AN EXPLORATORY STUDY ON LOW-INCOME CONSUMER BEHAVIOUR WITH REFERENCE TO THEIR MARKET PLACE

By –

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ABSTRACT

Since intense competition in the market every marketer has to search for new opportunities as part of this process we made an attempt to conduct a survey on low income consumer behaviour in Y.S.R Kadapa and Chittoor districts of Andhra Pradesh. In the present study we selected the people whose income is less than rupees one lakh sixty thousands per annum and treated them as low income consumers. Here, we focussed on the market place and the influencing factors of the low income consumers to visit that particular market place. The key inferences are the low income consumers' market place is being influenced by their income and income is depending on profession and profession is relying on education. Among various market places we found that they are mostly visiting public distribution shop for purchasing goods and among the various factors we found the variables like ' to purchase all the available goods at PDS,' 'quantity' are the most influencing factors. In the present study through multi-stage non random sampling technique we selected 500 respondents and the tools for data analysis were mean, median, mode, chi-square test, factor analysis and reliability scaling.

Key words: low-income consumer, market place, public distribution shop,

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In the majority cases the occupations of the low-income consumers rely on the education level of the low-income people in the proposed study area (Abraham Konda and Rajasekhar Mamilla, January, 2015)*. In connection with such inferences the present study is conducted to bring forward the current research and to make further inferences.

Objectives:

To trace the relationship between profession and income of the low-income consumers in the present study area.

To know the association between the income of the low-income consumers and their market place.

To find out the market place where we can take many low-income consumers for purchasing goods.

To dig out the main reasons why the low income consumers are visiting to a particular market place.

Sample selection: Through multy-stage non random sampling technique 250 respondents each were selected from Chittoor and Y.S.R. Kadapa districts of Andhra Pradesh. Hence, the total sample respondents were 500.

Tools for data analysis: Descriptive statistics like mean median mode, chi-square test, data reduction and reliability scaling analysis.

Low-income consumers: The consumers whose income is below Rs. One lakh sixty thousand per year were treated as low income consumers in the present study.

Table no. 1: Profile of the respondents according to their profession and income.

Profession	Income			Total
	1. Up to 80,000	2. 80,000-1,20,000	3. 120,000-160,000	
1. Agricultural labour	237	38	0	275
2. Private employees	0	89	6	95
3. Others	0	0	130	130
Total	237	127	136	500

The above table explains the profile of the respondents according to their profession and income. Out of 275 agricultural labours 237 are belongs to the income level 1 and 38 are relating to the income level 2 as shown in the above table. In the similar fashion the others that is the own business running people, government employee, etc., are 130 all these people are falling in to the third income category.

Table no.2: Relationship between profession and income.

Description	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	759.180(a)	4	.000
Likelihood Ratio	790.417	4	.000
Linear-by-Linear Association	444.694	1	.000
N of Valid Cases	500		

Based on the above values it is clear that there is a significant relationship between the profession and the income of the low income consumers in the proposed study area. Hence, the null hypothesis is rejected. That means based on the profession of the low-income consumers their income is changing.

Table no.3: Profile of the respondents according to their income and market place.

Income	Market place					Total
	Public distribution shops	Retail shop	Mandal head quarters	District heae quarters	Fairs and exbhitations and others	
Up to Rs. 80,000	231	3	1	1	1	237
80,000-120,000	123	1	0	1	2	127
120,000-160,000	100	13	8	11	4	136
Total	454	17	9	13	7	500

The above table depicts that out of 500 respondents 454 respondents are belongs to 'public distribution shops' 17 are relating to 'retail shops' 9 are 'mandal head quarters' 13 are quoted 'district head quarters', 'fairs and others' are quoted by only 7 low income consumers. In the same table we can take the income wise categorisation of low income consumers.

Table no. 4: Relationship between income and the market place being visited by low-income consumers.

Description	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.054(a)	8	.000
Likelihood Ratio	63.435	8	.000
Linear-by-Linear Association	40.638	1	.000
N of Valid Cases	500		

a 10 cells (66.7%) have expected count less than 5. The minimum expected count is 1.78.

The above table says that the null hypothesis is being rejected due to the calculated chi-square value is greater than the table value. Since that, we can say that there is a difference

among the low-income consumers in the priority of visiting a market place. That means the market place of low-income consumers is somewhat different based on their income.

Table no. 5: Frequency and statistics implying the intensity of visiting a Market place in the proposed study area.

