# A Study on Determining the Customer Loyalty through the Psycho-Graphic Segmentation in the Indian Online Apparel Buying

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#### **Abstract**

Indian online marketing is witnessing high growth with it's competitive advantage over the traditional marketing. The raising literacy rate, penetration of the internet and the effective supply chain in both the rural and urban regions is one of the major factors which intensify the online marketing in India. Enormous products such as apparels, mobile phones, books, consumer electronics, footwear, jewellery, fashion accessories etc are seeking by the customers through online. According to the statistics it is observed that the major stake i.e 35% of the business is coming from apparel products only. This study considered the customers who use online avenues for the apparels online purchase. Furthermore, this research paper is emphasised to understand the role of market segmentation of the customers who are purchasing through online based on their psychographic profiles by using VALS which is the short form of Values and Lifestyles. VALS is a way of viewing people on the basis of their attitudes, needs, wants, beliefs and demographics. Moreover, this research work also emphasised to understand the role of cognitive bias with the customers' psychographic segmentation as well as their loyalty towards the online marketing avenues. Finally, this research is intended to determine the moderating role of cognitive bias on customers psychographic segments such as, innovators, strivers, achievers, experiencers, survivors, believers, thinkers and makers over customer loyalty. The results of the study explored the moderating impact of cognitive bias over customer loyalty with respect to the psychographic segmentation of the customers.

**Keywords**— Psychographic Segmentation; Cognitive Bias, Customer Loyalty; Values and Life Styles; Indian Online Marketing.

# Introduction

Market segmentation is a sub division of populace or company's contribution one or more that source them to have similar product requirements (Debo et al., 2005; Hultmaaan et al., 2009; Hung et al., 2008). The intention is to marketing augment effectiveness by concentrating marketing efforts work to a specific group (Green, 1977; Hunter et al., 2009; Tu, Y. 2008). Quite just the notion of market segmentation is again postered by Wendell Smith in the year of 1956. This thought is considerably influencing several other well-known perceptions in the domain of marketing (Kesting et al., 2011; Reichard et al., 2008; Venkatesh. R. 2011). For each and every product the outcome in which all stakeholders

are interested is called profit and by presenting variances for comparison drives to profitable scenario (Homburg, Schäfer, & Schneider, 2012; Zhang et al., 2007). At present when there is an extensive competition among the marketers for their products or services and where the resemblance survives, this idea of market segmentation accomplishes the so-called rule "Divide and conquer". It means that to target a specific set of customers for the products differently each set and win their trust and satisfaction in an accumulating manner (Yankelovich, D. et al., 2006). Market segmentation gives us to do widespread investigate and study to learn dissimilar types of end user actions with admiration to their predilections and then maintenance path of the

drift so as to fulfil their desires and anxiety through suitable product growth that pleases each type. Market segmentation can be done in many ways such as Geographic, Demographic, Psychographic and Behavioural. In the marketing segmentation procedure, it happens to recognize the basis for segmenting the marketplace and then extend profiles of ensuing divisions (Jones, Shaw, & McLean, 2009; Wyly et al., 2011).

#### **Review of Literature:**

The literature on marketing segmentation and marketing modelling is huge. Wind (1978) is a good general article on segmentation which might probably be study previous to any rigorous investigate keen on exact segmentation areas. The authors such as Myers and Tauber (1976 &1977) and Wilkie and Cohen (1977) also provided the abundant literature over the marketing segmentation research. The studies of Barnett (1969) and Yankelovich (1964); Worcester et al., (1969); Ziff, R., (1971) are considered to be pioneering studies in the concept of marketing segmentation. The preliminary evidence in segmenting a market is that segments actually do exist. In other words, the supposition is that the market is not completely standardized. It also explicated that the market segmentation will take place because of two main reasons:

- (1) To look for new product opportunities or areas which may be receptive to current product repositioning
- (2) Intended for improved advertising messages by gaining a better understanding of one's customers.

