FACTORS AFFECTING THE BUYING BEHAVIOUR OF AN INDIVIDUAL WHO HOLDS SEVERAL LOYALTY CARDS

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Abstract— Recently many Supermarkets, Insurance companies, and similar products or service providers started giving loyalty cards to their consumers as a marketing strategy to retain their loyal customers, due to this reason a single customer holds several loyalty cards and the basic idea of retaining customers by issuing just a loyalty card has arrived in to a complex problem. Therefore, the objective of this research is to identify what other factors affect the customers buying behaviour even after obtaining a loyalty card, so that the marketers could focus on improving the findings on this research to retain their consumers within their business even though consumers have several loyalty cards. This study focused on fourteen factors affecting the buying behaviour of consumers who already have a loyalty card. A questionnaire was distributed randomly and 207 successful responses were coded and analysed using several statistical tests for their significance towards the goal of identifying what factors are prioritized the most by the consumers when selecting a good or service.

The findings revealed that, Consumers who concern mostly about the budget prefer closer shops, low price products, free offers, and promotions and out of which male customers preferred buying free products and searching for discounts more than females. Consumers who like trendy and new products prefer to visit shops that show respect and friendliness on them and also concerns about the time factor. A customer with a single loyalty card prefer to move towards the shops where they spend less time during their transaction and where the needed items can be easily located provided that the other factors are similar. More generally a customer gives the priority to visit the shops that give many rewards for loyal customers, rather than shopping from a place where just a loyalty card was given. However, Company being famous, started issuing the loyalty card first or attendants concern on the consumers was not affected in a different manner. Finally card holders showed high interest on having discount on vegetables/fruits and grocery items compared to beverage, fish/meet or bath-ware.

I. INTRODUCTION

Many industries which have the same business, shares the common set of target customers, and it is a clear fact that having a large customer base out of the target customers affects strongly on the success of a business. Due to these reasons, to have a greater share of the customer base, businesses try many marketing strategies. But increasing the number of customers is not the only fact that keeps a business strong at all times, it depends also on retaining its customers for a longer time. This stabilizes the business and thus increases the strength of it also.

One of the recently used and widely spreading marketing strategies in many businesses, to attract, retain and identify the potential customers is the issue of a loyalty card. The main idea of loyalty programs is to promote repeated purchases of a particular brand or service, from a particular business, and to build a long term relationship by providing benefits in return for the customers who are being loyal (McIlroy & Barnett, 2000). This defensive relationship marketing strategy is now being widely used by many businesses and therefore a single customer may own several loyalty cards and the basic idea of customer being loyal to the business or the industry that has issued them a loyalty card is now being questioned. In some situations, customers can move to another product or service if they are not satisfied with the current product or service even if they have a loyalty card. This suggests that special offers or bonus points are only few factors out of the others that make a customer loyal towards a business. Because, economic factors are only under a single category of what customers expect from a business (Boedeker, 1997). A similar research was conducted in Finland and the researcher determined that there exist other factors such as price, respect, closeness, emotions, and promotions which affect the buying behaviour of customers, and the effect of the cards issued to the customers to become loyal was limited.

(George Asamoah, 2012). Therefore in a situation where a customer has several loyalty cards, this research determines what are the other factors that affect them when selecting a particular business to buy products or services? Therefore the objective of this study is to classify the factors in to several groups that possibly influence the buying behaviours of customers with loyalty cards and find out whether those grouped factors are influenced by gender or number of loyalty cards and if so what factors are influenced the most.Based on the above, the questions for the research are identified as.

1.What factors can be categorized in to similar groups according to the buying behaviour of customers with loyalty cards?

2. Does the gender affect the above factors in a single group? If so, what factors are the most prioritized factors?
3.In a situation where a customer has two or more cards, does the number of cards affect the factors in a single group? If so, what factors are influenced the most?

