor Perceived Ease of Use while purchasing apparel online.

Family Monthly Income	N	Subset for alpha $= 0.05$			
Family Monuly Income	IN	1	2		
20,001-30,000	114	3.30			
Less than 20,000	64	3.32			
30,001-40,000	246	3.39			
40,001-50,000	262		3.81		
More than 50,000	208		3.88		

 TABLE NO. 4.8.3 Tukey's Post hoc analysis based on Family monthly income for

 Perceived Trust

Tukey's Post-hoc results in Table 4.8.3 reveals that the mean score for the Millennials whose Family monthly income 20,001-30,000 (3.30), less than 20,000 (3.32), 30,001-40,001(3.39) are significantly different from the Millennials whose Family monthly income between 40,001-50,000 (3.81) and above 50,000 (3.88). Millennials recognized Trust in same manner among the group subset but significantly different from other subset while doing online apparel shopping.

 TABLE NO. 4.8.4 Tukey's Post hoc analysis based on Family monthly income for

 Perceived Enjoyment

Family Monthly Income	N	Subset for $alpha = 0.05$			
Family Monully Income	IN	1	2		
Less than 20,000	64	3.28			
20,001-30,000	114	3.32			
30,001-40,000	246	3.39			
40,001-50,000	262		3.77		
More than 50,000	208		3.80		

Means for groups in homogeneous subsets are displayed.

Homogeneous subset Table 4.8.4 reveals that the mean score for the Millennials whose Family monthly income less than 20,000 (3.28), 20,001-30,000 (3.32), 30,001-40,001(3.39) are significantly different from the Millennials whose Family monthly income between 40,001-50,000 (3.77) and above 50,000 (3.80). Millennials observed Enjoyment while doing online apparel shopping the same way among the group subset but significantly different from other subset.

Family Monthly	N	Subset for alpha = 0.05					
Income	IN	1	2	3			
Less than 20,000	64	3.26					
20,001-30,000	114		3.53				
30,001-40,000	246		3.68	3.68			
40,001-50,000	262			3.87			
More than 50,000	208			3.95			

TABLE NO. 4.8.5 Tukey's Post hoc analysis based on Family monthly income forOnline Apparel Purchase Intention

Means for groups in homogeneous subsets are displayed.

Tukey's Post Hoc Test Results in Table 4.8.5 endorsed that the Millennials of three subset groups have significantly different Intentions during Online Apparel Purchase decisions. The mean score for the Millennials whose Family monthly income between 40,001-50,000 (3.87) and above 50,000 (3.95) persuaded Purchase Intention more than other Millennial's Income Groups.

TABLE NO. 4.8.6 Tukey's Post hoc analysis based on Family monthly income for Online Apparel Purchase Behaviour

Family Monthly	N	Subset for $alpha = 0.05$					
Income	1	1	2	3			
Less than 20,000	64	3.24					
20,001-30,000	114	3.28					
30,001-40,000	246		3.65				
40,001-50,000	262			3.97			
More than 50,000	208			4.00			

Means for groups in homogeneous subsets are displayed.

From Table 4.8.6 Post Hoc results illustrates that the Millennials of three subset groups have significantly different Purchase Behaviour for apparels. Millennial's group with Family Monthly income less than 20,000 had the lowest mean (3.24) and Income group more than 50,000 had the highest mean (4.00) in Homogeneous subset table. Tukey's test confirms that Millennials elevated Apparel Purchase Behaviour with E-retailers primarily based on Income.

Family Monthly	N	Subset for $alpha = 0.05$					
Income	IN	1	2	3			
20,001-30,000	114	3.31					
Less than 20,000	64	3.53	3.53				
30,001-40,000	246		3.68				
40,001-50,000	262			3.98			
More than 50,000	208			4.10			

 TABLE NO. 4.8.7 Tukey's Post hoc analysis based on Family monthly income for

 Online Flow Experience

Homogeneous subset Table 4.8.7 reveals that the mean score for the Millennials whose Family monthly income between 20,001-30,000 (3.31), 30,001-40,001(3.68), and above 50,000 (4.10) are significantly different. The Millennials whose Family monthly income between 40,001-50,000 assume alike as Income group above 50,000 But dissimilar with other Income Groups less than 40,000. Tukey's test proved that Millennials contemplated diverse Flow experience during Apparel Purchase with E-retailers.

 TABLE NO. 4.8.8 Tukey's Post hoc analysis based on Family monthly income for

 Online Apparel Re-Purchase Intention

Family Monthly	N	Subset for $alpha = 0.05$				
Income	IN	1	2	3		
20,001-30,000	114	3.36				
Less than 20,000	64		3.69			
30,001-40,000	246		3.70			
More than 50,000	208			4.08		
40,001-50,000	262			4.10		

Means for groups in homogeneous subsets are displayed.

From Table 4.8.8 Post Hoc results illustrates that the Millennials of three subset groups have significantly varied Re-Purchase Intention for apparels. Millennial's group with Family Monthly income between 20,001 -30,000 had the lowest mean (3.36) and Income group 40,000-50,000 had the highest mean (4.10) in Homogeneous subset table. Tukey's test confirms that Millennials have various intensity in Re- Purchase Intention with E-retailers.

4.9 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Hours Surfing E-retailer website by Millennials

7.H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Hours Surfing E-retailer website by Millennials.

			Mean		-			
Factor	Less than 5 hours	5-10 hours	10-15 hours	15-20 hours	More than 20 hours	F value	Sig	Result
Perceived Usefulness	3.10	3.58	4.01	4.13	4.43	52.676	.000	Significant
Perceived Ease of use	3.02	3.41	3.94	4.06	4.15	45.057	.000	Significant
Perceived Trust	2.85	3.24	3.82	3.94	4.30	63.874	.000	Significant
Perceived Enjoyment	2.85	3.27	3.83	3.87	4.09	39.376	.000	Significant
Online Apparel Purchase Intention	3.14	3.34	4.03	4.03	4.26	48.742	.000	Significant
Online Apparel Purchase Behaviour	3.10	3.28	3.93	4.13	4.42	72.851	.000	Significant
Online Flow Experience	2.94	3.33	4.13	4.26	4.32	131.528	.000	Significant
Online Apparel Re-purchase Intention	3.15	3.40	4.14	4.28	4.28	78.343	.000	Significant

TABLE NO. 4.9 ANOVA RESULTS BASED ON HOURS SURFING E-RETAILER WEBSITE

Note: Statistically significant at 0.05 level

Analysis of Variance results in Table 4.9 reveals that there is statistically significant difference in all the factors such as perceived usefulness, perceived ease of use, perceived trust, Perceived Enjoyment, Online Apparel Purchase Intention ,Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's time spend surfing E-retailers Website. Besides Anova, the group wise differences among the Millennials been probed using Tukey's Post Hoc analysis.

TABLE NO. 4.9.1 Tukey's Post hoc analysis based on Millennial's Hours spendsurfing E-retailers website for Perceived Usefulness

		Subset for $alpha = 0.05$				
Hours Surfing						
E-retailer Website	Ν	1	2	3	4	
Less than 5 hrs	140	3.10				
5-10 hrs	214		3.58			
10-15 hrs	203			4.01		
15-20 hrs	248			4.13		
More than 20 hrs	89				4.43	

Means for groups in homogeneous subsets are displayed.

From Table 4.9.1, Tukey's Post Hoc test exemplifies that Millennials with varied Surfing Hours in all the four subsets are significant Different in considering the factor Perceived Usefulness while shopping apparels online. Means Of the Millennials with Surfing time of 10-15 hours (4.01)and 15-20 Hours (4.13) have no significance difference between them but different from other Millennial Groups having surfing time less than 5 hours (3.10), 5-10 Hours (3.58) and More than 20 Hours (4.43).

TABLE NO. 4.9.2 Tukey's Post hoc analysis based on Millennial's Hours spend surfing E-retailers website for Perceived Ease Of Use

Hours Surfing	N	Subse	et for alpha =	= 0.05
E-retailer Website	1	1	2	3
Less than 5 hrs	140	3.02		
5-10 hrs	214		3.41	
10-15 hrs	203			3.94
15-20 hrs	248			4.06
More than 20 hrs	89			4.15

Means for groups in homogeneous subsets are displayed.

Tukey's Post Hoc analysis summary in Table 4.9.2 confirms that Millennials been categorized under three subset based on their Surfing time in context to perceived Ease of use factor. Millennials surfing more than 10 hours in E-retailers website deemed Perceived Ease of use factor predominantly for online apparel purchase. Mean score of the Millennials with surfing hours less than 5 hours (3.02) in E-retailers website considered the factor Perceived Ease of use factor inadequately during Online shopping of Apparels.

Hours Surfing		Subset for $alpha = 0.05$				
E-retailer Website	Ν	1	2	3	4	
Less than 5 hrs	140	2.85				
5-10 hrs	214		3.24			
10-15 hrs	203			3.82		
15-20 hrs	248			3.94		
More than 20 hrs	89				4.30	

TABLE NO. 4.9.3 Tukey's Post hoc analysis based on Millennial's Hours spendsurfing E-retailers website for Perceived Trust

From Homogenous subset table 4.9.3, post - Hoc test unveiled that Millennials spending more than 20 hours in surfing E-retailers website perceived the paramount importance of the factor Trust as the mean score (4.30) is highest. Millennials spending less than 5 hours acquired low trust as the mean score (2.85) is lowest in Subset. Mean score significantly increases with more Surfing Hours of the millennials.

TABLE NO. 4.9.4 Tukey's Post hoc analysis based on Millennial's Hours spendsurfing E-retailers website for Perceived Enjoyment

Hours Surfing	N	Subse	et for alpha =	= 0.05
E-retailer Website	IN	1	2	3
Less than 5 hrs	140	2.85		
5-10 hrs	214		3.27	
10-15 hrs	203			3.83
15-20 hrs	248			3.87
More than 20 hrs	89			4.09

Means for groups in homogeneous subsets are displayed.

Tukey's Post Hoc results in Table 4.9.4, shows that Millennials spending more than 20 hours in surfing E-retailers website intervening Enjoyment while doing Online apparel shopping as the mean score (4.09) is highest. Millennials spending less than 5 hours accomplished low Enjoyment while shopping with E-retailers as the mean score (2.85) is lowest in Subset. Mean score of Perceived Enjoyment significantly improves with increase of Surfing Hours of the millennials.

TA	BLE NO.	4.9.5	Tukey's	Post h	oc analy	sis base	d on	Millenn	ial's	Hours	spend
	surfing E	-retail	lers web	site for	• Online	Appare	l Pur	chase In	tenti	ion	

Hours Surfing		Subset for $alpha = 0.0$			
E-retailer Website	Ν	1	2		
Less than 5 hrs	140	3.14			
5-10 hrs	214	3.34			
15-20 hrs	248		4.03		
10-15 hrs	203		4.03		
More than 20 hrs	89		4.26		

Tukey's Post Hoc Test Results in Table 4.9.5 justified that the Millennials of two subset groups have significantly different Intentions during Online Apparel Purchase decisions. The mean score for the Millennials who spend more than 10 hours in E-retailer's website persuaded Purchase Intention more than other Millennial's groups who spend Less than 5 Hours (3.14) and between 5-10 Hours (3.34). Mean score of the millennials spending more than 20 hours surfing time have maximum (4.26).

TABLE NO. 4.9.6 Tukey's Post hoc analysis based on Millennial's Hours spend surfing E-retailers website for Online Apparel Purchase Behaviour

Hours Surfing	N	Subse	et for alpha =	= 0.05
E-retailer Website	IN	1	2	3
Less than 5 hrs	140	3.10		
5-10 hrs	214	3.28		
10-15 hrs	203		3.93	
15-20 hrs	248		4.13	
More than 20 hrs	89			4.42

Means for groups in homogeneous subsets are displayed.

From Table 4.9.6 Post Hoc results illustrates that the Millennials of three subset groups have significantly different Purchase Behaviour for apparels. Millennial's group with surfing time less than 5 hours have the lowest mean (3.10) and Millennials with surfing time more than 20 hours have the highest mean (4.40) in Homogeneous subset table. Tukey's test confirms that Millennials have prominent Apparel Purchase Behaviour with E-retailers typically based on Surfing Time in E-retailer's website.