Values are fundamental to people's lives. Many behavioral activities are implemented to attain specific values. Values effect the attitude establishment and the process in which people consider the ideas regarding the products and services. Moreover, values deliberate the various evidences about the movement of the society as the values are focal to society. In view of many authors for the better understanding of the culture of the customers, it is suggested to observe the purchasing habits of that specific population (Beatty et al., 1988;

Doraszelskiw et al., 2006, Mitchell et al., 1994). Another way to understand the global market scenario it is suggested to examine the values and lifestyles of public of different nations and their cultures. Researchers may assess the relationship between the values and the consumption of specific products within different countries or within different geographic areas of nations (Lindquist et al., 2003).

The VALS system considers the total market segmentation to be in eight different segments, the segment which will possess the abundant resources and high motivation is considered to be the innovators. The last segment of the proposed model is suvivors which may consist the less resources and low motivations among them. This philosophy believed that the three traits such as ideals, achievements and selfexpression are leading the remaining segments. The segment of thinkers considered to be the customers who will have high resources and the segments who are equipped with less resources under the ideals notation is considered to be believers. The achievers which consist the more resources and the strivers who consists the less resources segmented under the notion of achievement. Finally, the segments such as experiences who consists the more resources and the makers whom they have less resources is considered to be motivated by the variable of self-expression. The eight segments of VALS scheme variety as of the pinnacle with mainly capital and high inspiration, the innovators, near the base fraction by smallest amount possessions and small drive, the survivors. Amid are Thinkers (more resources) and believers (less resources) achievers (more enthused by standards; resources) and strivers (less resources) stimulated by attainment and experiences (more resources) and makers (less resources) stirred by articulacy.

The VALS model segmented the total customers in to eight different divisions (C.Anandan et al., 2014). The innovators are considered to be good for their receptiveness towards the new product and technology. Furthermore, they will consider as the lifestyle

group which enjoys the fines things. Strivers are segment of the customers who are trendy, fashionable and fun lovers. They always preferred to have the stylish products. They give utmost priority for the opinion and approval of others towards selection of the products or services. Achievers are treated as change leaders and considered to be the highly self-esteemed customers. Experiencers are the customers who are fond of various things such as, excitement, thrill and who will strive for new things and challenges. The survivors segmented customers have high concern for their safety. They are considered to be very limited and live on narrowly focus. Believers segment customers treated as very conservative and conventional type, it is also denoted as their educational qualifications and the income levels are modest but adequate to meet their minimum needs. Thinkers are group of the people who has interest on specific subjects such as art, culture and history. Makers segment customers are the people who like to live on their own way. They never follow anyone and likes to be very trendy.

# Research Gap:

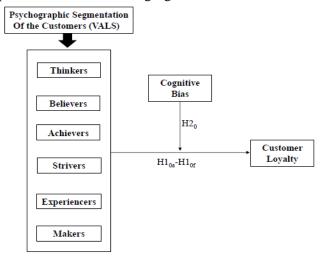
Though the concept of customer loyalty is highly recognized in marketing context, extensive research is not in that area. There are only limited studies available which depicts the role of values, attitudes and lifestyles over the customer loyalty (Lin and Mattila, 2006; Gilbert and Tsao, 2000; Lockyer and Tsai, 2004). Furthermore, the existing studies deliberated the results which are contradicting each other. Hence, it is required to understand the impact of psychographic segmented customers impact over the customer loyalty.

Moreover, cognitive bias affecting online customers behaviour towards customer loyalty with respect to psychographic segmentation has not been explored much. There is a study which reported the relationship with respect to low-income group female customers in low-involvement products in health care sector (Gbadamosi, 2009). Looking at the immense opportunity that specifically in online marketing segment, along with the need for the

marketers in the present online marketing, the growth of online shopping avenues in the Indian e-commerce has been below-par, hence the study attempts to unearth the moderating impact of cognitive bias over the psychographic segmentation of the customers on customer loyalty among the Indian online apparel segment.

# **Conceptual Model of the Study:**

Based on the research gap, the researcher developed a conceptual model and the same is presented in the following fig-1.



