

Factor That Affects Consumer Buying Behavior: An Analysis of Some Selected Factors

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Abstract: The current debate was started between the economic theory and marketing theory on the issue of key determinants of consumers' response to product offer. Through in depth analysis of the available data, it has confirmed that the level of education and income level are only two key determinants of consumers' response to product offer. Moreover, the consumers' are not homogeneous in terms of their response to product offer in context of level of education and income level. Consumers' who earn more i.e. have high income level are more responsive to product offers as compared to those who earn less within a month. Convincingly, the consumers with high level of income have adequate saving and surplus amount to spend on such extra product offerings. Contrary to this condition the consumers with limited earnings do not have something extra to pay against such product offers. It is therefore confirmed that the level of income is a significant predictor of consumer response to product offer.

Key words: Consumer buying behavior • Selected factors

INTRODUCTION

The economic theory is of the view that the consumers' behavior is significantly driven by the level of income. While making a purchase the purchasing power is taken as a significant element. In contrast to this attribution the Marketing philosophy argues that the level of income cannot be treated as a single factor while explaining the consumer buying behavior and response toward a specific category. The marketing theory suggests that there might be many other potential determinants of consumer behavior toward buying different products.

When a person move toward a market to purchase a product at that time different factor affects his or her decision while final selection or purchasing decision of a product. Such kind of factor can be income, family, environment and peer groups etc. All of these factors are important but most frequently income factor is major factor which impact over the consumer behavior to purchase a product and according to researcher consumer buying behavior is influenced by certain variables such as income, age, education and occupation [1].

On the logical ground the marketing core is at right end suggesting more than one predictors of consumer behavior. In common observation the consumers hold valuable products far beyond their buying capacity. Convincingly, the relaxed payment policies have made it easy for buyers to hold costly items normally beyond their purchasing power by in whole down payment.

Here, in the remaining portion the attempt will be made to retest the counter arguments of economic view point and marketing view point in terms of consumer buying behavior in purchasing capacity context. Different factors like consumers' level of education, birth month, credit card debt, marital status, political outlook and preferred breakfast have been taken as extended potential determinants of consumer buying behavior.

Objectives of Research: This research paper intends to identify the different factors that affect on respond to product offer. By taking age, marital status, income, birth month, preferred breakfast and political outlook as independent variables to check affect of all these factors on "respond to product offer" which is dependent variable. A secondary purpose of this research paper is

also to identify factors that majorly affect over respond to product offer. In doing so the paper will endeavor to answer the following questions;

- Factors that affect on consumer buying behavior?
- Major factor that affect on respond to product offer?

Literature Review: Literature is also studied to understand the different factors of this research. Different researcher has identified the relationship of different factors with consumer behavior decision toward product offer. With the help of literature the relationship of age, gender, income, education is defined by different researcher point of view that how these factors affects on the buying behavior and what kind of relationship is exist regarding different researchers point of view,

According to researcher the price affect over the income [2]. Consumer behavior has greatly affects on age [1]. Consumer buying behavior is a process which in comprises on the process of gathering information, gathering information about selecting and purchasing product. [3]. Demographic, behavioral and psychographic factors help to understand the consumer need [4].

Consumer behaviors of the individuals focus that how they make decisions to spend their available resources such as time, money and efforts on consumption related products [5]. Consumer behavior is about to know that how, what, when, why people buy, [4]. Furthermore, CB greatly influence by certain factors such as demographic factors, including age, education, income as well as occupation of individuals [1].

Different researchers have described the relationship between income level of individual and CB behavior as researcher said that income, age are factors that affect on consumer buying behavior [6]. Income has positive relationship with promotion response behavior of consumer but some researcher considered negative relationship. Some researchers have found that there is no relationship of some factors like income, education, type of housing on response of consumer [7]. Age is also a factor in consumer buying behavior like according to researcher older shoppers most likely seek entertainment in their shopping [8].