II. LITERATURE REVIEW

The consumer buying behaviour is a complex and a continuous changing aspect and hence it is approached differently according to the situation it is considered. Main reason for this complexity is that it directly relates with the human psyche. Human psyche is also rapidly changing according economic, social and emotional factors (Clark & Goldsmith, 2006).
The buying process of a human being basically starts from the childhood and it continues thereafter through teen, adult and matured ages. Due to the change in needs and wants at different stages of the lifecycle basic preference towards products or services changes and these preferences are also affected by various factors such as family background, cultural background, feelings, attitude, society, etc. This indicates why not all the consumers are having similar buying behaviors and why a better understanding about the market and the human psyche are important for the success of a product or service.Decision making process of the buyer on a purchase is as in figure 1
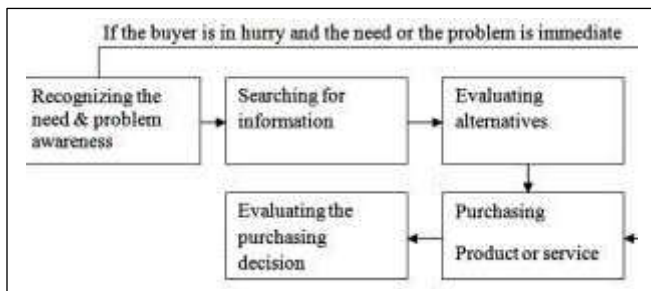

Figure 1. Decision making process of the buyer
Source: adapted from (Kotler. P, 1998)

The decision making process of a buyer starts with a proper identification of the need or the problem and then it goes under certain stages till the buyer repurchase or moves to an alternative. During the evaluation process alternatives will be compared and thus marketers have the advantage of introducing new brands. Sometimes free trials of the product will attract new customers towards the brand and if the buyer feels an importance towards a particular choice of brand with respect to the perceived benefits upon others, purchasing of the particular brand is made. A repurchase of a product mostly occurs if the quality of product or service satisfies the consumer, this process of retaining customers is known as customer retention (Jobber, 2001). Successful businesses concern very much about customer retention by creating value for them. For this purpose, programs to receive customer feedbacks, comments, and complaints are found to be important. The idea of loyalty cards is also to retain the customer loyalty towards the business which leads to create a long term strong relationship. In Sri Lanka also it was found that loyalty cards have become a successful tool to retain the customers by providing them rewards for being loyal (Pieris D. and Udunuwara M. 2012), due to this reason, many businesses are using loyalty cards to retain customers and now a single customer may have several loyalty cards, therefore this concept has become a common factor and hence better understanding about other factors affecting the buying behaviour needs to be tested.

III. METHODOLOGY

For the purpose of identifying the influencing factors, a quantitative approach was identified to be more appropriate. Similar researches also have used quantitative approach and sample sizes near 200 (Pieris D. and Udunuwara M. 2012) , (George Asamoah, 2012). Some past surveys conducted on market researches based on loyalty were also dependent on structured questionnaires for the purpose of collecting data (Pieris D. and Udunuwara M. 2012), (George Asamoah, 2012) and with the theoretical findings the questionnaire used by George Asamoah was initially piloted and some variables were changed, some were removed and few new variables were added. Finally fifteen different variables which are found to be affecting the buying behaviour of consumers were tested under several existing theories and they were tested under an ordinal scale where, 5(strongly agree) to 1 (strongly disagree) and a nominal scale from 1 to 5 whenever appropriate. This research restricted the responder has to

have at least one loyalty card. This restriction was made to avoid the responses of non-loyalty card holders affecting the final conclusions which would violate the research topic.Secondly, the age barriers were set such as <18, 18 to 45, >45 and only the respondents between 18 and 45 were chosen for the analysis. This restriction was implemented because, respondents between 18 and 45 were assumed to be price sensitive and are willing to search for new brands and services without being stuck in to only one (George Asamoah, 2012).