*Fig – 1: Conceptual Model of the Study* 

### **Objectives of the Study:**

The study has specific objectives and they are presented below:

- ➤ To determine the Psychographic Segmentation of the customers based on VALS model.
- ➤ To assess the moderating impact of Cognitive Bias on psychographic segmentation of the customers over the customer loyalty.

### **Scope of the Study:**

Basically, this research paper is aimed to explore the customers' psychographic segmentation dimensions such as thinkers, believers, achievers, strivers, experiencers and makers in online apparel retailing. Later, the acknowledged variables have been tested with the moderating effect of cognitive bias over customer loyalty. The scope of the study is confined to emotions, feelings that are evoked

by cognitive bias and customer loyalty only. The study is carried out in pan India.

### Research Methodology:

In order to measure the proposed variables of the study, the items have been selected from the previous studies. The researcher adopted 23 items (Social Research Institute (SRI) Mitchell, 1983) to measure the psychographic segmentation of the customers. To measure the customer loyalty, the scales are adopted from the study of Anandan et al., 2006. Further, Sachin et al., 2012 scale is adopted to measure the cognitive bias.

### **Statistical Tools:**

The descriptive statistics such as, mean, mode, cross-tabulation analysis and chi-square statistics are used. Further it is also used the exploratory factor analysis to check the unidimensionality of the variables. The tests like, Cronbach's Alpha and Inter-Item Correlation matrix are applied to check the reliability and consistency of the data. In order to measure the moderating impact of cognitive bias over psychographic segmentation of the customers on customer loyalty, the researcher deployed Hierarchical Regression technique. The researcher applied iteratively on each proposed independent variable over the dependent variable.

### **Exploratory Factor Analysis:**

The researcher applied exploratory factor analysis to the collected 117 samples, the principle component factor analysis and varimax rotation method to derive exploratory factory analysis. The loadings are considered those values are greater than 0.05 and rest are eliminated from the process. The EFA results primarily tested the adequacy of data through KMO and Bartlett's test. The test disclosed that the sampling adequacy is 0.856 which is greater than the threshold level of 0.6; Chi-Square value is 4030.920 and the significance value is 0.000. So that it is concluded that the primary data of this study is adequate to carry forward the research further.

### **Total Variance Explained in the Model:**

The statistical test is evidenced with totally eight components and the recorded total variance is 80.069. This value is greater than 0.60, hence we may claim that the concerned data is appropriate. Further, it is also noted that the first component of the study recorded 39.50 percent of variance, the second component of the study denoted with 10.79 percent of variance, third component of the study disclosed 8.35 percent of variance, fourth component revealed 6.26 percent, fifth component claimed 5.12 percent, sixth 3.82, component seventh component evidenced with 3.13 percent and the eighth component divulged 3.06 percent of variance. However, the total variance is considered as 80.06.

# **Unidimensionality Analysis:**

In order to conduce the large set of data, the researcher applied Rotated Component Matrix analysis. This statistical test is useful to identity the unidimentional factor loadings of the concerned items, based on that the researcher named the variables. The first variable customer loyalty is evidenced with the six items. The highest factor loading is found to be 0.830 and the lowest factor loading is found to be 0.738. The second variable cognitive bias is evidenced with five items, the highest factor loading is observed as 0.784 and the lowest factor loading is 0.731. Third variable thinkers is evidenced with four items where as one item is found to be insignificant. The highest factor loading is 0.810 and the lowest factor loading is 0.767. Fourth variable is makers which is proved with four items. The highest factor loading of makers is 0.981 and the lowest factor loading is found to be 0.784. Fifth variable of the study is experiencers and this variable is proved with four items. The highest factor loading is found to be 0.819 and the lowest factor loading in this variable is 0.698. The variable of strivers is manifested as sixth variable of the study. The highest factor loading of concerned variable is 0.837 and the lowest factor loading is found to be 0.574. Achievers is designated as seventh variable in the model. The highest factor loading of this variable is 0.829 and the lowest factor loading is found to be 0.754. Eighth and the last variable of the model is believers which is existed with three items. The highest factor loading is found to be 0.896 and the lowest factor loading is found to be 0.658. However, this rotated component matrix table helped to identify the existence of variables in the model.