Hours Surfing	N	Subset for $alpha = 0.05$				
E-retailer Website	IN	1	2	3		
Less than 5 hrs	140	2.94				
5-10 hrs	214		3.33			
10-15 hrs	203			4.13		
15-20 hrs	248			4.26		
More than 20 hrs	89			4.32		

TABLE NO. 4.9.7 Tukey's Post hoc analysis based on Millennial's Hours spendsurfing E-retailers website for Online Flow Experience

Tukey results in Table 4.9.7 confirms that Millennials spending more than 20 hours (4.32) are significantly different from Millennials spending less than 5 hours (2.94) and between 5-10 hours (3.33) but not different from Millenials spending 10- 15 hours (4.13) and 15-20 hours (4.26) with E- retailer's Website Post Hoc test confirms that millennials surfing more than 20 hours enfold high online flow experience in Apparel shopping.

 TABLE NO. 4.9.8 Tukey's Post hoc analysis based on Millennial's Hours spend

 surfing E-retailers website for Online Apparel Re-purchase Intention

Hours Surfing	N	Subse	et for alpha =	= 0.05
E-retailer Website	1	1	2	3
Less than 5 hrs	140	3.15		
5-10 hrs	214		3.40	
10-15 hrs	203			4.14
More than 20 hrs	89			4.28
15-20 hrs	248			4.28

Means for groups in homogeneous subsets are displayed.

From Table 4.9.8 Post Hoc results illustrates that the Millennials of three subset groups have significantly different Re-Purchase Intention for apparels. Millennial's group spending more than 15 hours (4.28) had the highest mean in Homogeneous subset table. Tukey's test confirms that Millennials have varied Re- Purchase Intention with E-retailers based on their surfing time.

4.10 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's recent apparel purchase with E-retailers.

8.H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's recent apparel purchase with E-retailers.

TABLE NO. 4.10 ANOVA RESULTS BASED ON MILLENNIAL'S RECENT APPAREL PURCHASE WITH E-RETAILERS.

			Μ	ean					
Factor	Less than						F	Sig	Result
	1	1-3	3-5	5-7	7-9	9-12	value		
	month	months	months	months	months	months	07.04	000	<u> </u>
Perceived Usefulness	4.21	4.20	3.94	3.72	3.22	3.06	27.21	.000	Significant
Perceived Ease of use	4.01	4.05	3.84	3.58	3.17	3.03	19.38	.000	Significant
Perceived Trust	4.00	3.90	3.78	3.52	2.95	2.62	29.09	.000	Significant
Perceived Enjoyment	3.65	3.95	3.72	3.47	2.99	2.83	18.10	.000	Significant
Online Apparel Purchase Intention	3.91	4.00	3.91	3.69	3.18	2.91	19.86	.000	Significant
Online Apparel Purchase Behaviour	4.04	3.97	3.90	3.71	3.10	3.03	22.69	.000	Significant
Online Flow Experience	4.00	4.12	4.04	3.68	3.08	2.91	40.46	.000	Significant
Online Apparel Re-purchase Intention	4.07	4.05	4.11	3.81	3.19	2.87	31.83	.000	Significant

Note: Statistically significant at 0.05 level

Analysis of Variance results in Table 4.10 exhibits that there is statistically significant difference in all the factors such as perceived usefulness, perceived ease of use, perceived trust, Perceived Enjoyment, Online Apparel Purchase Intention ,Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on recent apparel purchase of the Millennials with E-retailers. Moreover to seek out the pair-wise significance differences, Tukey's Post Hoc analysis was executed.

Recent Apparel		Subset	Subset for $alpha = 0.05$			
purchase with E- retailers	Ν	1	2	3		
9-12 months	39	3.06				
7-9 months	103	3.22				
5-7 months	217		3.72			
3-5 months	280		3.94	3.94		
1-3 months	188			4.20		
Less than 1 month	67			4.21		
				-		

 TABLE NO. 4.10.1 Tukey's Post hoc analysis based on Millennial's recent Apparel

 purchase with E-retailers website for Perceived Usefulness

Tukey's post Hoc analysis creates Homogeneous subset based on Harmonic Means and it is displayed in Table 4.10.1. The results shows that Millennials evoked Perceived Usefulness factor more as the mean score is highest for the purchase within 1 month (4.21) and lowest for the apparel purchase made before 9-12 months (3.06).

 TABLE NO. 4.10.2 Tukey's Post hoc analysis based on Millennial's recent Apparel

 purchase with E-retailers website for Perceived Ease of Use

Recent Apparel		Subset for $alpha = 0.0$			
purchase with E- retailers	Ν	1	2	3	
9-12 months	39	3.03			
7-9 months	103	3.17			
5-7 months	217		3.58		
3-5 months	280		3.84	3.84	
Less than 1 month	67			4.01	
1-3 months	188			4.05	

Means for groups in homogeneous subsets are displayed.

From Homogenous subset table 4.10.2, confirms that Mean score is maximum for apparel purchased in E-retailer's Website within 3 months (4.05) and minimum mean score for the purchase made 9-12 months earlier (3.03). Tukey's post Hoc analysis concluded that millennials conferred Perceived Ease of use factor significantly in context to Apparel E-shopping.

Recent Apparel purchase	N	Subset for all			pha = 0.05		
with E-retailers	1	1	2	3	4		
9-12 months	39	2.62					
7-9 months	103		2.95				
5-7 months	217			3.52			
3-5 months	280			3.78	3.78		
1-3 months	188				3.90		
Less than 1 month	67				4.00		

TABLE NO. 4.10.3Tukey's Post hoc analysis based on Millennial's recentApparel purchase with E-retailers website for Perceived Trust

Tukey's Post-hoc results in Table 4.10.3 reveals that the mean score for the Millennials who purchased apparel in E-retailer's website less than 1 month (4.00), before 1-3 months (3.90). and before 3-5 months (3.78) are extensively maximum compared to the Millennials who purchase 7-9 months previously (2.95) and 9-12 months (2.62). Millennials predicted Trust significantly different in all subset while doing online apparel shopping.

TABLE NO. 4.10.4Tukey's Post hoc analysis based on Millennial's recentApparel purchase with E-retailers website for Perceived Enjoyment.

Recent Apparel purchase	N	Subset for $alpha = 0.05$				
with E-retailers	IN	1	2	3		
9-12 months	39	2.83				
7-9 months	103	2.99				
5-7 months	217		3.47			
Less than 1 month	67		3.65	3.65		
3-5 months	280		3.72	3.72		
1-3 months	188			3.95		

Means for groups in homogeneous subsets are displayed.

Tukey's Post Hoc results in Table 4.10.4, shows that Millennials purchased apparels less than 3 months in E-retailers website superseding Enjoyment as the mean score (3.95) is highest. Millennials who done online shopping prior 9-12 months consummate low Enjoyment with E-retailers as the mean score (2.83) is lowest in Subset.

 TABLE NO. 4.10.5 Tukey's Post hoc analysis based on Millennial's recent Apparel purchase with E-retailers website for Online Apparel Purchase Intention .

Recent Apparel purchase		Subset for $alpha = 0.02$		
with E-retailers	Ν	1	2	
9-12 months	39	2.91		
7-9 months	103	3.18		
5-7 months	217		3.69	
3-5 months	280		3.91	
Less than 1 month	67		3.91	
1-3 months	188		4.00	

Means for groups in homogeneous subsets are displayed.

Tukey's Post Hoc Test Results in Table 4.10.5 vindicated that the Millennials of two subset groups have significantly different Intentions during Online Apparel Purchase decisions. The mean score for the Millennials who purchased in E-retailer's website between 1-3 months(4.00) been influenced in Apparel Purchase Intention more than other Millennial's groups who made purchase between 9-12 months former (2.91).

 TABLE NO. 4.10.6 Tukey's Post hoc analysis based on Millennial's recent Apparel

 purchase with E-retailers website for Online Apparel Purchase Behaviour

Recent Apparel purchase with E-		Subset for $alpha = 0.0$		
retailers	Ν	1	2	
9-12 months	39	3.03		
7-9 months	103	3.10		
5-7 months	217		3.71	
3-5 months	280		3.90	
1-3 months	188		3.97	
Less than 1 month	67		4.04	

Means for groups in homogeneous subsets are displayed.

From Homogenous subset table 4.10.6, confirms that Mean score is maximum for apparel purchased by the millennials in E-retailer's Website less than 1 month (4.04) and minimum mean score for the purchase made 9-12 months before (3.03). Tukey's post Hoc analysis concluded that millennials online apparel purchase behaviour significantly proportionate with their recent Apparel E-shopping.

Recent Apparel purchase	N	Subset for $alpha = 0.05$			
with E-retailers	IN	1	2	3	
9-12 months	39	2.91			
7-9 months	103	3.08			
5-7 months	217		3.68		
Less than 1 month	67			4.00	
3-5 months	280			4.04	
1-3 months	188			4.12	

TABLE NO. 4.10.7 Tukey's Post hoc analysis based on Millennial's recent Apparel purchase with E-retailers website for Online Flow Experience

Means for groups in homogeneous subsets are displayed.

Tukey results in Table 4.10.7 confirms that mean score of the Millennials who have purchased apparels online less than 1 month (4.00), between 3- 5 months (4.04) and between 1-3 months (4.12) are significantly different from Millennials who did their purchase 5-7 months before (3.68), between 7-9 months (3.08) and between 9-12 months earlier (2.91) in E- retailer's Website. Post Hoc test confirms that millennials who purchased prior to less than 5 months enclosed high online flow experience in Apparel shopping.

 TABLE NO. 4.10.8 Tukey's Post hoc analysis based on Millennial's recent Apparel

 purchase with E-retailers website for Online Apparel Re-Purchase Intention .

Recent Apparel purchase	N	Subset for $alpha = 0.05$				
with E-retailers	1	1	2	3		
9-12 months	39	2.87				
7-9 months	103		3.19			
5-7 months	217			3.82		
1-3 months	188			4.05		
Less than 1 month	67			4.07		
3-5 months	280			4.11		

Means for groups in homogeneous subsets are displayed.

From Table 4.10.8 Post Hoc results illustrates that the Millennials of three subset groups have significantly different Re-Purchase Intention for apparels. Millennial's group who purchased apparel in E-retailer's website varying from less than 1 month to maximum 7 months hold the highest mean in Homogeneous subset table. Tukey's test confirms that Millennials have assorted Re- Purchase Intention based on recent purchase with E-retailers.

4.11 Difference in Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Online apparel purchase Experience.

9.H0: There is no significant difference between Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Millennial's Online apparel purchase Experience.

TABLE NO. 4.11 ANOVA RESULTS BASED ON MILLENNIAL'S ONLINE APPAREL PURCHASE EXPERIENCE.

				Mean						
Factor	Less than 1 year	1-2 years	2-4 years	4-6 years	6-8 years	8-10 years	More than 10 years	F value	Sig	Result
Perceived Usefulness	3.35	3.50	3.58	3.91	4.05	4.39	4.67	13.86	.000	Significant
Perceived Ease of use	3.42	3.28	3.44	3.79	4.10	4.09	3.92	13.43	.000	Significant
Perceived Trust	3.02	2.93	3.32	3.69	3.97	4.16	4.31	20.98	.000	Significant
Perceived Enjoyment	3.10	3.07	3.35	3.63	3.82	4.14	4.32	11.06	.000	Significant
Online Apparel Purchase Intention	3.38	3.18	3.59	3.75	4.02	4.23	4.31	11.40	.000	Significant
Online Apparel Purchase Behaviour	2.97	3.04	3.52	3.78	4.14	4.16	4.51	21.79	.000	Significant
Online Flow Experience	2.67	3.06	3.52	3.90	4.18	4.37	4.65	34.18	.000	Significant
Online Apparel Re-purchase Intention	3.03	3.23	3.57	3.98	4.18	4.39	4.49	22.37	.000	Significant

Note: Statistically significant at 0.05 level

Analysis of Variance results in Table 4.11 show substantiation that there is statistically significant difference in all the factors such as perceived usefulness, perceived ease of use, perceived trust, Perceived Enjoyment, Online Apparel Purchase Intention ,Online Apparel Purchase Behavior, Online Flow Experience & Online Apparel Re-purchase Intention based on Online apparel purchase Experience of the Millennials with E-retailers. Tukey's Post Hoc analysis was performed to find out the group-wise significance differences.