The analysis and the final conclusions were made based on a sample which obtained by using the stratified market sampling method.The questioners obtained from customers falling within the above mentioned target group in Matara District, Sri Lanka were received filled in full. But, 29 were declared not valid for the purpose of the study because they did not satisfy the target group requirements. Therefore the sample considered for the research had 207 accepted questionnaires. The data were analysed using SPSS 17.0 v (Statistical package for social sciences) software, under the following appropriate statistical methods for their significance, relativity, validity and influence on the concerned research topic. The chosen level of significance (also known as critical level) for the purpose of this study is considered as α = 0.05 (i.e. 5% significance level). That is, the probability of rejecting its null hypothesis in a wrongful manner is 5%(George Asamoah, 2012).

Chi-square test is a measure of difference between observed frequencies and expected frequencies of several variables.
Chi- square test for several variables can be interpreted as,

$$\chi^2 = \sum_{i=1}^{r} \sum_{j=1}^{c} \frac{\left(O_{ij} - E_{ij}\right)^2}{E_{ij}}$$

Where, O_{ij} Observed frequency for the ith row and j^{th} column
E_{ij} Expected frequency for the ith row and j^{th} column
i row number
j column number
Degree of freedom (df) of a Chi Square distribution is considered as df= (r-1)x(c-1) (StatTrek.com, 2015)
Chi-squared one variable test is used to test whether there is any difference under a certain significance level between expected and observed frequencies of one or more than one category.
Chi-squared one variable test,

$$\chi^2 = \sum_{i=1}^{k} \frac{\left(O_i - E_i\right)^2}{E_i}$$

Where, O_i Observed frequency for the ith variable
E_i Expected frequency for the ith variable
Degree of freedom (df) of a Chi Square distribution is considered as df= (k-1) (StatTrek.com, 2015)
Cluster analysis is mainly used for the purpose of partitioning variables in to several different sub-groups according to their similarities. Grouping of the variables was done using agglomerative hierarchical method. This process can be summarized as a diagram using a dendrogram, it represents the set of nested clusters arranged as a hierarchical tree. To measure of the similarity between each pair of variables this study uses the method of Euclidean distance.
The distance measure was made using,

$$D_{ij}^2 = \sum_{k=1}^{n}\left(x_{ik} - x_{jk}\right)^2$$

Where, D_{ij} - *distance between object i and j*
x_{ik} – *the value of kth characteristic for the ith object*
x_{jk} – *the value of kth characteristic for the jth object*
n- number of variables
(Lior Rokach & Oded Maimon, 2005)
Wilcoxon-Mann-Whitney U test is used to compare two independent groups of ordinal level measurements, In this study it was used as a non-parametric test, to test whether two samples are identically distributed or not.
Hypothesis associated with this test is,
Null Hypothesis (H_o) : Two samples are identically distributed
Alternative Hypothesis (H_a) : Two samples are not identically distributed
Test statistic for the hypothesis

$$z = \frac{U - \dfrac{n_1 n_2}{2}}{\sigma_u}$$

Where, $\sigma_u^2 = \dfrac{n_1 n_2 (n_1 + n_2 + 1)}{12}$

$\dfrac{n_1 n_2}{2}$ = mean of U (μ_u)

σ_u = Population Standard deviation of the data U
n_1, n_2 = Two sample sizes
(Rand R. Wilcox, 2009)
Kruskall-wallis test is an extension on Wilcoxon-Mann-Whitney U test. It is used for the purpose of comparing more than two independent groups which contains ordinal level measurements. It is being used in this study to test whether

more than two considered samples are identically distributed, and hence to find whether there is a rank difference between groups. The hypothesis associated with this test is,

Null Hypothesis (H$_o$) : $\mu_1 = \mu_2 = \mu_3 \ldots \ldots = \mu_k$

Alternative Hypothesis (H$_a$): at least two means are different

Initially all *N* number ofobservations in all the groups will be pooled and ranked. Ranks are assigned in such a way that the smallest observation gets a rank of 1, next smallest gets a rank of 2, and so on.

Then The sum of ranks for each group becomes $R_i = \sum_{i=1}^{n_j} R_{ij}$

(where j = 1, …. ,).