# **Reliability Analysis:**

After the exploratory analysis, the researcher conducted reliability analysis to the manifested variables in the model. Based on the Cronbach's Alpha value of the model it is possible to check the reliability of the concerned variables. Usually, the reliability analysis is intended to know the consistency of the proposed variables of the study. As the proposed items of the questionnaire are drawn from different authors which have been conducted in different nations with different research objectives. In other words, this test is useful to check the consistency of the individual variables. The thumb rule for this test is the Cronbach's Alpha values should be more than 0.6. In order to test the reliability, iteratively the researcher conducted the reliability test to the proposed variables. The Cronbach's Alpha value of the variable thinkers if found to be 0.947, strivers is found to be 0.844, achievers is found to be 0.841, experience is found to be 0.929, believers is found to be 0.857, makers alpha value is 0.926, cognitive bias alpha value is 0.884 and the dependent variable customer loyalty is found to be 0.941. As all the variables Cronbach's Alpha values are found to be greater 0.6, it is believed that all the mentioned variables in the conceptual model of the study is reliable and valid for the further analysis.

### **Data Analysis:**

 $H1_{0a}$ : Thinkers and Cognitive Bias will not have significant effect over Customer Loyalty

The mean scores of the variable thinkers and cognitive bias is regressed over the customer loyalty by using hierarchical regression analysis. The model summary results revealed two regression models. In model - 1 the independent variable thinkers only regressed over the dependent variable of customer loyalty. In model - 2, the independent variables thinkers and cognitive bias combinedly regressed over the dependent variable of customer loyalty. The regression model summary results presented in table - revealed that the adjusted R square value is found to be 52.1; standard error of the estimate is 0.59414; F- value is 127.407 and the p value is found to be 0.000 in model -1. The other model -2revealed that the adjusted R square value is found to be 53.3; standard error of the estimate is 0.58711; F- value is 67.121 and the p value is found to be 0.000. The results summarised that the proposed two models are significant and the R square change is found to be 1.2 which indicates that the cognitive bias has certain impact over customers loyalty.

Table 5.28: Regression Model Summaries for Thinkers and Cognitive Bias on Customer Loyalty

Mode	Model Summary					ANOVA Results				
Mo	R	R Square	Adjusted R	Std. Error of	F-Value	df1	df2	Sia		
del	K	K Square	Square	the Estimate	r-value	ull	uiz	Sig.		
1	0.725 <sup>a</sup>	0.526	0.521	0.59414	127.407	1	115	0.000		
2	2 0.735 <sup>b</sup> 0.541 0.533 0.58711 67.121 2 114 0.000							0.000		
a. Pre	a. Predictors: (Constant), Thinkers									
b. Pre	edictors: (Co	nstant), Think	ers, Cognitive	Bias						

The beta estimates of the models are presented in the following table -. The regression statistics disclosed that the constant value of the model is 0.239; beta -1 value is found to be 0.767 and beta -2 value is denoted as 0.198. The standard

error values are 0.093 and 0.102; the p-values of the model is 0.000 and 0.015. The regression equation of the model is formulated as below.

Customer Loyalty (Y) = 0.239 + 0.767 (Thinkers)+ 0.198 (Cognitive Bias)

Table 5.29: Predictor effects and Beta Estimates (Unstandardized) for Customer Loyalty associated with Thinkers and Cognitive Bias

Coeffi	cients <sup>a</sup>						
		Unstandar	Unstandardized				
Model		Coefficier	Coefficients		t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	0.128	0.315		0.404	0.687	
1	Thinkers	0.870	0.077	0.725	11.287	0.000	
	(Constant)	0.239	0.365		0.657	0.513	
2	Thinkers	0.767	0.093	0.639	8.252	0.000	
	Cognitive Bias 0.198 0.102		0.150	1.941	0.015		
a. Der	endent Variable: Cust	omer Lovalty	•	•	•	•	