TABLE NO. 4.11.1 Tukey's Post hoc analysis based on Millennial's Online Apparel purchase Experience for Perceived Usefulness

Apparel E-shopping	N	Subset for $alpha = 0.05$				
Experience	IN	1	2	3	4	
Less than 1 year	8	3.35				
1-2 yrs	59	3.50	3.50			
2-4 yrs	295	3.58	3.58			
4-6 yrs	277	3.91	3.91	3.91		
6-8 yrs	186		4.05	4.05		
8-10 yrs	52			4.39	4.39	
More than 10 yrs	17				4.67	

Means for groups in homogeneous subsets are displayed.

Tukey's Post-hoc results in Table 4.11.1 reveals that the mean score for the Millennials who have more than 10 years of online apparel purchase experience in E-retailer's website (4.67) is significantly different from the Millennials with online experience less than 1 year (3.35). Homogeneous Subset confirms that Millennials esteemed on the factor Perceived Ease of Use with perspective of their online experience.

TABLE NO. 4.11.2 Tukey's Post hoc analysis based on Millennial's Online Apparelpurchase Experience for Perceived Ease of Use.

Apparel E-shopping	N	Subset for $alpha = 0.05$		
Experience	IN	1	2	
1-2 yrs	59	3.28		
Less than 1 year	8	3.42	3.42	
2-4 yrs	295	3.44	3.44	
4-6 yrs	277	3.79	3.79	
More than 10 yrs	17	3.92	3.92	
8-10 yrs	52		4.09	
6-8 yrs	186		4.10	

Means for groups in homogeneous subsets are displayed.

Table 4.11.4 shows that mean score of the Millennials with 1-2 years (3.28) of Online apparel purchase experience with E-retailers are significantly different from Millennials with 6-8 years (4.10) and with 8-10 years (4.09) of Online experience in Homogeneous subset table. Tukey test confirms that Online experience of Millennials with E-retailers have significant impact over Perceived Ease of use factor while purchasing Apparel.

TABLE NO. 4.11.3 Tukey's Post hoc analysis based on Millennial's Online Apparel purchase Experience for Perceived Trust.

Apparel E-shopping	N	Subset for $alpha = 0.05$				
Experience	IN	1	2	3		
1-2 yrs	59	2.93				
Less than 1 year	8	3.02				
2-4 yrs	295	3.32	3.32			
4-6 yrs	277		3.69	3.69		
6-8 yrs	186			3.97		
8-10 yrs	52			4.16		
More than 10 yrs	17			4.31		

Means for groups in homogeneous subsets are displayed.

Tukey's Post-hoc results in Table 4.11.3 reveals that the mean score for the Millennials with online experience of 1-2 years (2.93), less than 1 year (3.02) and 2-4 years (3.32) are significantly different from the Millennials with online experience of 4-6 years (3.69), 6-8 years (3.97), 8-10 years (4.16) and more than 10 years (4.31). Millennials recognized Trust in same manner among the group subset but significantly different from other subsets while doing online apparel shopping.

TABLE NO. 4.11.4 Tukey's Post hoc analysis based on Millennial's OnlineApparel purchase Experience for Perceived Enjoyment.

Apparel E-shopping	N	Subset for $alpha = 0.05$			
Experience	IN	1	2		
1-2 yrs	59	3.07			
Less than 1 year	8	3.10			
2-4 yrs	295	3.35			
4-6 yrs	277	3.63	3.63		
6-8 yrs	186	3.82	3.82		
8-10 yrs	52		4.14		
More than 10 yrs	17		4.32		

Means for groups in homogeneous subsets are displayed.

Tukey's Post Hoc results in Table 4.11.4, shows that Millennials with more than 10 years of online apparel purchase experience in E-retailers website felt elevated Enjoyment as the mean score (4.32) is highest. Millennials who have 1-2 years online experience felt low Enjoyment in apparel shopping with E-retailers as the mean score (3.07) is lowest in Subset.

Apparel E-shopping	N	Subset for $alpha = 0.05$					
Experience	IN	1	2	3	4		
1-2 yrs	59	3.18					
Less than 1 year	8	3.38	3.38				
2-4 yrs	295	3.59	3.59	3.59			
4-6 yrs	277	3.75	3.75	3.75	3.75		
6-8 yrs	186		4.02	4.02	4.02		
8-10 yrs	52			4.23	4.23		
More than 10 yrs	17				4.31		

TABLE NO. 4.11.5 Tukey's Post hoc analysis based on Millennial's OnlineApparel purchase Experience for Online Apparel Purchase Intention.

Tukey Post Hoc results in table 4.11.5 shows that Millennials with 1-2 years of online shopping experience with E-retailer is significantly different from Millennials with more than 10 years of online shopping experience. Millennials with more than 10 years of online shopping Experience encompass the highest mean (4.31) in Homogeneous subset table. Tukey test concludes that Millennials with greater online Experience with E-retailers have high purchase intention during apparel shopping.

TABLE NO. 4.11.6 Tukey's Post hoc analysis based on Millennial's Online Apparel purchase Experience for Online Apparel Purchase Behaviour.

Apparel E-shopping	Ν	Subset for $alpha = 0.05$			
Experience		1	2	3	4
Less than 1 year	8	2.97			
1-2 yrs	59	3.04			
2-4 yrs	295	3.52	3.52		
4-6 yrs	277		3.78	3.78	
6-8 yrs	186			4.14	4.14
8-10 yrs	52			4.16	4.16
More than 10 yrs	17				4.51

Means for groups in homogeneous subsets are displayed.

From Table 4.11.6 Post Hoc results illustrates that the Millennials of varies subset groups have significantly different Purchase Behaviour for apparels. Millennial's group with less than 4 years of online shopping Experience had the lowest mean and Millennial's group with more than 6 years had the uppermost mean in Homogeneous subset table. Tukey's test confirms that Millennial's Apparel Purchase Behaviour with E-retailers ascend with shopping years.
Apparel E-		Subset for $alpha = 0.05$				
shopping Experience	Ν	1	2	3	4	5
Less than 1 year	8	2.67				
1-2 yrs	59	3.06	3.06			
2-4 yrs	295		3.52	3.52		
4-6 yrs	277			3.90	3.90	
6-8 yrs	186				4.18	4.18
8-10 yrs	52				4.37	4.37
More than 10 yrs	17					4.65

TABLE NO. 4.11.7 Tukey's Post hoc analysis based on Millennial's Online Apparel purchase Experience for Online Flow Experience

Means for groups in homogeneous subsets are displayed.

Tukey's post Hoc results in Table 4.9.7 confirms that maen score of the Millennials having more than 10 years (4.65) of Online shopping Experience are significantly different from Millennials having less than 1 year (2.67) of experience with E- retailer's. Post Hoc test confirms that millennials enfold high online flow experience in Apparel shopping with added years of experience.

TABLE NO. 4.11.8 Tukey's Post hoc analysis based on Millennial's OnlineApparel purchase Experience for Online Apparel Re-Purchase Intention.

Apparel E-shopping	N	Subset for $alpha = 0.05$			
Experience	18	1	2	3	
Less than 1 year	8	3.03			
1-2 yrs	59	3.23			
2-4 yrs	295	3.57	3.57		
4-6 yrs	277		3.98	3.98	
6-8 yrs	186			4.18	
8-10 yrs	52			4.39	
More than 10 yrs	17			4.49	

Means for groups in homogeneous subsets are displayed.

From Table 4.11.8 Post Hoc results illustrates that the Millennials of varying subset groups have significantly different Re-Purchase Intention for apparels. Millennials with more than 10 years (4.49) had the highest mean in Homogeneous subset table. Tukey's test confirms that Millennial's Re- Purchase Intention progress based on their Online apparel purchase experience with E-retailers.

OBJECTIVE 2: To find the association between Perceived Usefulness, Perceived Ease of Use, Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience and Online Apparel Re-purchase Intention.

4.12 Association between Perceived Usefulness, Perceived Ease of Use , Perceived Trust, Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience and Online Apparel Re-purchase Intention.

It was intended to study the association or correlation between Perceived Usefulness, Perceived Ease of Use , Perceived Trust , Perceived Enjoyment, Online Apparel Purchase Intention, Online Apparel Purchase Behavior, Online Flow Experience and Online Apparel Repurchase Intention. In Table 12 it shows the correlation among all the study factors with Online Apparel Purchase Behavior and Online Apparel Re-purchase Intention. The study variables Online Flow Experience (r =0.719), Online Apparel Purchase Intention (r = 0.671) and Online Apparel Re-purchase Intention (r = 0.668) indicates significant positive correlation with Online Apparel Purchase Behavior. The association of Online Flow Experience (r =0.755) determines high influence and positive correlation with the factor Online Apparel Re-purchase Intention. Correlation reflects the stronger relationship between Online Apparel Purchase Behavior, Online Flow Experience and Online Apparel Re-purchase Intention.

The positive linear association implies that as one variable moves, either up or down, the other variable moves in the same direction. The variables such as Perceived Trust (r = 0.474) and Perceived Enjoyment (r = 0.415) are moderately associated with Online Apparel Purchase Behavior. Similarly Perceived Trust (r = 0.455) and Perceived Enjoyment (r = 0.410) are moderately associated with Online Apparel Re-purchase Intention. The correlation coefficients clearly states that Online Purchase Behaviour of the millennials are strongly connected with their purchase Intention. Correspondingly Online Apparel Re-purchase Intention of the millennials are reliant with their Online Flow Experience. Based on the correlation results, the researcher postulate that the stronger the Millennials experience has a significant linear correlation on the link between Online Apparel Purchase Behavior and Online Apparel Re-purchase Intention.

Construct	Pearson Correlation with Online Apparel Purchase Behaviour	Pearson Correlation with Online Apparel Repurchase Intention
Perceived usefulness	.321**	.380**
Perceived ease of use	.390**	.398**
	47.4**	45544
Perceived trust	.4/4**	.455**
Perceived enjoyment	.415**	.410**
Online appared purchase intention	671**	564**
Online apparel purchase behaviour	1	668**
Online flow experience	.719**	755**
Online apparel repurchase intention	.668**	1

Table 4.12 CORRELATION RESULTS

**. Correlation is significant at the 0.01 level (2-tailed).

OBJECTIVE 3: To examine the effect of Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Intention over Online Apparel Purchase Behaviour.

4.13 Strength of Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Intention impacting over Online Apparel Purchase Behaviour.

Linear Regression analysis is used to probe the strength between dependent variable Online Apparel Purchase Behaviour and independent variables such as Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Intention. The objective of the research was to investigate the variables influencing significantly the Millennial's Online Apparel Purchase Behaviour.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.686 ^a	.470	.467	2.690

TABLE NO:4.13.1 MODEL SUMMARY

a. Predictors: (Constant), Perceived Usefulness, Perceived Ease of Use, Perceived Trust,

Perceived Enjoyment, Online Apparel Purchase Intention.

b. Dependent Variable: Online Apparel Purchase Behaviour

Table 4.13.1 is the model summary which provides the R, R² and adjusted R² which can be used to establish how well a regression model fits the data. The multiple correlation coefficient (R) can be considered as one of the quality measure for prediction of the dependent variable Online Apparel Purchase Behaviour. A value of .686 indicates a reasonable level of prediction (68.6%) of the dependent variable. The R² value (the coefficient of determination) defines the proportion of variance in the dependent variable online apparel purchase Behaviour explained by the independent variables such as Perceived Usefulness, Perceived Ease Of Use, Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Intention. R² value of 0.470 for dependent variable Online Apparel Purchase Behaviour influenced by 47% of the independent variables. This shows that all the independent variables Perceived Usefulness, Perceived Ease of Use , Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Perceived Usefulness, Perceived Ease of Use , Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Perceived Usefulness, Perceived Ease of Use , Perceived Trust, Perceived Enjoyment and Online Apparel Purchase Intention have key impact on the millennial's Online Apparel Purchase Behaviour. Adjusted R² illustrates how well the data points fit a regression line presenting the percentage of variation explained only by the independent variables that actually affect the dependent variable. Adjusted R² value of 0.467 shows that independent variables explains 46.7% of the dependent variable Online Apparel Purchase Behaviour.