Methodology: For statistical analysis, certain test are being used e.g. descriptive statistics to describe data and then inferential statistics by implementing multiple linear regression, normality test and implemented one way

analysis of variance (ANOVA) on certain variables to measure relationship with consumer behavior discussed below,

Descriptive Statistics: Descriptive statistics techniques is just used to describe the data and for implementing further analysis. Because on the behalf of descriptive statistics we can't do analysis or generate any result. Therefore, to understand the basic data description this technique is being implemented which is discussed below:

Consumers' Demographics: In order to take some preliminary insights to the nature of data the consumers' demographical profile will be discussed in short in the introductory part of the analysis section. It will help to understand the sampled distribution by gender, age, education, marital status, credit card debt, political outlook and preferred breakfast.

Normality Check: As the data collected is not composed of likert scales therefore the reliability and validity checks will not be performed. By the same taken there would be no issue of the presence of the element of singularity. Therefore, the correlation analysis will not be incorporated. However, the normality test will be performed in order to avoid the violations of stated assumptions of tests being used in further analyses.

Inferential Statistics

Multiple Linear Regression Analysis: Here, it is intended to investigate the key determinants of consumer buying behavior triggered by different product offers. Therefore, the multiple regression analysis technique will be employed. The multiple linear regression analysis will help to understand the key factors behind the consumer response to different product offers. Additionally, the predictive capacity of the resultant model will be known. The contribution of each stated factor toward the consumers' response generation will be captured. It will help to understand the importance of each variable in the resultant model.

The variable named "Consumer Response to Product Offer 02" will be regressed against the independent variables namely consumers' level of education, birth month, credit card debt, marital status, political outlook and preferred breakfast.

One-Way ANOVA Analysis: Moreover, in order to check the significant differences between and within the groups the One-Way ANOVA technique will be used.

Tabl -01: Sample Distribution by Gender

		Gender			
		F	%	Valid Percent	Cumulative%
Valid	Male	2449	49.0	49.0	49.0
	Female	2551	51.0	51.0	100.0
Total		5000	100.0	100.0	

Table 02: Sample Distribution by Age

		Age Category			
		F	%	Valid Percent	Cumulative%
Valid	18-24	623	12.5	12.5	12.5
	25-34	885	17.7	17.7	30.2
	35-49	1245	24.9	24.9	55.1
	50-64	1202	24.0	24.0	79.1
	>65	1045	20.9	20.9	100.0
Total		5000	100.0	100.0	

Data Analysis

Consumers' Demographics Analysis: The demographic analysis was performed in order to capture some preliminary insights to the consumers' dataset. It has been found that the sample was evenly distributed by gender i.e. 49% of the data were female and 51% were males (Table-01).

In terms of age category, 12.5% were between the range of 18-24 years, 17.7% were between 25-34 years, 24.9% were between 35-49 years, 24% were between 50-64 years and 20.9% were 65 years and above. It can be observed that the least number of respondents were with the range of 18-24 years while the majority of the sampled consumers was within the range of 35-49 years (Table-02).

By education level the least number of respondents had post undergraduate degree while the majority of the respondents had high school degree. Consumers who did not complete their high school level were 19.1%, consumers who had some sort of college level qualification were 20% and those who had college level degree were 22.3% (Table 03). Among sampled consumers the majority was unmarried i.e. 51.2% while the least number of respondents were married i.e. 48.8%. Convincingly, the sample distribution by gender is also evenly distributed (Table 04).

Multiple Linear Regression Analysis: Multiple linear regression analysis was employed in order to identify the key determinants of consumers' response to product offer. It has been found that the proposed variables poorly explain the consumers' response toward product. The variable namely 'Response to Product Offer 02' was entered as dependent variable while seven other variables namely 'Income in Thousands', 'Level of Education', 'Age', 'Credit Card Debt in Thousands', 'Marital Status', 'Political Outlook' and 'preferred Breakfast' were entered as independent variables (Table-06).

The predictive capacity of the proposed model is not up to the desired level ($R^2=0.007$) (See Table-05). Though the value of R^2 with lower magnitude is acceptable in social sciences but the value of R^2 in present case does not meet the threshold value proposed in the disciplines of social sciences.