# H1<sub>0b</sub>: Believers and Cognitive Bias will not have significant effect over Customer Loyalty

The mean scores of the variable believers and cognitive bias is regressed over the customer loyalty by using hierarchical regression analysis. The model summary results revealed two regression models. In model -1 the independent variable believers only regressed over the dependent variable of customer loyalty. In model -2, the independent variables believers and cognitive bias combinedly regressed over the dependent variable of

customer loyalty. The regression summary results presented in table - revealed that the adjusted R square value is found to be 16.9; standard error of the estimate is 0.82865; F- value is 14.615 and the p value is found to be 0.000 in model -1. The other model -2revealed that the adjusted R square value is found to be 28.0; standard error of the estimate is 0.72857; F- value is 23.601 and the p value is found to be 0.000. The results summarised that the proposed two models are significant and the R square change is found to be 11.1 which indicates that the cognitive bias has moderate impact over customers loyalty.

Table 5.28: Regression Model Summaries for Believers and Cognitive Bias on Customer Loyalty

Mode	Model Summary					ANOVA Results				
Mo	R R Square	R Square	Adjusted R	Std. Error of	F-Value	df1	df2	Sig.		
del		Resquare	Square	the Estimate	1 varae	ui i	u12	516.		
1	0.278a	0.177	0.169	0.82865	14.615	1	115	0.000		
2	0.541 <sup>b</sup>	0.293	0.280	0.72857	23.601	2	114	0.000		
a. Pre	a. Predictors: (Constant), Believers									
a. Pre	2 00.12 00.20 00.200									

b. Predictors: (Constant), Believers, Cognitive Bias

The beta estimates of the models are presented in the following table -. The regression statistics disclosed that the constant value of the model is 0.129; beta -1 value is found to be 0.240 and beta -2 value is denoted as 0.630. The standard error values are 0.117 and 0.107; the p-values

of the model is 0.042 and 0.000. The regression equation of the model is formulated as below.

Customer Loyalty (Y) = 0.129 + 0.240 (Believers)+ 0.630 (Cognitive Bias)

Coeff	icients <sup>a</sup>					
	Model		Unstandardized Coefficients			
Mode					t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.941	0.551		3.519	0.001
1	Believers	0.400	0.129	0.278	3.101	0.002
	(Constant)	0.129	0.574		0.224	0.823
2	Believers	0.240	0.117	0.167	2.061	0.042
	Cognitive Bias 0.630 0.107		0.107	0.477	5.896	0.000
a. Dep	endent Variable: Cust	omer Loyalty	•	•	•	•

Table 5.29: Predictor effects and Beta Estimates (Unstandardized) for Customer Loyalty associated with Believers and Cognitive Bias

# H1<sub>0c</sub>: Achievers and Cognitive Bias will not have significant effect over Customer Loyalty

The mean scores of the variable achievers and cognitive bias is regressed over the customer loyalty by using hierarchical regression analysis. The model summary results revealed two regression models. In model – 1 the independent variable achievers only regressed over the dependent variable of customer loyalty. In model – 2, the independent variables achievers and cognitive bias combinedly regressed over the dependent variable of customer loyalty. The regression model

summary results presented in table – revealed that the adjusted R square value is found to be 12.5; standard error of the estimate is 0.80362; F- value is 17.498 and the p value is found to be 0.000 in model – 1. The other model -2 revealed that the adjusted R square value is found to be 31.3; standard error of the estimate is 0.71168; F- value is 27.473 and the p value is found to be 0.000. The results summarised that the proposed two models are significant and the R square change is found to be 19.3 which indicates that the cognitive bias has high impact over customers loyalty.

Table 5.28: Regression Model Summaries for Achievers and Cognitive Bias on Customer Loyalty

Mode	Model Summary					ANOVA Results				
Mo	D	R R Square	Adjusted R	Std. Error of	F-Value	df1	df2	Sig.		
del	K	K Square	Square	the Estimate	1'- value	ull	uiz	Sig.		
1	0.363 <sup>a</sup>	0.132	0.125	0.80362	17.498	1	115	0.000		
2	2 0.570 <sup>b</sup> 0.325 0.313 0.71168 27.473 2 114 0.000						0.000			
a. Pre	a. Predictors: (Constant), Achievers									
b. Pre	b. Predictors: (Constant), Achievers, Cognitive Bias									

The beta estimates of the models are presented in the following table -. The regression statistics disclosed that the constant value of the model is 0.623; beta -1 value is found to be 0.455 and beta -2 value is denoted as 0.599. The standard error values are 0.144 and 0.105; the p-values

of the model is 0.002 and 0.000. The regression equation of the model is formulated as below.