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	4.273	.452		9.462	.000		
PERCEIVED USEFULNESS	020	.027	026	766	.444	.518	1.931
PERCEIVED EASE OF USE	.031	.022	.049	1.377	.169	.471	2.123
PERCEIVED TRUST	.092	.021	.147	4.444	.000	.547	1.827
PERCEIVED ENJOYMENT	.005	.024	.007	.200	.842	.511	1.958
ONLINE APPAREL PURCHASE INTENTION	.445	.024	.577	18.571	.000	.619	1.616

TABLE NO: 4.13.2 ESTIMATED MODEL COEFFICIENTS

Dependent Variable: ONLINE APPAREL PURCHASE BEHAVIOUR

It can be seen from table 4.13.2, that all the independent variables except Perceived Usefulness are positively related to Online Apparel Purchase Behaviour as the coefficient shows positive sign. The result indicates that the two independent variables Perceived Trust and

Online Apparel Purchase Intention have statistically significant impact on dependent variable Online Apparel Purchase Behaviour. It can be seen that Online Apparel Purchase Intention has the major impact on Online Apparel Purchase Behaviour as the parameter indicates so $(\beta = 57.7\%, t = 18.571, p = 0.000)$. This shows that Online Apparel Purchase Intention plays an effective role on Millennial's Online Apparel Purchase Intention Behaviour. The factor Perceived Trust also has the major impact on Online Apparel Purchase as the parameter indicates so ($\beta =$ 14.7%, t = 4.444, p = 0.000). Perceived trust plays a major role for Online Apparel Purchase Behaviour among millennials. The factors such as Perceived Usefulness ($\beta = -2.6\%$, t =-0.766, $P \ge 0.444$), Perceived Ease Of Use ($\beta = 4.9\%$, t =1.377, $P \ge 0.169$) and Perceived Enjoyment $(\beta = 0.7\%, t = 0.200, P \ge 0.842)$ have no significant impact on millennial's Online Apparel Purchase Behaviour. The information in the Table 4.13.2 allows to check for multi-collinearity among all variables. Multi-collinearity means that the variance of independent variables explain in dependent variables are overlapping with each other and thus not each explaining unique variance in the dependent variable. A common rule of thumb: for any predictor VIF >3 and the tolerance less than 0.10 will potential have collinearity problem. Therefore to avoid collinearity, tolerance value should be greater than 0.10 and VIF <3. All the predicators in the study have VIF (variable inflation factor) less than 3 and the tolerance value greater than 0.10 confirming that variables do not have any multi-collinearity issues.

OBJECTIVE 4: To measure the influential level of online apparel purchase behavior and online flow experience over online apparel repurchase intention.

4.14 Strength of online apparel purchase behavior and online flow experience impacting over online apparel repurchase intention.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777ª	.603	.602	2.866

TABLE NO:4.14.1 MODEL SUMMARY

a. Predictors: (Constant), Online Flow Experience, Online Apparel Purchase Behaviourb. Dependent Variable: Online Apparel Re-Purchase Intention

In table 4.14.1 the model summary indicates that the two Independent Variables Online Flow Experience and Online Apparel Purchase Behaviour have about 60.3% influences over Online Apparel Re-Purchase Intention of the millennials. This conveys that the factors plays a major impact for the millennials to make online Apparel re-purchase decision from E-retailers.

Variables	Unstan Coeff	dardized ficients	Standardized Coefficients	t	Sig.	Colline Statis	arity tics
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	3.151	.450		7.000	.000		
ONLINE APPAREL PURCHASE BEHAVIOUR	.319	.037	.259	8.512	.000	.483	2.072
ONLINE FLOW EXPERIENCE	.332	.018	.569	18.741	.000	.483	2.072

TABLE NO:4.14.2 ESTIMATED MODEL COEFFICIENTS

a. Dependent Variable: Online Apparel Re-purchase Intention

It can be seen from table 4.14.2, that all the two independent variables are positively related to Online Apparel Re-purchase Intention as the coefficient shows positive sign. The result indicates that the Online Flow Experience and Online Apparel Purchase Behaviour have statistically significant impact on Millennial's Online Apparel Re-purchase Intention . It can be seen that Online Flow Experience has the major impact over Online Apparel Re-purchase Intention of the millennials as the parameter indicates so ($\beta = 56.9\%$, t = 18.741, p = 0.000). This shows that Online Flow Experience plays an important role in Re-purchase Intention of

Apparels from E-retailers. It can be seen that Online Apparel Purchase Behaviour also have the major impact over Online Apparel Re-purchase Intention as the parameter indicates so $(\beta = 25.9\%, t = 8.512, p = 0.000)$. Here the Online Apparel Purchase Behaviour considered as an important factor for the millennials as they have an overall view about the E-retailers which it evokes them positive feeling .Thus Millennials who have positive online flow experience during Online Shopping consider E-retailer's website for Apparel Re-purchase in future. In addition, the results confirms that both variables do not have any multi-collinearity issues.

4.15 ESTIMATION OF MODEL

This section elucidate the model estimation and validation of the theoretical framework that is derived for the study. This is done by using Structural equation modeling (SEM). This technique explicated in detail below.

4.15.1 STRUCTURAL EQUATION MODELING (SEM)

Structural Equation Modeling (SEM) is an proficient technique for conceptualizing a theoretical model framework. In addition SEM confirms the associations between variables and gaining insight of the causal nature and impact of identified relationships in the model (Ragunathan et al., 2004; Zain et al., 2005). SEM examines series of dependence relationships simultaneously and it is predominantly helpful in testing theories that contain multiple equations involving dependence relationships. SEM has two parts.

1. The Measurement Model

2. The Structural Model

The measurement model demonstrates the relationship between items and their underlying latent construct. A measurement model is a typical confirmatory factor analysis (CFA) and it is considered as "null model" (Salim, 2007). In this model, the co-variances for the latent variables are assumed to be zero. CFA tests a measurement model by assessing the validity of individual measures based on the overall model's fit and other evidence of construct validity (Hair et al. 2010).

The second part is the structural model explaining how constructs are associated with each other, often with multiple dependence relationships (Hair, 2010). SEM represents the theoretical relationship between exogenous (Independent Variables) and endogenous variables (Dependent Variables). SEM was employed in this study for two main purposes: (1) confirmatory factor analysis (CFA) to verify the validity of the constructs established in the study (i.e. measurement model); and (2) Evaluating the structural model by testing the hypotheses using path significance analysis for the research constructs. SEM is identified by various names: covariance structure analysis, latent variable analysis, and sometimes it is even

referred by the name of the specialized software package used (e.g AMOS model). In this study SPSS AMOS statistical package was used for undertaking SEM .

SEM accounts for the amount of measurement error in the variables (latent constructs). But SEM estimates what the relationship would be if there was no measurement error. The SEM model can be formalized using a path diagram. Path diagram is a visual demonstration of a model with the complete set of relationships among the model's constructs. Constructs are unobservable (latent factors) represented by multiple measures. Dependence relationships are illustrated by straight arrows, with the arrow radiating from the predictor variable and the arrow head pointing to the dependent variable. Curved arrows in path diagram represent correlations between constructs or indicators, but no causation is implied.. In the path diagram, constructs are represented by ovals or circles, and measured variables are represented by squares or rectangles.

4.15.2 EVALUATING THE FITNESS OF A MODEL

In SEM, there are numerous Fitness Indexes that reflect how fit is the model to the data at hand. Hair et al. (1995, 2010) recommend the use of at least one fitness index from each category of model fit. There are three model fit categories in SEM namely

(1)Absolute Fit

(2) Incremental Fit and

(3) Parsimonious Fit.

(1) Absolute Fit: Absolute fit measures conclude the degree to which the overall model predicts the observed covariance or correlation matrix (Hair et al., 2006). These measures are the resultant from the fit of the obtained and implied covariance matrices and from the Maximum Likelihood function. The measures of absolute fit are divided into two categories: 'goodness of fit measures' and 'badness or lack of fit measures'. Goodness of fit indicate how well the specified model fits the observed or sample data. Therefore higher values of these measures are desirable (Malhotra and Dash, 2012). Goodness of fit indices are Chi-Square, GFI (Goodness of Fit) and AGFI (Adjusted Goodness of Fit). Badness of fit indices measure error or deviation and so lower values on these indices are required (Malhotra and Dash, 2012). Badness of fit indices are CMIN/DF (Chi-square statistic divided by degrees of freedom), RMR (Root Mean Residual) and RMSEA (Root Mean Square Error of Approximation).

The chi-square statistic is also called as discrepancy function, likelihood ratio or chisquare goodness of fit. It evaluates the discrepancy scale between the sample and co-variances (Hu and Bentler, 1999). In AMOS, it is also known as CMIN. Chi-Square is the mainframe model fit which indicates the difference between observed and expected covariance matrices. Chi-square is criticized by many researchers because of inadequacy connected with its use. Being very susceptible to sample size, many researchers reject the index if the sample size is large. The reason behind is when the size of sample is large, chi-square rejects nearly all the models. (Hooper et al.,2008). Researcher can disregard chi-square p value in the study if the sample size is larger than 200 (Hair et al., 1996; Joreskog and Sorbom, 1996). Suggested Chi-Square P-value for goodness of fit is > 0.05 (Wheaton et al., 1977).

The Goodness-of-Fit statistic (GFI) evaluate the proportion of variance that is explained by the estimated population covariance. This statistic ranges from 0 to 1 with larger samples greater its value. Generally accepted value of GFI is 0.90 or greater indicate well fitting models (Hu & Bentler, 1999) Adjusted Goodness of Fit Index (AGFI) takes into consideration the degrees of freedom obtainable for a model. when GFI is adjusted for the degrees of freedom, the index is termed as AGFI. Hooper et al. (2008) and Malhotra and Dash (2012) define AGFI as an index of absolute fit. Hair et al. (2006) and Malhotra and Dash (2012) recommend a value either greater than or equal to 0.90 but for AGFI, a criteria of greater than 0.8 is also provided (Njite & Parsa, 2007 and Hu & Bentler, 1999). Relative Chi-Square (CMIN/DF) index is also known as Normed Chi-Square. CMIN/DF is the chi-square value divided by its degrees of freedom. Recommended the ratio of approximately 5 or less for good fit (Wheaton et al., 1977 and Hair et al., 1998). The RMR are the square root of the differentiation between the residuals of the sample data covariance matrix and the assumed co-variance model. The RMR range is measured upon the item scales therefore, if a questionnaire have varying levels items (ie some items ranging from 1 - 5 while others ranging from 1 - 7) the RMR turn out to be complicated to understand (Kline, 2005). Suggested Values for the RMR is less than 0.08 (Hooper et al., 2008). But with well fitting models obtaining values less than 0.05 (Byrne, 1998). However index value as greater as 0.08 are considered good enough (Hu and Bentler, 1999).

The Root Mean Square Error of Approximation (RMSEA) is the mean square root of the residuals which is squared precedingly (Malhotra and Dash, 2012). It is defined as sensitive to the number of parameters estimated but comparatively insensitive to size of sample (Albright and Park, 2009). According to Hu and Bentler (1999) 0.06 or less value is an sign of good model fit. For this index value less than or equal to 0.08 indicate good fit (Hair et al., 2006)

(2) Incremental Fit: Measures of Incremental fit estimate how well the observed model fits the sample data relative to some substitute model that is considered as a baseline model (Hair et al., 2006). The baseline model is also considered as null model which is defined as a model from which the estimated model should be anticipated to exceed (Hair et al., 2006). Hence the incremental fit statistics in AMOS are also known as baseline comparisons. NFI (Normed Fit Index), RFI (Relative Fit Index), IFI (Incremental Fit Index), TLI (Tucker-Lewis Index) and CFI (Comparative Fit Index) are extensively used category of incremental fit.

Normed Fit Index (NFI) is the ratio of difference in the chi-square value for the projected model and the null model divided by the chi-square of null model (The Bentler and Bonett, 1980). NFI cannot exceed above 1 and it ranges = 0 to 1 which is the ideal fit. The values of greater than or equal to 0.90 are considered adequate for the index (Hair et al., 2006 and Hu & Bentler, 1998). It should be larger than the value of 0.95 for a ideal good fit.

Relative Fit Index (RFI) is also known as Bollen's RFI. It symbolize as NFI derivative value (Byrne, 2010). For the computation of RFI, relative chi square (CMIN/DF) of estimated

model is divided by relative chi-square of baseline model, after that this ratio is subtracted from one. Indices greater than 0.90 are satisfactorily acceptable. (Byrne,2010)

Incremental Fit Index (IFI) was developed to address the issues of parsimony and sample size. Therefore IFI is quite insensitive to sample size (Byrne, 2010). To compute it, initially the difference between the chi square of the baseline model and the chi-square of the estimated model is calculated. After that, the difference between the chi-square of the estimated model and the degrees of freedom for the estimated model is calculated. The calculated value ratio denotes IFI. Value of this index can go beyond 1.0 and values close to 1.0 indicates perfect fit. Nevertheless, alike to other statistical index, value exceeding 0.90 is acceptable for IFI (Byrne,2010).