Market place		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1. Public distribution shops	331	66.2	66.2	66.2
	2. Retail shops	82	16.4	16.4	82.6
	3. Mandal H.Q	60	12.0	12.0	94.6
	4. District H.Q	23	4.6	4.6	99.2
	5. Fairs and others	4	.8	.8	100.0
	Total	500	100.0	100.0	

N	500
	0
Mean	1.5740
Median	1.0000
Mode	1.00

In the above table it is clear that number one is being repeated by most of the low income consumers which means that the majority of the low-income consumers are visiting public distribution shops for purchasing goods. The same thing we can say based on the frequency table also as the mode is number one.

Table no.6: Variables and their communalities under factor analysis.

Variables	Initial	Extraction
Low price goods	1.000	.786
Nearness to shop	1.000	.335
Familiar shop keeper	1.000	.720
Quality of goods	1.000	.727
Quantity of goods	1.000	.901
To a specific good	1.000	.555
To all the available goods	1.000	.866
Credit facility	1.000	.711
Because of no. Of alternatives	1.000	.828
Discounts	1.000	.956
Gifts and prizes	1.000	.936
Updated goods	1.000	.654
Home delivery facility	1.000	.934
Guaranteed goods	1.000	.643
Govt. Running shop	1.000	.819

Extraction Method: Principal Component Analysis.

The above said table implies the variables that are considered to influence the low income consumers while visiting a market place. We can take the extraction values of the selected variables in the present study the high extraction values can be considered and the low extraction values can be dropped under the current analysis.

Table no. 7: Total Variance Explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.627	37.510	37.510	5.627	37.510	37.510	4.392	29.279	29.279
2	3.163	21.086	58.596	3.163	21.086	58.596	4.084	27.226	56.505
3	1.526	10.175	68.771	1.526	10.175	68.771	1.570	10.467	66.972
4	1.057	7.043	75.815	1.057	7.043	75.815	1.326	8.843	75.815
5	.873	5.820	81.635						
6	.816	5.438	87.073						
7	.613	4.083	91.156						
8	.415	2.769	93.925						
9	.331	2.205	96.130						
10	.197	1.316	97.446						
11	.136	.909	98.355						
12	.116	.776	99.131						
13	.069	.458	99.589						
14	.051	.337	99.926						
15	.011	.074	100.000						

Extraction Method: Principal Component Analysis.

In the above table it is clear that the 15 variables are grouped in to four components. These four components are forming 75 percent of variance this we can take in the above table. In the total variance table those values are less than one that can be eliminated. The component one and its variables variance is 29.27, component two cumulative variance is 27.226, component three cumulative variance is 10.467 and lastly the component four cumulative variance is 8.843.

Table no.8: Rotated Component Matrix (a)

Variables	Component			
	1	2	3	4
Low price goods	.813	-.231	-.108	.245
Nearness to shop	.307	-.145	.204	.422
Familiar shop keeper	.323	-.378	-.688	.009
Quality of goods	-.022	.208	-.400	.724
Quantity of goods	.939	-.105	-.049	.082
To a specific good	.079	-.017	.736	.081
To all the available goods	.853	-.344	.105	.094
Credit facility	-.523	-.607	.198	-.174
Because of no. of alternatives	.387	-.721	-.359	.169
Discounts	-.114	.970	.009	-.049
Gifts and prizes	-.110	.960	.001	-.037
Updated goods	.237	-.194	.309	.682
Home delivery facility	-.159	.949	.073	-.046
Guaranteed goods	.774	.038	-.187	.086
Govt. running	.887	-.047	.157	.073

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser
Normalization. a Rotation converged in 6 iterations.

In the above table we can see that the variables ‘to all the available goods’, ’government running shops’, ’quantity of goods’, ‘low priced goods’ and ‘guaranteed goods’ are placed in the first component that means this can be treated as one factor . In the second component ‘discounts’’, gifts and prizes, and ‘home delivery facility’ are placed. In the third component only the variable ‘to a specific good’ is placed. And in the last component ‘quality of goods’, ’up-dated goods’ and ‘nearness to home’ are placed. Here we can eliminate the other variable whose values are less than 0.40.

Table no. 9: Reliability scaling of the selected factor one and ItemTotal Statistics.

Cronbach's Alpha : .924

Variables	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Low price goods	9.6800	23.937	.811	.906
Quantity of goods	9.6200	23.066	.904	.888
To all the available	9.4600	23.281	.843	.899

goods				
Guaranteed goods	10.1700	24.304	.674	.934
Govt. running	9.3900	24.018	.799	.908

Based on the above table we can make a decision regarding which are the other variables that can be removed further from any of the component. Since comparing the cronbach's Alpha and cronbach's Alpha if item deleted values we can eliminated 'guaranteed goods' variable from the component one. Further we can consider the values under scale variance if item deleted column in order to eliminate variables , here as 'government running shop' and 'low price goods' variables having low correlated item total correlation values that is 0.799 and 0.811. In this regard we need to take in to account the high correlated item total correlation values.