Customer Loyalty (Y) = 0.623 + 0.455 (Achievers)+ 0.599 (Cognitive Bias)

Table 5.29: Predictor effects and Beta Estimates (Unstandardized) for Customer Loyalty associated with Achievers and Cognitive Bias

Coefficients <sup>a</sup>									
	Unstandardized		Standardized						
Model	Coefficients		Coefficients	t	Sig.				
	В	Std. Error	Beta						

1	(Constant)	0.887	0.661		1.342	0.182				
1	Achievers	0.660	0.158	0.363	4.183	0.000				
2	(Constant)	0.623	0.642		0.970	0.334				
	Achievers	0.455	0.144	0.250	3.151	0.002				
	Cognitive Bias	0.599	0.105	0.454	5.713	0.000				
a. Dep	a. Dependent Variable: Customer Loyalty									

# $H1_{0d}$ : Strivers and Cognitive Bias will not have significant effect over Customer Loyalty

The mean scores of the variable strivers and cognitive bias is regressed over the customer loyalty by using hierarchical regression analysis. The model summary results revealed two regression models. In model -1 the independent variable strivers only regressed over the dependent variable of customer loyalty. In model -2, the independent variables strivers and cognitive bias combinedly regressed over the dependent variable of

loyalty. The regression model customer summary results presented in table - revealed that the adjusted R square value is found to be 28.1; standard error of the estimate is 0.72846; F- value is 46.251 and the p value is found to be 0.000 in model -1. The other model -2revealed that the adjusted R square value is found to be 35.1; standard error of the estimate is 0.69205; F- value is 32.332 and the p value is found to be 0.000. The results summarised that the proposed two models are significant and the R square change is found to be 7 which indicates that the cognitive bias has moderate impact over customers loyalty.

Table 5.28: Regression Model Summaries for Strivers and Cognitive Bias on Customer Loyalty

Mode	Model Summary					ANOVA Results				
Mo del	R	R Square	Adjusted R Square	Std. Error of the Estimate	F-Value	df1	df2	Sig.		
1	0.536a	0.287	0.281	0.72846	46.251	1	115	0.000		
2	0.602 <sup>b</sup>	0.362	0.351	0.69205	32.332	2	114	0.000		
a. Pre	a. Predictors: (Constant), Strivers									
h Pre	edictors: (Co	nstant) Strive	ers Cognitive B	lias						

The beta estimates of the models are presented in the following table -. The regression statistics disclosed that the constant value of the model is 0.475; beta -1 value is found to be 0.598 and beta -2 value is denoted as 0.426. The standard error values are 0.145 and 0.116; the p-values

of the model is 0.000 and 0.000. The regression equation of the model is formulated as below.

Customer Loyalty (Y) = 0.475 + 0.598 (Strivers)+ 0.426 (Cognitive Bias)

Table 5.29: Predictor effects and Beta Estimates (Unstandardized) for Customer Loyalty associated with Strivers and Cognitive Bias

Coeff	ficients <sup>a</sup>						
		Unstanda	Unstandardized				
Model		Coefficier	Coefficients		t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	0.069	0.528		0.130	0.896	
	Strivers	0.879	0.129	0.536	6.801	0.000	
	(Constant)	0.475	0.524		0.908	0.366	
2	Strivers	0.598	0.145	0.364	4.130	0.000	
	Cognitive Bias	0.426	0.426 0.116		3.663	0.000	
a. De	pendent Variable: Cus	tomer Loyalty	•	•	•	•	