Tucker-Lewis Index (TLI) is estimated by dividing the difference of relative chi-square of baseline model and relative chi-square of estimated model by the difference of relative chi-square of baseline model and one. According to Hooper et al. (2008), the main problem associated with its use is its values can go beyond 1.0 and thus it can be difficult to interpret. For the index, values as high as 0.95 is preferred (Hu and Bentler, 1999). Value higher than 0.90 considered as good fit for TLI (Hair et al., 1998).

Comparative Fit Index (CFI) is a revised version for NFI. It was first given by Bentler (1990) so it is also called as Bentler's comparative fit index. For the computation of CFI, along with chi-square and degrees of freedom, non-centrality parameter (NCP) is also considered both for estimated and baseline models. Similar to other indices, a CFI value of 0.90 is acceptable as good fit (Daire et al, 2008) and values greater than 0.95 is acknowledged as perfect fit (Hooper et al., 2008).

(3) Parsimonious Fit: Mulaik et al (1989) have developed two parsimonious fit indices. They are the Parsimony Goodness-of-Fit Index (PGFI) and the Parsimonious Normed Fit Index (PNFI). The PGFI is based on adjusting GFI with the loss of freedom degrees. The PNFI also adjusts for degrees of freedom yet it is based on the NFI (Mulaik et al 1989). Mulaik et al (1989) mentioned that it is potential to obtain parsimony fit indices within the 0.50 whereas other goodness of fit indices achieve values over 0.90. There is no threshold levels for these statistics

which made them more difficult to interpret. These indices are meaningful when comparing between different models with varying degree of complexity.

The fit index choice from each categories namely Absolute Fit, Incremental Fit, and Parsimonious Fit reported in the study are based on the literature reviews. The information pertaining to the model fit category, their acceptance level, and literature references are presented in Table 4.15. The acceptable fit criterion values reported by researchers may vary depending on literature reviews been referred.. However, the summary table presents the literature support for the widely employed fitness indexes.

TABLE NO. 4.15

S.NO	FIT INDICES	FIT CRITERION	LITERATURE REFERENCE
		ABSOLUTE F	IT
		Goodness of Fi	t
1	Chi-Square P value	> 0.05	Wheaton et al., (1977)
2	GFI (Goodness-of-fit index)	> 0.90	Hair et al.,(2006)
3	AGFI (Adjusted goodness-of-fit index)	≥ 0.90	Hair et al., (2006), Hu and Bentler, (1999)
		Badness of Fit	
4	Chi-Square / df (CMIN/DF)	< 5.0	Wheaton et al., (1977) ,Hair et al., (1998)
5	RMSEA (Root mean square error of approximation)	< 0.08	Hair et al., (2006)
	Ι	NCREMENTAL	FIT
6	NFI (Normed fit index)	> 0.90	Hair et al., (2006), Hu and Bentler, (1998)
7	CFI (Comparative fit index)	> 0.90	Hu and Bentler, 1999
8	IFI (Incremental Fit Index)	> 0.90	Byrne,(2010)
9	TLI (Tucker-Lewis index)	> 0.90	Hair et al.,(1998)

SUMMARY OF LITERATURE REVIEWS FOR FIT INDICES

10	RFI (Relative Fit Index)	> 0.90	Byrne,(2010)				
	PARSIMONIOUS FIT						
11	PGFI (Parsimony Goodness-of- Fit Index)	< 0.50	Mulaik et al (1989)				

4.15.3 MODIFICATION INDICES

If the model fitness is not adequate, then the common practice is to modify the model, by deleting parameters that are not significant, and adding parameters that improve the fit. SEM AMOS software can compute modification indices for each parameter. The given modification index value is the minimum amount that the chi-square statistic is anticipated to decrease if the corresponding parameter is freed. Researchers often use this information to perform a series of model modifications. At each step a parameter is freed that generates the largest improvement in fit, and this process is continued till an satisfactory fit is reached. The model quality can also be improved by adding one parameter to it. The modification indices recommend adding various co-variances between error terms of the same factor to improve the model fit. Co-variances are drawn based on high MI value. Only 4 times by adding co-variances in modification indices are saved. If all these values are in acceptance level then the model is said to be valid and referred as Good fit model

4.16 CONFIRMATORY FACTOR ANALYSIS

Confirmatory Factor Analysis (CFA) is a unique form of factor analysis. It is engaged to test whether the measures of a construct are consistent with the researcher's perceptive of that construct. The CFA procedure replaced the older methods to verify the construct validity. The CFA method has the facility and ability to assess the Unidimensionality, Validity and Reliability of a latent construct. Every latent construct in measurement model should undergo CFA before modeling in SEM.

4.16.1 ANALYSIS OF MEASUREMENT MODEL

SEM is a confirmatory method presenting a comprehensive means for analyzing the measurement model of latent constructs. The validating procedure is the Confirmatory Factor

Analysis (CFA). CFA is carried out for all latent constructs involved in the study before verifying their inter-relationship in a structural model (SEM).

Unidimensionality, validity, and reliability of all latent constructs are analyzed through CFA to verify measurement model. The fitness of a measurement model is confirmed through Fitness Indexes.

Unidimensionality: This requirement was attained through the item-deletion procedure for low factor loading items of less than 0.50 in the measurement model. The new model is run and the item deletion process is repeated until the fitness indexes are at satisfactory level. Nevertheless the items deletion should not exceed 20% of total items in a model. Otherwise the particular construct is estimated to be invalid because it failed the confirmatory itself.

Validity and Reliability: The validity and the reliability of all the constructs are already verified and the results are presented in Chapter 3. Therefore in this section the Unidimensionality and the fitness of the measurement model are presented.

4.16.2 ASSESSING MEASUREMENT MODEL FIT OF PERCEIVED USEFULNESS

CFA is employed to assess the measurement model fit of the construct Perceived Usefulness. The relationship between the items and unobserved variable is shown in the figure 4.5. The items namely PU1, PU2, PU3, PU4, PU5 and PU6 are observed variables and the construct Perceived Usefulness (PU) is unobserved variable been indicated in fig 4.5. All the items are loaded above 0.5, thereby satisfying Unidimensionality of the construct.



Fig 4.5 confirmatory factor analysis of Perceived Usefulness

In the measurement model of the construct Perceived Usefulness, Chi-square test statistic (CMIN) is 16.678, P= 0.054, CMIN/DF= 1.853; RMSEA= 0.031; GFI= 0.994; AGFI= 0.985; NFI= 0.996; CFI= 0.998; IFI=0.998; TLI= 0.997; RFI=0.994 and PGFI=0.426. The P value is greater than 0.05 ensuring that the measurement model is a good fit. The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are also found to be above the acceptable value of 0.900. RMSEA value is 0.031 which shows that acceptable limits of less than the value 0.080. The value of PGFI is 0.426 and it is accepted as the value is less than 0.50. CMIN/DF value found to be 1.853 which is also lesser than 5.0. Therefore all observed values are matching the standard acceptable value indicating the construct as a good fit model. As the model fit values are adequate for good fit model, no co-variances are drawn among the error terms based on the Modification Indices values . The model fit values are shown in the table 4.16.1 which is said to be good fit as the values are all in accepted level.

TABLE NO. 4.16.1

MEASUREMENT MODEL FIT SUMMARY OF PERCEIVED USEFULNESS

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT				
	ABSOLUTE FIT							
	Goodn	ess of Fit						
1	Chi-Square P value	0.054	> 0.05	1% level				
2	GFI (Goodness-of-fit index)	0.994	> 0.90	Good Fit				
3	AGFI (Adjusted goodness-of-fit index)	0.985	≥ 0.90	Good Fit				
	Badness of Fit							
4	Chi-Square / df (CMIN/DF)	1.853	< 5.0	Good Fit				
5	RMSEA (Root mean square error of approximation)	0.031	< 0.08	Good Fit				
	INCREM	ENTAL FIT						
6	NFI (Normed fit index)	0.996	> 0.90	Good Fit				
7	CFI (Comparative fit index)	0.998	> 0.90	Good Fit				
8	IFI (Incremental Fit Index)	0.998	> 0.90	Good Fit				
9	TLI (Tucker-Lewis index)	0.997	> 0.90	Good Fit				
10	RFI (Relative Fit Index)	0.994	> 0.90	Good Fit				
	PARSIMONIOUS FIT							
11	PGFI (Parsimony Goodness-of- Fit Index)	0.426	< 0.50	Good Fit				

4.16.3 ASSESSING MEASUREMENT MODEL FIT OF PERCEIVED EASE OF USE

The relationship between the items and unobserved variable is shown in the figure 4.6. The items namely PEOU1, PEOU2, PEOU3, PEOU4, PEOU5 and PEOU6 are observed variables and the construct Perceived Ease of Use (PEOU) is unobserved variable been indicated in fig 4.6.



Fig 4.6 confirmatory factor analysis of Perceived Ease Of Use

From fig 4.6, it is evident that all the items namely have the standard estimate value above 0.5 thereby validating Unidimensionality of the construct Perceived Ease of Use. The Chisquare test statistic (CMIN) is 46.728, P= 0.000, CMIN/DF= 5.192; RMSEA= 0.069; GFI= 0.983; AGFI= 0.960; NFI= 0.989; CFI= 0.991; IFI=0.991; TLI= 0.986; RFI=0.982 and PGFI=0.421. The P value is lesser than 0.05 in this measurement model which is not acceptable . The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are found to be above the acceptable value of 0.900. RMSEA value is 0.069 which shows that acceptable limits of less than 0.080. The value of PGFI is 0.421 and it is accepted as the value is less than 0.50. CMIN/DF value found to be 5.192 which is not in the acceptable limit of lesser than 5.0. The P value and CMIN/DF values not measures within the value of fit index. In order to validate the measurement model, it is improved by associating error items.



Fig 4.7 confirmatory factor analysis of Perceived Ease Of Use - Revised Model

From the fig 4.7 CFA represents that the variables e2 to e6 and e5 to e6 are said to be associated error items for the respective construct Perceived Ease of Use . After revising the model, the chi square test statistic (CMIN) value is 0.878 and the P value is 0.522 which is more than acceptable value indicating a good fit. The other goodness of fit measures namely GFI, AGFI,NFI, CFI, IFI, RFI and TLI are found to be above 0.9. RMSEA value is found to be 0.000 which is within the expected value of 0.08. PGFI value is 0.333 which is well within the acceptable limit. All the fit Indices are showing acceptable values after correlating measurement errors. Therefore the new measurement model shows good fit

The revised measurement model fit values of the construct Perceived Ease Of Use is shown in the table 4.16.2 which is said to be good fit as the values are all in accepted level.

TABLE NO. 4.16.2

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT			
	ABSOI	LUTE FIT					
	Goodr	ness of Fit					
1	Chi-Square P value	0.522	> 0.05	1% level			
2	GFI (Goodness-of-fit index)	0.998	> 0.90	Good Fit			
3	AGFI (Adjusted goodness-of-fit index)	0.993	≥ 0.90	Good Fit			
	Badness of Fit						
4	Chi-Square / df (CMIN/DF)	0.878	< 5.0	Good Fit			
5	RMSEA (Root mean square error of approximation)	0.000	< 0.08	Good Fit			
	INCREM	ENTAL FIT					
6	NFI (Normed fit index)	0.999	> 0.90	Good Fit			
7	CFI (Comparative fit index)	1.000	> 0.90	Good Fit			
8	IFI (Incremental Fit Index)	1.000	> 0.90	Good Fit			
9	TLI (Tucker-Lewis index)	1.000	> 0.90	Good Fit			
10	RFI (Relative Fit Index)	0.997	> 0.90	Good Fit			
	PARSIMO	ONIOUS FIT					
11	PGFI (Parsimony Goodness-of- Fit Index)	0.333	< 0.50	Good Fit			

MEASUREMENT MODEL FIT SUMMARY OF PERCEIVED EASE OF USE

4.16.4 ASSESSING MEASUREMENT MODEL FIT OF PERCEIVED TRUST

All the items have higher loadings on unobserved Perceived Trust construct, the standard Estimate values of each item are more than 0.5 by which it shows Unidimensionality of the construct.