Moreover, it has been confirmed that the income was the significant predictor of consumers' response to product offer (Beta=0.053, $p=0.001$). In the similar fashion

Table 03: Sample Distribution by Level of Education

		Level of Education			
		F	%	Valid Percent	Cumulative%
Valid	Did not complete high school	953	19.1	19.1	19.1
	High school degree	1571	31.4	31.4	50.5
	Some college	1002	20.0	20.0	70.5
	College degree	1113	22.3	22.3	92.8
	Post-undergraduate degree	361	7.2	7.2	100.0
Total		5000	100.0	100.0	

Table 04: Sample Distribution by Marital Status

		Marital Status			
		F	%	Valid Percent	Cumulative%
Valid	Unmarried	2559	51.2	51.2	51.2
	Married	2441	48.8	48.8	100.0
Total		5000	100.0	100.0	

Table 05: Proposed Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.084 ^a	.007	.006	.339

a. Predictors: (Constant), Preferred breakfast, Political outlook, Credit card debt in thousands, Level of education, Marital status, Age category, Income category in thousands

Table 06: Regression Coefficients

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.062	.027		2.301	.021
	Income category in thousands	.015	.005	.053	3.185	.001
	Level of education	.015	.004	.053	3.656	.000
	Age category	-.001	.004	-.004	-.261	.794
	Credit card debt in thousands	.000	.002	-.004	-.268	.789
	Marital status	.017	.010	.025	1.757	.079
	Political outlook	-.002	.004	-.008	-.528	.598
	Preferred breakfast	3.381E-5	.006	.000	.006	.995

a. Dependent Variable: Response to product offer 02

Table 07: ANOVA by Level of Education

ANOVA					
Response to product offer 02					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.160	4	.790	6.882	.000
Within Groups	573.395	4995	.115		
Total	576.555	4999			

the consumers level of education also predicts their response to product offer significantly (Beta=0.053, p=0.000).

Contrary to these findings the 'Age' (Beta=-0.004, p=0.794), 'Credit Card Debt' (Beta=-0.004, p=0.789), 'Marital Status' (Beta=0.025, p=0.079), 'Political Outlook' (Beta=-0.008, p=0.598) and 'Preferred Breakfast' (Beta=0.000, p=0.995) were not the significant predictors of consumers' response to product offer (Table-06).

Conclusively, the 'Income' and 'Level of Education' were only the significant predictors of consumers' response to product offer.

One-Way Analysis of Variance (ANOVA) by Level of Education: In order to take the deeper insights into the consumer response patterns to product offer, the analysis of variance was incorporated with the help of Least Square Difference (LSD) technique. It has been confirmed that the consumers were significantly different from each other in terms of their response to product offer (Table-07).

To further understand the difference between consumers' response to product offer see Table-08. It can be seen that the consumers who did not complete their high school education are less responsive toward product offer as compared to those who have high school degree, some college level qualification, college degree and post undergraduate degree.

Consumers with high school degree are more responsive to product offer as compared to those with no high school level education. Contrary to this argumentation, the consumers with high school degree are less responsive to product offer as compared to those who have some sort of college level qualification, those who have college degree and those who have post undergraduate degree.

One-Way Analysis of Variance (ANOVA) by Level of Income: It has been confirmed that the consumers were significantly different from each other in terms of their response to product offer subject to their level of income (Table-09). Through Least Square Difference (LSD)