# $H1_{0e}$ : Experiencers and Cognitive Bias will not have significant effect over Customer Loyalty

The mean scores of the variable experiencers and cognitive bias is regressed over the customer loyalty using hierarchical by regression analysis. The model summary results revealed two regression models. In model - 1 the independent variable experiencers only regressed over the dependent variable of customer loyalty. In model - 2, the independent variables experiencers and cognitive bias combinedly regressed over the dependent variable of customer loyalty. The regression model summary results presented in table revealed that the adjusted R square value is found to be 42.0; standard error of the estimate is 0.65436; F- value is 84.838 and the p value is found to be 0.000 in model - 1. The other model -2 revealed that the adjusted R square value is found to be 42.7; standard error of the estimate is 0.65030; F- value is 44.171 and the p value is found to be 0.000. The results summarised that the proposed two models are significant and the R square change is found to

be 0.7 which indicates that the cognitive bias has very low impact over customers loyalty.

Table 5.28: Regression Model Summaries for Experiencers and Cognitive Bias on Customer Loyalty

Mode	el Summary					
Mo	R	D Canara		Std. Error of		
del	K	R Square	Square	the Estimate		
1	0.652a	0.425	0.420	0.65436		
2	0.661 <sup>b</sup>	0.437	0.427	0.65030		
o Dro	diators (Co	nctant) Evno	rioncore			

a. Predictors: (Constant), Experiencers

b. Predictors: (Constant), Experiencers, Cognitive Bias

The beta estimates of the models are presented in the following table -. The regression statistics disclosed that the constant value of the model is 0.306; beta -1 value is found to be 0.457 and beta -2 value is denoted as 0.194. The standard error values are 0.078 and 0.124; the p-values of the model is 0.000 and 0.021. The regression equation of the model is formulated as below.

Customer Loyalty (Y) = 0.306 + 0.457 (Experiencers)+ 0.194 (Cognitive Bias)

Table 5.29: Predictor effects and Beta Estimates (Unstandardized) for Customer Loyalty associated with Experiencers and Cognitive Bias

		Unstanda	Unstandardized			
Model		Coefficie	Coefficients		t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.797	0.208		8.626	0.000
	Experiencers	0.538	0.058	0.652	9.211	0.000
	(Constant)	stant) 0.306			3.471	0.001
2	Experiencers	0.457	0.078	0.553	5.867	0.000
•	Cognitive Bias	0.194	0.124	0.147	1.563	0.021

# $H1_{0f}$ : Makers and Cognitive Bias will not have significant effect over Customer Loyalty

The mean scores of the variable makers and cognitive bias is regressed over the customer loyalty by using hierarchical regression analysis. The model summary results revealed

two regression models. In model – 1 the independent variable makers only regressed over the dependent variable of customer loyalty. In model – 2, the independent variables makers and cognitive bias combinedly regressed over the dependent variable of customer loyalty. The regression model summary results presented in table – revealed that the adjusted R square value is found to be

52.1; standard error of the estimate is 0.86190; F- value is 19.187 and the p value is found to be 0.000 in model -1. The other model -2 revealed that the adjusted R square value is found to be 56.1; standard error of the estimate is 0.73973; F- value is 21.189 and the p value is

found to be 0.000. The results summarised that the proposed two models are significant and the R square change is found to be 3.1 which indicates that the cognitive bias has moderate impact over customers loyalty.

Table 5.28: Regression Model Summaries for Makers and Cognitive Bias on Customer Loyalty

Mode	Model Summary					ANOVA Results				
Mo	R R Square	D Canara	Adjusted R	Std. Error of	F-Value	df1	df2	Sig.		
del		K Square	Square	the Estimate	1'- v alue	ui i	uiz	Sig.		
1	0.540 <sup>a</sup>	0.523	0.521	0.86190	19.187	1	115	0.000		
2	0.561 <sup>b</sup>	0.558	0.552	0.73973	21.189	2	114	0.000		
a. Pre	a. Predictors: (Constant), Makers									

b. Predictors: (Constant), Makers, Cognitive Bias

The beta estimates of the models are presented in the following table -. The regression statistics disclosed that the constant value of the model is 0.478; beta -1 value is found to be 0.110 and beta -2 value is denoted as 0.686. The standard error values are 0.130 and 0.106; the p-values

of the model is 0.001 and 0.000. The regression equation of the model is formulated as below.