Fig 4.8 confirmatory factor analysis of Perceived Trust

From fig 4.8, The Chi-square test statistic (CMIN) is 26.134, P= 0.002, CMIN/DF= 2.904; RMSEA= 0.046; GFI= 0.990; AGFI= 0.977; NFI= 0.994; CFI= 0.996; IFI=0.996; TLI= 0.993; RFI=0.989 and PGFI=0.424. The P value is lesser than 0.05 in this measurement model which is not acceptable . The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are found to be above the acceptable value of 0.900. RMSEA value is 0.046 which shows within the acceptable limits of less than 0.080. The value of PGFI is 0.424 and it is also accepted as the value is less than threshold level 0.50. CMIN/DF value found to be 2.904 which is also well within the standard Cut-off Criterion. P value should be greater than 0.05 in order to validate the fit model and it is improved by re-specification of the model by co-varying the error terms as recommended in the modification Indices of CFA.



Fig 4.9 confirmatory factor analysis of Perceived Trust- Revised Model

From the fig 4.9 it represents that the variables e5 to e6 is said to be related error items for the construct Perceived Trust. After revising the model, the P value indicates a good fit as the value is in accepted level. The other goodness of fit measures namely GFI, AGFI,NFI, CFI, IFI, RFI and TLI are found to be above 0.9, whereas RMSEA value is also found to acceptable. Parsimony Fit Index PGFI value also found to be within Cut-off criterion. CMIN/DF value found to be 1.549 which is also well within the standard suggested value for good fit. Therefore the model is validated by adding the co-variances between the specific error terms of e5 to e6.

From the revised model of fig 4.9 the model fit values are shown in the table 4.16.3 which is considered to be good fit as the values meets the accepted threshold level.

TABLE NO. 4.16.3

MEASUREMENT MODEL FIT SUMMARY OF PERCEIVED TRUST

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT				
	ABSOLUTE FIT							
	Goodn	ess of Fit						
1	Chi-Square P value	0.134	> 0.05	1% level				
2	GFI (Goodness-of-fit index)	0.995	> 0.90	Good Fit				
3	AGFI (Adjusted goodness-of-fit index)	0.988	≥ 0.90	Good Fit				
	Badne	ess of Fit						
4	Chi-Square / df (CMIN/DF)	1.549	< 5.0	Good Fit				
5	RMSEA (Root mean square error of approximation)	0.025	< 0.08	Good Fit				
	INCREM	ENTAL FIT						
6	NFI (Normed fit index)	0.997	> 0.90	Good Fit				
7	CFI (Comparative fit index)	0.999	> 0.90	Good Fit				
8	IFI (Incremental Fit Index)	0.999	> 0.90	Good Fit				
9	TLI (Tucker-Lewis index)	0.998	> 0.90	Good Fit				
10	RFI (Relative Fit Index)	0.994	> 0.90	Good Fit				
	PARSIMONIOUS FIT							
11	PGFI (Parsimony Goodness-of- Fit Index)	0.379	< 0.50	Good Fit				

4.16.5 ASSESSING MEASUREMENT MODEL FIT OF PERCEIVED ENJOYMENT

CFA of the measurement model represents that all factor loading (Standard Estimate Values) of each item namely PE1, PE2, PE3, PE4 and PE5 are higher than 0.50 on the latent variable Perceived Enjoyment (PE). This confirms that all the items are contributing to the construct and hence the Unidimensionality is established.



Fig 4.10 confirmatory factor analysis of Perceived Enjoyment

From fig 4.10, Measurement Model result represents the Chi-square test statistic (CMIN) is 21.009, P= 0.001, CMIN/DF= 4.202; RMSEA= 0.060; GFI= 0.991; AGFI= 0.973; NFI= 0.995; CFI= 0.996; IFI=0.996; TLI= 0.992; RFI=0.990and PGFI=0.330. The P value is lesser than 0.05 and not support the goodness fit Indices of the model. The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are found to be above the acceptable value of 0.900. RMSEA value is 0.060 which is within the acceptable limits of less than 0.080. The value of PGFI is 0.330 which is also accepted as the value is less than threshold level 0.50. CMIN/DF value found to be 4.202 which is also well within the standard goof fit Criterion. P value should be greater than 0.05 in order to validate the fit model and it is improved by using recommendation specified in the modification Indices of CFA.



Fig 4.11 confirmatory factor analysis of Perceived Enjoyment - Revised Model

From the measurement model of fig 4.11 it represents that the variables e1 to e2 and e1 to e5 are related error items for the construct Perceived Trust. After revising the model, the P value indicates good fit indices as it is in accepted level. The other goodness of fit measures namely GFI, AGFI,NFI, CFI, IFI, RFI and TLI are found to be above 0.9. RMSEA value is found to acceptable. Parsimony Fit Index PGFI value also established within Cut-off criterion. CMIN/DF value found within the suggested value for a good fit.

Therefore this revised measurement model fit is confirmed by adding the co-variances between the specific error terms .From the revised model of fig 4.11, the observed fit values are depicted in the table 4.16.4 which is considered to be good fit as the values meets the accepted threshold level.

TABLE NO. 4.16.4

MEASUREMENT MODEL FIT SUMMARY OF PERCEIVED ENJOYMENT

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT
	ABSOI	LUTE FIT		
Goodness of Fit				
1	Chi-Square P value	0.873	> 0.05	1% level
2	GFI (Goodness-of-fit index)	1.000	> 0.90	Good Fit
3	AGFI (Adjusted goodness-of-fit index)	0.998	≥ 0.90	Good Fit
Badness of Fit				
4	Chi-Square / df (CMIN/DF)	0.233	< 5.0	Good Fit
5	RMSEA (Root mean square error of approximation)	0.000	< 0.08	Good Fit
INCREMENTAL FIT				
6	NFI (Normed fit index)	1.000	> 0.90	Good Fit
7	CFI (Comparative fit index)	1.000	> 0.90	Good Fit
8	IFI (Incremental Fit Index)	1.001	> 0.90	Good Fit
9	TLI (Tucker-Lewis index)	1.002	> 0.90	Good Fit
10	RFI (Relative Fit Index)	0.999	> 0.90	Good Fit
PARSIMONIOUS FIT				
11	PGFI (Parsimony Goodness-of- Fit Index)	0.200	< 0.50	Good Fit

4.16.6 ASSESSING MEASUREMENT MODEL FIT OF ONLINE APPAREL PURCHASE INTENTION

The relationship between the items and unobserved variable is shown in the figure 4.12. The items namely OAPI1, OAPI2, OAPI3, OAPI4 and OAPI5 are observed variables and the construct Online Apparel Purchase Intention is unobserved variable been indicated in fig 4.12. All the items are loaded above 0.5, thereby satisfying Unidimensionality of the construct.



Fig 4.12 confirmatory factor analysis of Online Apparel Purchase Intention

In the measurement model of the construct Online Apparel Purchase Intention, Chi-square test statistic (CMIN) is 3.878, P= 0.567 CMIN/DF= 0.776; RMSEA= 0.000; GFI= 0.998; AGFI= 0.995; NFI= 0.999; CFI= 1.000; IFI=1.000; TLI= 1.001; RFI=0.998 and PGFI=0.333. The P value is greater than 0.05 ensuring that the measurement model is a good fit. The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are also found to be above the acceptable value of 0.900. RMSEA value is 0.000 which is well within the acceptable limits of less than 0.080. The value of PGFI is 0.333 which is acceptable as the value is less than 0.50. CMIN/DF value found to be 3.878 which is lesser than 5.0. Therefore all observed values are matching the standard acceptable value indicating the construct as a good fit model. As the

model fit values are adequate for good fit model, no Modification Indices values are shown in CFA. The model fit values are shown in the table 4.16.5 which is said to be good fit as the values are all in accepted level.

TABLE NO. 4.16.5

MEASUREMENT MODEL FIT SUMMARY OF ONLINE APPAREL PURCHASE INTENTION

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT
	ABSOI	LUTE FIT		
Goodness of Fit				
1	Chi-Square P value	0.567	> 0.05	1% level
2	GFI (Goodness-of-fit index)	0.998	> 0.90	Good Fit
3	AGFI (Adjusted goodness-of-fit index)	0.995	≥ 0.90	Good Fit
Badness of Fit				
4	Chi-Square / df (CMIN/DF)	0.776	< 5.0	Good Fit
5	RMSEA (Root mean square error of approximation)	0.000	< 0.08	Good Fit
INCREMENTAL FIT				
6	NFI (Normed fit index)	0.999	> 0.90	Good Fit
7	CFI (Comparative fit index)	1.000	> 0.90	Good Fit
8	IFI (Incremental Fit Index)	1.000	> 0.90	Good Fit
9	TLI (Tucker-Lewis index)	1.001	> 0.90	Good Fit
10	RFI (Relative Fit Index)	0.998	> 0.90	Good Fit
PARSIMONIOUS FIT				
11	PGFI (Parsimony Goodness-of- Fit Index)	0.333	< 0.50	Good Fit

4.16.7 ASSESSING MEASUREMENT MODEL FIT OF ONLINE APPAREL PURCHASE BEHAVIOUR

The output of CFA illustrates the standard estimates of all items namely OAPB1, OAPB2, OAPB3 and OAPB4 are above 0.50 for the construct Online Apparel Purchase Intention (OAPB) as in Fig 4.13. Through CFA, Unidimensionality of the construct is confirmed.



Fig 4.13 confirmatory factor analysis of Online Apparel Purchase Behaviour

From the model fit summary of CFA for the construct Online Apparel Purchase Intention presented Chi-square test statistic (CMIN) is 3.188, P= 0.203 CMIN/DF= 1.594; RMSEA= 0.026; GFI= 0.998; AGFI= 0.991; NFI= 0.999; CFI= 1.000; IFI=1.000; TLI= 0.999; RFI=0.996 and PGFI=0.200. The P value is greater than 0.05 ensuring that the good measurement model fit. The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are also found to be above the acceptable value of 0.900. RMSEA value is 0.026 which is well within the acceptable limits of less than 0.080. The value of PGFI is 0.200 which is acceptable as the value is less than 0.50. CMIN/DF value found to be 1.594 which is lesser than 5.0. Therefore all observed values are meeting the standard acceptable value indicating the construct as a good fit model. As the model fit values are adequate for good fit model, no model modification is required. The model fit values are shown in the table 4.16.6 which is indicating good fit as the values are all in accepted level.

TABLE NO. 4.16.6

MEASUREMENT MODEL FIT SUMMARY OF ONLINE APPAREL PURCHASE BEHAVIOUR

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT
	ABSOI	LUTE FIT		
Goodness of Fit				
1	Chi-Square P value	0.203	> 0.05	1% level
2	GFI (Goodness-of-fit index)	0.998	> 0.90	Good Fit
3	AGFI (Adjusted goodness-of-fit index)	0.991	≥ 0.90	Good Fit
Badness of Fit				
4	Chi-Square / df (CMIN/DF)	1.594	< 5.0	Good Fit
5	RMSEA (Root mean square error of approximation)	0.026	< 0.08	Good Fit
INCREMENTAL FIT				
6	NFI (Normed fit index)	0.999	> 0.90	Good Fit
7	CFI (Comparative fit index)	1.000	> 0.90	Good Fit
8	IFI (Incremental Fit Index)	1.000	> 0.90	Good Fit
9	TLI (Tucker-Lewis index)	0.999	> 0.90	Good Fit
10	RFI (Relative Fit Index)	0.996	> 0.90	Good Fit
PARSIMONIOUS FIT				
11	PGFI (Parsimony Goodness-of- Fit Index)	0.200	< 0.50	Good Fit

4.16.8 ASSESSING MEASUREMENT MODEL FIT OF ONLINE FLOW EXPERIENCE

CFA results for the construct Online Flow Experience (OFE) illustrating the factor loading of the 9 items namely OFE1, OFE2, OFE3, OFE4, OFE5, OFE6, OFE7, OFE8 and OFE9 are shown in the fig 4.14. Factor Loading for all the items are well above 0.50, hence Unidimensionality been established.



Fig 4.14 confirmatory factor analysis of Online Flow Experience

In Fig 4.14 CFA model summary represents Chi-square test statistic (CMIN) is 96.604, P= 0.000 CMIN/DF= 3.578; RMSEA= 0.054; GFI= 0.974; AGFI= 0.956; NFI= 0.984; CFI= 0.988; IFI=0.988; TLI= 0.985; RFI=0.979 and PGFI=0.584. The goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are also found to be above the acceptable value

of 0.900. RMSEA value is 0.054 which is well within the acceptable limits of less than 0.080. The value of PGFI is 0.584 which is acceptable as the value is less than threshold cut-off 0.50. CMIN/DF value found to be 3.578 which is lesser than 5.0. The P value is less than 0.05, therefore the measurement model fit needs to be improved. As the P value and parsimony fit measure PGFI are not meeting the recommendable values for a good model fit, clearly states that modification indices are needed to determine the model fit.