Table 08: Least Square Difference (LSD) by Education

Multiple Comparisons						
Response to product offer 02 LSD						
(I) Level of education	(J) Level of education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DNCHE	HSD	-.037*	.014	.007	-.06	-.01
	SC	-.062*	.015	.000	-.09	-.03
	CD	-.048*	.015	.001	-.08	-.02
	PUD	-.094*	.021	.000	-.14	-.05
HSD	DNCHS	.037*	.014	.007	.01	.06
	SC	-.025	.014	.067	-.05	.00
	CD	-.011	.013	.421	-.04	.02
	PUD	-.057*	.020	.004	-.10	-.02
SC	DNCHS	.062*	.015	.000	.03	.09
	HSD	.025	.014	.067	.00	.05
	CD	.014	.015	.328	-.01	.04
	PUD	-.032	.021	.125	-.07	.01
CD	DNCHS	.048*	.015	.001	.02	.08
	HSD	.011	.013	.421	-.02	.04
	SC	-.014	.015	.328	-.04	.01
	PUD	-.046*	.021	.024	-.09	.00
PUD	DNCHS	.094*	.021	.000	.05	.14
	HSD	.057*	.020	.004	.02	.10
	SC	.032	.021	.125	.00	.07
	CD	.046*	.021	.024	.01	.09

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

Did Not Complete High School (DNCHS)

High School Degree (HSD)

Some College (SC)

College degree (CD)

Post-Undergraduate Degree (PUD)

Table 09: ANOVA by Income

ANOVA					
Response to product offer 02					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.300	4	.575	5.002	.001
Within Groups	574.255	4995	.115		
Total	576.555	4999			

technique, it was found that the consumers with income level \$25 and those with 25\$-49\$ respond to the product offer in similar fashion. However the consumers with income level of \$75-\$124 and \$125 above are more responsive to the product offer as compared to those with income level of \$25-\$49. It confirms that the product offers captures the attention of consumers with income levels (Table-10). It can be seen that the highest income level within the sampled consumers is \$125 and above and this

income group is found to be the more responsive group to the product offer. Conversely, the lowest income group within the sampled population is under \$25. Noticeably, this group of consumers with lower income level is least responsive to the product offer.

Therefore, it can be argued that the level of income alone does not determine the consumers' response to product offering rather the level of income inclusively matters a lot in this regard

Table 10: Least Square Difference (LSD) by Income

Multiple Comparisons					95% Confidence Interval	
Response to product offer 02 LSD					Lower Bound	Upper Bound
(I) Income category in thousands	(J) Income category in thousands	Mean Difference (I-J)	Std. Error	Sig.		
Under \$25	\$25 - \$49	.000	.012	.987	-.02	.02
	\$50 - \$74	-.025	.015	.100	-.05	.00
	\$75 - \$124	-.042*	.016	.009	-.07	-.01
	\$125+	-.067*	.020	.001	-.10	-.03
\$25 - \$49	Under \$25	.000	.012	.987	-.02	.02
	\$50 - \$74	-.025	.014	.085	-.05	.00
	\$75 - \$124	-.042*	.015	.006	-.07	-.01
	\$125+	-.066*	.019	.000	-.10	-.03
\$50 - \$74	Under \$25	.025	.015	.100	.00	.05
	\$25 - \$49	.025	.014	.085	.00	.05
	\$75 - \$124	-.017	.018	.327	-.05	.02
	\$125+	-.042*	.021	.045	-.08	.00
\$75 - \$124	Under \$25	.042*	.016	.009	.01	.07
	\$25 - \$49	.042*	.015	.006	.01	.07
	\$50 - \$74	.017	.018	.327	-.02	.05
	\$125+	-.024	.022	.258	-.07	.02
\$125+	Under \$25	.067*	.020	.001	.03	.10
	\$25 - \$49	.066*	.019	.000	.03	.10
	\$50 - \$74	.042*	.021	.045	.00	.08
	\$75 - \$124	.024	.022	.258	-.02	.07

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

CONCLUSION

This study was aspired to investigate the key determinants of consumers' response to product offer. In this attempt to develop the comprehensive model seven independent variables were determined with the expectation that they significantly determine the consumer response toward product offer. But, only two among seven proposed variables significantly determined the consumer response while the rest were not significant predictors of consumer response. These two significant predictors were the consumers' level of education and their income level.

Among those seven independent variable such as age, income, education, birth month, credit card debt, marital status, preferred breakfast and political outlook are expecting to determine consumer response toward product offer and only income and education are major predictors of consumer behaviors as compare to others like marital status, birth month, credit card debt, preferred breakfast as well as age have fewer affect over response to product offer comparatively income level and education of consumer.

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