Customer Loyalty (Y) = 0.478+ 0.110 (Makers)+ 0.686 (Cognitive Bias)

Table 5.29: Predictor effects and Beta Estimates (Unstandardized) for Customer Loyalty associated with Makers and Cognitive Bias

Coefficients <sup>a</sup>					
	Unstand	Unstandardized			
Model	Coeffici	ents	Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant	3.367	0.624		5.397	0.000
1 Makers	0.065	0.151	0.040	0.432	0.667
(Constant	0.478	0.696		0.686	0.494
2 Makers	0.110	0.130	0.067	0.842	0.001
Cognitive	e Bias 0.686	0.106	0.520	6.490	0.000

#### **Discussion of Results:**

The study consists of six sub hypotheses under hypothesis – 1. The results disclosed that the cognitive bias can effect the different types of customers who are segmented based on the psychographic segmentation when regressed over the customer loyalty. The moderating impact of cognitive bias over thinkers on customer loyalty is found to be significant. Though the model is found to be significant, the moderating impact is found to be very less as it denoted only 1.2 percent which is very meagre. This phenomenon clearly indicates that the thinkers are very much deterministic customers and due to cognitive bias, they are not deviating

much. The other segmentation of believers is also tested, the impact of believers on customers loyalty model generated only 17.7 percent of variance in the model. When the believers and cognitive bias is jointly regressed, the variance in the model is found to be 29.3 percent where the change in R square is found to be very high which is 11.1 percent. This scenario indicates that the believers are much effecting by the cognitive bias. Basically, the believers' segment is tend to be conservative, hence they are drastically effecting by the impact of cognitive bias while purchasing the apparels through online.

The moderating impact of cognitive bias is found to be very high with respect to achievers.

In this test, model - 1 which reveals the impact of achievers over customer loyalty is found to be only 12.5 percent and it has been raised to 31.3 percent when it is associated with cognitive bias. Finally, it is denoted that the moderating impact i.e change in R square is found to be 19.3 percent in this model. As the achievers are high self-esteemed and it is proved that the cognitive bias is highly influencing them when placing the order for apparels through online. The results of the strivers segments over customer loyalty through moderating impact of cognitive bias elicited that the concerned model is significant. The first model of the test revealed the R square value as 28.1 percent and the model - 2 revealed as 35.1 percent which the difference 7 percent is the moderating impact of cognitive bias. The nature of strivers is fashion seekers and likes to purchase the fashionable products. Hence, we understand that the impact of cognitive bias is found to be high with respect to the strivers segment.

In general, the experiencers segment customers like excitement, thrill and new challenges. They are supposed to tend for trying the new things, but the results in this study are quite interesting and contradictory. The change in R square of the model is found to be 0.7 percent which is meagre. Hence, we understand that the moderating impact over the experiencers is very less. The segmentation of makers over the customer loyalty derived the R square value of 52.1 percent and when makers and cognitive bias are regressed over the customer loyalty the R square value is observed as 55.2. Hence, we understand that the role of cognitive bias is moderate over the makers. Basically, the makers are the customer segment which seeks to make the things on their own way. However, the results indicated that the cognitive bias has moderating impact over makers and customer loyalty while purchasing the apparels on various online platforms.

# Scope for the Future Research:

This study can consider as an empirical evidence for the moderating effect of cognitive bias over the customer loyalty with respect to the psychographic segmentation of the online apparels. This study is confined only to the market segmentation based on VALS model; the future research can be done on subsegmentation of the proposed customer segments. For instance, the future research can be done on strivers segments sub-groups such as trend seekers, fashionable and fun-lovers etc, Furthermore, this study is limited only to check the impact of customer segments over customer loyalty only, the study can be extended to customer satisfaction.

#### **Conclusion:**

The impact of cognitive bias over the customer loyalty while purchasing the apparels through online platforms is assessed through this research paper. This research paper can consider as a basis for the better understanding of the customers in the market segmentation.

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