Fig 4.15 confirmatory factor analysis of Online Flow Experience- Revised Model

Based on CFA model Fig 4.15 Error Co-variances e1 to e2, e3 to e8, e7 to e8 and e7 to e9 were fixed to improve the fit Indices. Testing the re-specified CFA model showed the chi-square P value improved to 0.067 which is statistically acceptable. The summary of the model fit indices are showed in the table 4.16.7

TABLE NO. 4.16.7

MEASUREMENT MODEL FIT SUMMARY OF ONLINE FLOW EXPERIENCE

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT	
	ABSOI	LUTE FIT			
Goodness of Fit					
1	Chi-Square P value	0.067	> 0.05	1% level	
2	GFI (Goodness-of-fit index)	0.991	> 0.90	Good Fit	
3	AGFI (Adjusted goodness-of-fit index)	0.983	≥ 0.90	Good Fit	
Badness of Fit					
4	Chi-Square / df (CMIN/DF)	1.471	< 5.0	Good Fit	
5	RMSEA (Root mean square error of approximation)	0.023	< 0.08	Good Fit	
INCREMENTAL FIT					
6	NFI (Normed fit index)	0.994	> 0.90	Good Fit	
7	CFI (Comparative fit index)	0.998	> 0.90	Good Fit	
8	IFI (Incremental Fit Index)	0.998	> 0.90	Good Fit	
9	TLI (Tucker-Lewis index)	0.997	> 0.90	Good Fit	
10	RFI (Relative Fit Index)	0.991	> 0.90	Good Fit	
PARSIMONIOUS FIT					
11	PGFI (Parsimony Goodness-of- Fit Index)	0.507	< 0.50	Good Fit	

4.16.9 ASSESSING MEASUREMENT MODEL FIT OF ONLINE APPAREL REPURCHASE INTENTION

CFA used to examine the factor loadings of all the items in the construct Online Apparel Re-purchase Intention . Fig 4.16 illustrating the factor loading of the 5 items namely OARI1, OARI2, OARI3, OARI4 and OARI5 . Factor Loading for all the items of the construct Online Apparel Re-purchase Intention are well above 0.50, thereby establishing the Unidimensionality.



Fig 4.16 confirmatory factor analysis of Online Apparel Re-purchase Intention

The Measurement Model of Fig 4.16 signifies the Chi-square test statistic (CMIN) = 10.912, P= 0.053, CMIN/DF= 2.182, RMSEA= 0.036; GFI= 0.995; AGFI= 0.985; NFI= 0.997; CFI= 0.998; IFI=0.998; TLI= 0.996; RFI=0.993 and PGFI=0.332. The P value is greater than 0.05 ensuring that the good measurement model fit. The other goodness of fit measures namely GFI, AGFI, NFI, CFI, IFI, TLI and RFI are also found to be above the acceptable value of 0.900. RMSEA value is 0.036 which is well within the acceptable limits of less than 0.080. The value of PGFI is 0.332 which is acceptable as the value is less than 0.50.

CMIN/DF value found to be 2.182 which is lesser than 5.0. Therefore all observed values are meeting the standard acceptable value indicating the construct as a good fit model. As the measurement model fit values are adequate for good fit model, no modification is required. The model fit values are shown in the table 4.16.8 which is indicating good fit as the values are all in accepted level.

TABLE NO. 4.16.8

MEASUREMENT MODEL FIT SUMMARY OF ONLINE APPAREL RE-PURCHASE INTENTION

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT
	ABSOI	LUTE FIT		
Goodness of Fit				
1	Chi-Square P value	0.053	> 0.05	1% level
2	GFI (Goodness-of-fit index)	0.995	> 0.90	Good Fit
3	AGFI (Adjusted goodness-of-fit index)	0.985	≥ 0.90	Good Fit
Badness of Fit				
4	Chi-Square / df (CMIN/DF)	2.182	< 5.0	Good Fit
5	RMSEA (Root mean square error of approximation)	0.036	< 0.08	Good Fit
INCREMENTAL FIT				
6	NFI (Normed fit index)	0.997	> 0.90	Good Fit
7	CFI (Comparative fit index)	0.998	> 0.90	Good Fit
8	IFI (Incremental Fit Index)	0.998	> 0.90	Good Fit
9	TLI (Tucker-Lewis index)	0.996	> 0.90	Good Fit
10	RFI (Relative Fit Index)	0.993	> 0.90	Good Fit
PARSIMONIOUS FIT				
11	PGFI (Parsimony Goodness-of- Fit Index)	0.332	< 0.50	Good Fit

4.17 EVALUATION OF STRUCTURAL MODEL USING CFA

The proposed structural model is now estimated and validated by employing SEM for hypothesis testing purposes. After all the measurement models have been validated using CFA and having satisfied measurement model fit of all the constructs and the necessary reliability and validity tests, the next part of this chapter focuses on testing the hypothesized relationship among the eight variables. In this study, SEM technique is used as the core statistical tool to test the relationship among the constructs. The process of establishing the structural model's validity follows the same general guidelines adopted for the measurement model. A new SEM estimated covariance matrix is computed using AMOS software. Specifying the structural model by assigning relationships from one construct to another based on the proposed theoretical model is a vital step.

SEM is actually the graphical representation whereby a set of mathematical equations relates dependent variables to their explanatory variables. Based on the theory and literature reviews, the structural relationships between the constructs are proposed in the form of the hypothesis in the model. The path diagram is constructed using validated measurement model of all constructs in the study. The co-variances are drawn between the exogenous constructs (Independent variables) and also error terms are marked. The single headed one way arrows showing the dependence relationship between constructs and denote the structural regression coefficients in the model. Hence it specifies the impact of one variable on the another. Thus, the path diagram shows the complete set of constructs and indicators in the measurement model and also the structural relationships among these constructs. All the estimations in the path analysis are handled by the AMOS software and it finally gives an output results which is then analyzed and reported to validate the structural model. The SEM program computes the model solution directly from data file inputted in AMOS. Path analysis was undertaken using the AMOS package of SEM technique reveals the significant interrelationships between the constructs. The structural model is executed in Amos software and Output Dialog box shows the standard estimates and Model fit summary. The overall model fit for structural model was examined and then validated. The same set of fit indices utilized to assess measurement model was used to test the full structural model. If all of the fit indices obtained were within the acceptable range associated with a good fit, it suggests that the overall SEM is a valid model.


Fig 4.17.1 Estimated Path Model

The path diagram in Figure 4.17.1 shows integrated SEM incorporating measurement model of all constructs and also structural relationship among all the constructs. In this study all the exogenous constructs such as Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Perceived Trust (PT), Perceived Enjoyment (PE), and endogenous constructs such as Online Apparel Purchase Intention (OAPI), Online Apparel Purchase Behaviour (OAPB), Online Flow Experience(OFE) and Online Apparel Re-purchase Intention (OARI) are illustrated in path Model. This path diagram facilitate the validation of the proposed model as well the analysis of the hypothesized relationships among constructs. Hence it helps to conclude that the proposed research model fits the data reasonably.

4.17.2 ASSESSING STRUCTURAL MODEL FIT

The overall fit of the structural model was evaluate using CFA with the same criteria as the measurement models are done. Using AMOS package model fit indices, standardized path coefficients and path significances were estimated for the structural model. The overall SEM model fit indices obtained are shown in Table 4.17.

The values of fit Indices for structural Model are demonstrated in table 4.17, which shows that absolute fit indices chi-square value (CMIN) is 2180.293 with the degree of freedom (DF) 965. To validate the model fit, the absolute fit measures are estimated using Amos. The first absolute goodness fit measure of GFI (Goodness of fit index) value is 0.905 which is above the fit Criterion representing model as a good fit. The next absolute goodness fit index of AGFI (Adjusted Goodness of fit) represents the value 0.894 which is equal to the 0.90 threshold is acceptable. The chi- square test statistics CMIN/DF value is 2.259 which is well below the acceptable limit of 5.0. RMSEA is said to be the error and value shows to be 0.038 which indicates good fit as the error is below the cut-off limit of 0.08. The Incremental fit measures represents the value NFI (0.943), CFI (0.967), IFI (0.967), TLI (0.965) and RFI (0.939) signifies a good fit as the index values are above the acceptable criterion of 0.90. All the incremental measures in the model are meeting the standard values indicating that the model is valid. As all the Index values of fit measures are satisfactory for good fit, the overall Structural Model is established as good fit model.

TABLE NO. 4.17

S.NO	FIT INDICES	INDEX VALUE	FIT CRITERION	RESULT				
ABSOLUTE FIT								
Goodness of Fit								
1	GFI (Goodness-of-fit index)	0.905	> 0.90	Good Fit				
2	AGFI (Adjusted goodness-of-fit index)	0.894	≥ 0.90	Good Fit				
Badness of Fit								
3	Chi-Square / df (CMIN/DF)	2.259	< 5.0	Good Fit				
4	RMSEA (Root mean square error of approximation)	0.038	< 0.08	Good Fit				
INCREMENTAL FIT								
5	NFI (Normed fit index)	0.943	> 0.90	Good Fit				
6	CFI (Comparative fit index)	0.967	> 0.90	Good Fit				
7	IFI (Incremental Fit Index)	0.967	> 0.90	Good Fit				
8	TLI (Tucker-Lewis index)	0.965	> 0.90	Good Fit				
9	RFI (Relative Fit Index)	0.939	> 0.90	Good Fit				

FINAL STRUCTURAL MODEL FIT SUMMARY

4.17.3 TESTING STRUCTURAL RELATIONSHIPS

The second step in the SEM model is testing the hypotheses formulated using path significance for each construct in the research model by computing the standardized estimates or beta coefficients. Path analysis has been carried out using AMOS software package to determine the relationships between the constructs of the model and for testing the hypothesis. P value denotes the level of significance between the constructs. *** implies path coefficients significant at 0.1% level of significance. ** implies path coefficients significant at 1% level of significance. ** implies path coefficients significance. The structural relationship among constructs shown in Figure 4.17.2 and hypothesis test results are shown in Table 4.17.1



Fig 4.17.2 Structural relationships and Hypothesis Testing

TABLE NO 4.17.1

IMPACT OF EXOGENOUS VARIABLES ON ENDOGENOUS VARIABLES

HYPOTHESIS	STRUCTURAL RELATIONSHIP		STANDARD ESTIMATES	S.E.	C.R.	Р	RESULT	
H9	OAPI	<	PU	.027	.044	.621	.534	Not significant
H10	OAPI	<	PEOU	.140	.042	3.370	***	Significant
H11	OAPI	<	РТ	.279	.037	7.525	***	Significant
H12	OAPI	<	PE	.249	.035	7.131	***	Significant
H13	OAPB	<	OAPI	.752	.034	22.056	***	Significant
H14	OFE	<	OAPB	.680	.031	21.847	***	Significant
H15	OARI	<	OFE	.612	.047	13.083	***	Significant
H16	OARI	<	OAPB	.265	.037	7.079	***	Significant

The Table 4.17.1 shows the standardized estimate (Also referred as Beta Co-efficient value), its standard error (S.E.), and the estimate divided by the standard error (abbreviated

C.R. for Critical Ratio). The probability value (P) associated with the null hypothesis been exhibited. The decision about hypothesis testing is explained using the above Amos table.

From the structural model results, it is evident that the path that connects Perceived Usefulness (PU) to Online Apparel Purchase Intention (OAPI) yields a coefficient value of 0.027 and this is not significant (SE=0.044; C.R=-0.621; P=0.534). As a result, hypothesis 9 is not supported. The results confirmed that Perceived Usefulness has no statistical influence over Online Apparel Purchase Intention.

The path that connects Perceived Ease Of Use (PEOU) to Online Apparel Purchase Intention (OAPI) shows a standard estimate value of 0.140 (SE=0.042; C.R=-3.370; P=0.000). Hence, a significant positive coefficient resulting in association of Perceived Ease Of Use with Online Apparel Purchase Intention thereby confirming Hypothesis 10. This finding is consistent with TAM theory which indicates PEOU are more likely connected with OAPI.