The main factors mainly influencing the low income consumers while visiting a public distribution shops is 'quantity of the goods' and 'to all the available goods'.

Table no. 10: Reliability scaling of the selected factor two and Item-Total Statistics.

Cronabach's Alpha : 0.985

Variables	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Discounts	9.5200	1.222	.985	.967
Gifts and prizes	9.5300	1.141	.972	.974
Home delivery facility	9.5500	1.179	.947	.992

In the column Cronbach's Alpha if item deleted we can find the value of the variable 'home delivery facility 'as 0.992 which is more than the earlier Cronbach's Alpha value 0.985. Hence, we can further reduce the above variables in to two variables like 'discounts' and 'gifts and prizes'.

Table no.11: Descriptive statistics of the two variables under the first factor.

The last selected two variables		
Variable 1: 'To all the available goods'		**Variable 2:** 'Quantity'
Mean	2.6200	2.460
Median	2.000	2.000
Mode	1.000	1.000

The ranks are given as in the following manner while conducting the factor

analysis. 1-Strongly agree, 2- Agree, 3-Neutral, 4-Dis-agree, 5- Strongly Dis-agree

Based on the above information we can say that the mode is one. Hence, we can conclude that the respondents stand is very strong. That means they are strongly agreeing that the above said two variables are mostly preferred under the first factor to visit a Public distribution shop.

Table no.12: descriptive statistics of the two variables under the second factor.

The last selected two variables		
Variable 1: Discounts		**Variable 2: Gifts &Prizes**
Mean	4.780	4.770
Median	5.000	5.000
Mode	5.000	5.000

The above table the mode is five in the both the cases which means that majority of the respondents are disagreeing on these two variable. Hence, we can eliminate these two variables and we can conclude that this cannot be considered while visiting a public distribution shops.

Findings and conclusions;

Based on the profession of the respondents their income is changing. It is clear in the table number two. That means based on the job what the low- income consumers are holding their income is different it is not the same.

And based on the income of the respondents their visiting market place is changing. This we can find in the table number four where the calculated significance value is is less than the standard significance value.

In the table number five we can find the intensity of visiting a market place, here we see that the majority of the low-income consumers are visiting public distribution shop for purchasing goods. This we can ensure based on the mode value in the above table.

Out of fifteen different variables which are considered to be the important factors influencing the low income consumers while visiting a market place, we find four most important factors influencing the behaviour of the low income consumers while visiting public distribution shop. This we can take in the table no.7.

Out of four factors the first factor named ‘to all the available goods’ consisting the other four variables Like ‘low-price’, ‘quantity’, ’guaranteed goods’, and ‘government running shop’ showing the much variance than the other three factors 27.2,10.4,8.8 consecutively. This we can observe in the table no.7. These four factors together showing the variance as 75.815 percentage of the total variance.

Out of fifteen variables we reduced the data in to four factors with different variables through factor analysis. Tha four factors are named as ‘ to all the available goods’,

'home delivery facility', 'to a specific good', and lastly 'quality of goods'.

The first factor consist the other variables like 'low-price', 'quantity of the goods', 'guaranteed goods', and 'government running shop along with ' to all the available goods'. The second factor comprised the variables like 'discounts'. 'Gifts and prizes', along with 'home delivery facility'. The third factor has only one variable that is 'to a specific good'. And last factor have the variables like 'nearness to shop', 'quality of the goods', along with 'up dated goods'.

In the first factor have eliminated the variables guaranteed goods, low price goods, government running shop as these variable has less corrected item total correlation value. Hence, the main factors which are influencing the low income behaviour while visiting a public distribution shop is 'to all the available goods and quantity of the goods'.

Relating to factor two we can eliminate the 'home delivery facility' as this Cronbach's alpha if item deleted value is higher than the standard Cronabach's alpha value 0.985. So, the important variables to be considered under the second factor are 'discounts and gifts & prizes'. This we can see in the table no.10. But these two variables were placed under negative response (Disagree) while assigning the ranks this cannot be taken in to account.

It is suggested to the government and the society to make the low income people to get the education as their income is relying on their profession and their profession is depending on their education. If it happens so there will a chance to make the low income people not to depend heavely on the government markets and the low priced goods.

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