As shown in Table 4.17.1, the association between Perceived Trust (PT) and Online Apparel Purchase Intention (OAPI) is 0.279 and this is significant at 0.001 (SE=0.037; C.R=-7.525; P=0.000). This implies that Perceived Trust has positive influence over Online Apparel Purchase Intention and Hence, H11 is supported in this study. This finding is in line with the earlier research study (Pavlou, 2003).

With a beta coefficient value of 0.249, the association between Perceived Enjoyment (PE) and Online Apparel Purchase Intention (OAPI) is deemed to be significant (SE=0.035; C.R=7.131: P=0.000). Therefore, a significant positive coefficient in this path confirming Hypothesis 12. Davis et al., (1992), Van der Heijden, H., (2004), and Moon & Kim., (2001) studies demonstrates that there is stronger linkage between Perceived Enjoyment and Online Purchase Intention. Prior studies suggested that Perceived Enjoyment helps in accurate prediction of Consumers acceptance towards Online and contributes to causal relationship. This study also gives substantial validation confirming the influence of Perceived Enjoyment over Online Purchase Intention.

The link between Online Apparel Purchase Intention (OAPI) and Online Apparel Purchase Behaviour (OAPB) as shown in Figure 4.17.2 and Table 4.17.1 generated a coefficient value of 0.752 and this is significant at 0.001 (SE=0.034; C.R=22.056; P= 0.000). This means

that Online Apparel Purchase Intention has a significant positive relationship with Apparel Purchase Behaviour. Hence, H13 is supported in this study. This result implies that among the variables, the strongest predictor of Online Apparel Purchase Behaviour is Online Apparel Purchase Intention of the millennials. Previous empirical studies showed that a stronger relationship occur between Purchase Intention and Purchase Behaviour on the evaluation of an individual technology acceptance (Davis et al., 2000, Van der Heijden, H et al., 2003, Moon and Kim., 2001 and Vekatesh et al., 2003). This study also posit the positive effect of Purchase Intention significantly impact the millennial's Online Purchase Behaviour of Apparels.

Figure 4.17.1 shows the β coefficient value for the route from Online Apparel Purchase Behaviour (OAPB) to Online Flow Experience (OFE) is 0.680 and this is significant at 0.001 (SE=0.031; C.R=21.847; P= 0.000). Thus, H14 is supported, indicating a significant positive relationship between Online Apparel Purchase Behaviour and Online Flow Experience. A summary of the results is presented in Table 4.17.1 . Novak., (1999) entailed the need to understand consumer behavior in computer-mediated environment, in which the online customer experience becomes paramount. Hence, the hypothesis is constructed in study. The results outlined high positive association between Online Apparel Purchase Behaviour and Online Flow Experience with the same outlook put-forth by Novak, T.P., D.L. Hoffman, and Y.F. Yung (2000).

In an online context, researchers have theorized that flow experience can magnetize consumers and significantly affect subsequent attitudes and behaviors (Novak et al., 2000). Researchers have revealed that flow experience is a significant determinant of consumer attitudes toward the website (Mathwick and Rigdon, 2004). Flow experience enhance the intention to revisit and spend additional time on the website platform (Kabadayi and Gupta, 2005). Previous study by Chen et al., 1999 have also presented a strong relationship between online flow experience and subsequent online behaviors. As confirmed by Wuand Chang (2005), the online consumers who experience flow while doing shopping will possibly engage in the future purchase. Hence, the hypothesis 15 is formulated in the study. The result confirms the strong association between Online Flow Experience (OFE) and Online Apparel Re-purchase Intention (OARI) of the millennials with coefficient value of 0.612 and this is significant at 0.001 (SE=0.047; C.R=13.083: P= 0.000).

Hypothesis 16 examined the direct effect of Online Apparel Purchase Behaviour (OAPB) over Online Apparel Re-purchase Intention (OARI). As indicated in Table 4.17.1 The path between Online Apparel Purchase Intention (OAPI) and Online Apparel Re-Purchase Behaviour (OARI) generated a coefficient value of 0.265 and this is significant at 0.001 (SE=0.037; C.R=7.079; P= 0.000). This means that Online Apparel Purchase Intention has a significant positive relationship with Apparel Re-purchase Behaviour. Hence, H16 is supported in this study. Figure 4.17.3 shows the estimated path results of SEM analysis.



Note: significance at 0.001

Fig 4.17.3 The estimated path results of SEM analysis

4.18 MEDIATION ANALYSIS

A pre-established causal relationship between two variables (X,Y) is theorized to exist due to an intermediate third variable (M). The additional (third) variable that is hypothesized to have this effect is known as a "mediator". It is also sometimes referred to as an intermediate variable, explanatory link, indirect effects, surrogate effects, intermediate effects, intervening effects.



Fig 4.18 Schematic of a simple mediation model.

Figure 4.18 illustrates the framework for a simple mediation model. X represents the independent variable, Y the dependent measure, and M the mediating variable. The panel A of the figure symbolize the total effect of $X \longrightarrow Y$, whereas the Panel B depicts the introduction of the mediator. In this figure, c represents the total effect of $X \longrightarrow Y$, whereas c' represents the direct effect of X on Y after controlling of the proposed mediator. The effect cause of the independent variable over the mediator is symbolized by "a" as shown in the panel B diagram. The effect of the mediator on the dependent variable is symbolized by "b". Finally, the indirect effect is the product a x b.

The significance testing of the $X \longrightarrow Y$ relationship has been described in two stages of the causal steps approach. The starting point for mediation analysis is a significant relationship between X and Y. From this perspective, a significant c coefficient can be considered as a necessary condition for testing mediation. Without a significant c, the causal steps approach guides to the conclusion that an indirect effect does not exist as there is no overall effect to mediate. Secondly, a proposed mediator has been introduced between $X \longrightarrow Y$ and statistically controlled. It is known as the direct effect and labeled c'. After finding a significant indirect effect, if there is no longer a significant direct effect of X on Y, then researcher report full mediation. In contrast, if there remains a significant direct effect between X and Y after mediator controlling , researchers report that the mediator only partially mediates the X and Y effect. Mediation analysis uses one of three approaches mentioned below

- Baron and Kenny's mediation analysis (1986)
- The Sobel test (1982)
- The Bootstrap method (Preacher & Hayes, 2004; 2008).

In particular Mediation analysis is employed to understand a known relationship by underlying mechanism by which one variable influences the other variable through a mediator variable. Precisely Mediation analysis can contribute to better understanding the relationship between an independent variable and a dependent variable when these variables do not have an obvious direct connection.

4.18 .1 THE BOOTSTRAP METHOD

The Bootstrap Method is the robust and most popular method of testing Mediation The bootstrap method developed by Preacher & Hayes (2004, 2008) is a non-parametric re-sampling test. The main trait of this statistical test is that it does not rely on the assumption of normality, and is thus also fit for smaller sample sizes (Hair et al., 2014). This test has an advantage over Sobel's test (1982), and Baron and Kenny (1986). Both the test measures whether an intermediation effect is significant. The Bootstrap method help to determine the mediation effect with certainty. The bootstrapping can be used twice: first without the presence of mediation, and

secondly, with the presence of mediation. It should be noted that if the direct path is not significant, there is no mediating effect (Hair et al., 2014).

4.18.2 CONDUCTING THE MEDIATION ANALYSIS IN SPSS PROCESS MACRO

Mediation can be tested using the dataset by following the below steps using the regular linear regression menu item in SPSS process macro developed by Andrew F. Hayes. To perform this analysis, first click analyze, then select regression and finally select PROCESS, by Andrew F. Hayes. This process Macro first needs to be installed on the computer. The PROCESS Dialog will open. Select and shift the Independent, Dependent Variable and the mediator into their appropriate column in the dialog box. Also include any covariates in the appropriate box. In order to test a mediation effect, set the Model Number. Tick on the Options button and choose appropriate options. To observe the effect of a mediating variable, the last four options (Effect size, Sobel test, Total effect model, and Compare indirect effects) can be selected. After running this process, the output will be shown with bootstrapping statistics. This process allows to calculate the standard error, construct confidence intervals and test the hypothesis.

4.18.3 ASSESSING THE MEDIATING EFFECT OF ONLINE FLOW EXPERIENCE BETWEEN ONLINE APPAREL PURCHASE BEHAVIOUR AND ONLINE APPAREL RE-PURCHASE INTENTION

This study explored the mediating effects of Online Flow Experience between Online Apparel Purchase Behaviour and Online Apparel Re-purchase Intention of the Millennials. To test the mediation model, the PROCESS (version3.5) macro for SPSS (Andrew F. Hayes 2018) have been used. A 95 per cent percentile bootstrap confidence interval was calculated with 5,000 simulations to assess the significance of the direct and indirect effects.

Koufaris (2002) acknowledged that consumer's online flow experiences increased their willingness to visit the websites again. Consumer's online flow experiences manipulated their cognitive attitudes toward websites and their willingness to visit the same websites again (Hoffman and Novak, 1996; Koufaris, 2002). Cyr et al. (2005) recommended that customers who experience flow while shopping online would be probable to consider return visits to the website

or purchasing from it in the future. Therefore, this study proposed the Online Flow experience of the millennials as mediator between their Online Apparel Purchase behaviour and Online Apparel Re-purchase Intention. Accordingly, the following Mediation model is constructed.



Fig 4.19 Total Effect of Online Apparel Purchase Intention over Online Apparel Repurchase Intention



Note: ***p<.001

Fig 4.20 Mediation Effect of Online Flow Experience between Online Apparel Purchase Intention and Online Apparel Re-purchase Intention

In Fig 4.19 the regression model of Online Apparel Purchase Behaviour with Online Apparel Re-purchase Intention of the millennials is illustrated. Fig 4.20 showed the Mediation Effect of Online Flow Experience between Online Apparel Purchase Intention and Online Apparel Re-purchase Intention using Sobel test. Bootstrapping results from SPSS Macro are consolidated and presented in Table no 4.18

Test Path	β	SE	t value	p value	Bias corrected bootstrap confidence intervals (95%)	
					LLCI	ULCI
Total effect of OAPB on OARI (c)	0.613	0.0306	23.15	0.000	0.648	0.768
Direct effect of OAPB on OARI (c')	0.200	0.0329	7.036	0.000	0.167	0.296
OAPB→OFE (a)	0.662	0.0497	26.36	0.000	1.214	1.409
OFE→OARI (b)	0.623	0.0166	21.85	0.000	0.331	0.396
Indirect effect of OAPB on OARI (a x b)	0.412	0.0309	OAPB→OF	E→OARI	0.346	0.467

TABLE NO. 4.18 MEDIATION MODEL SUMMARY

Note: β - Standard Estimates, SE= standard error, LLCI=Lower limit confidence Interval, ULCI=Upper limit confidence interval, 5000 bootstrap samples, p<0.001.

From Table No. 4.18 The Bootstrapping method results shows that the regression coefficient of Total effect from Online Apparel Purchase Behaviour (OAPB) to Online Apparel Re-purchase Intention (OARI) ignoring the mediator, was significant, $\beta = 0.613$, t =23.15, p = <.001. The Indirect effect of Online Apparel Purchase Behaviour (OAPB) to Online Flow Experience (OFE) was also significant, $\beta = 0.662$, t= 26.36, p = <.001. The mediation process showed that the mediator (Online Flow Experience) controlling Online Apparel Re-purchase Intention (OARI) was significant, $\beta = 0.623$, t = 21.85, p = 0.000. The mediation analysis revealed that direct effect from Online Apparel Purchase Behaviour (OAPB) to Online Apparel Re-purchase Intention (OARI) through the mediator Online Flow Experience (OFE) was also significant, $\beta = 0.623$, t = 21.85, p = 0.000. The mediation analysis revealed that direct effect from Online Apparel Purchase Behaviour (OAPB) to Online Apparel Re-purchase Intention (OARI) through the mediator Online Flow Experience (OFE) was also significant, $\beta = 0.200$, t = 7.036, p =0.000. A Sobel test was conducted and found partial mediation in the model as both the direct and the indirect effect are statistically significant. It

was found that Online Flow Experience partially mediated the relationship between Online Apparel Purchase Behaviour (OAPB) and Online Apparel Re-purchase Intention (OARI). The total measure for the indirect effect of Online Apparel Purchase Behaviour on Online Apparel Re-purchase Intention through Online Flow Experience is also calculated and the effect size was found as 41% (β =0.412). The indirect effect is estimated to lie between 0.346 and 0.467 with 95% confidence. Because zero is not in the 95% confidence interval, it is concluded that the indirect effect is indeed significantly different from zero at p < .05 (two tailed).