Here, R_{ij} is the rank of the ith observation in the Jthgroup (x_{ij}). When there are tied values, mid-ranks are used. And the test statistic for Kruskall-wallis test is,

$$T = \frac{12}{12N(N+1)} \sum_{j=1}^{k} \frac{R_j^2}{n_j} - 3(N+1)$$

For large samples with a degree of freedom = k-1 for which k>2 where k is the number of independent samples, this statistic approximate to chi-square distribution with k-1 degrees of freedom, the critical value becomes approximately equal to 1-α. The null hypothesis of equal population is rejected if the test statistic is in the critical region which suggests that there exists a rank difference between groups.(Rand R. Wilcox, 2009)

Dunn's test is used whenever it is required to test the significant difference between each of two variables, this test was conducted using Microsoft excel 2007 software and it is done by comparing the observed mean rank differences between groups i and j, $/R_i - R_j/$

with calculated critical differences (Δ_{ij}) between the same groups.

If $/R_i - R_j/ > \Delta_{ij}$ then it is concluded that the pair wise test result is significant.

Here,

$$\Delta_{ij} = Z_{1-\alpha} \sqrt{\frac{N(N+1)}{12}\left(\frac{1}{n_i} + \frac{1}{n_j}\right)}$$

Where, *N*- Total sample size
n_i- sample size of group *i*
n_j- sample size of group *j*
$Z_{1-\alpha}$ - critical value from the standard normal distribution.
Dunn, O. J. (1964)

IV. ANALYSIS

Following Table 1 shows us how the buying behavior of customers can be categorized in to six different groups using cluster analysis and variables under each cluster were explained. those groups have been named according to the theoretical findings.

Table 1. variable categorized in to distinct clusters (groups)

Cluster	Variables (I buy mostly from the shop,)	Cluster Name
1	which is closest to me **(R$_1$)**	Cost concerned, Opportunistic customers
	which offers low prices **(R$_2$)**	
	where the shop offers additional products, services for free **(R$_3$)**	
	which offers regular sales promotion or Discounts **(R$_4$)**	
2	which sells current, fashionable or trendy goods **(R$_5$)**	Time concentric and trendy customers
	where I'm treated with respect and in a friendly manner **(R$_6$)**	
	where I spend less time during transaction **(R$_7$)**	
	which is located where transportation, transiting is easier **(R$_8$)**	
	where the needed items can be easily located **(R$_9$)**	
3	which has the best rewards for the loyal customers **(R$_{10}$)**	Reward based loyal Customers
	which has granted me with a loyalty card **(R$_{11}$)**	
4	which granted me the first loyalty card **(R$_{12}$)**	Loyal Customers
5	where they are experts in the area of business **(R$_{13}$)**	Brand concentric customers
6	where attendants show concern about my problem **(R$_{14}$)**	Emotional customers

Each variable within the group is tested using Kruskall-wallis test to check whether all the variables are identically distributed within the group respect to the preference scores. Under the hypothesis,

Null hypothesis (H$_0$): All the variables are identically distributed with respect to the preference scores.
Alternative hypothesis (H$_a$): Not all the variables are identically distributed with respect to the preference scores.

Table 2.Kruskall-wallis test – Distribution of variables in first group under preferenceof cost concerned, opportunistic customers

How do you decide on which shop to buy your goods and services. I buy mostly from the shop,	N	Mean Rank	df	Chi-Square	P value
which is closest to me **(R₁)**	207	414.70	3	3.887	0.274
which offers low prices **(R₂)**	207	391.86			
where the shop offers additional products, services for free **(R₃)**	207	415.99			
which offers regular sales promotion or Discounts **(R₄)**	207	435.46			

Table 2 shows that chi-square value obtained = 3.887 and p = 0.274 > 0.05. Thus the null hypothesis is accepted and it states that all the variables are identically distributed. This concludes that all the four factors that influence the buying behaviour under the category of cost concern, opportunistic customers are preferred identically.

Table 3.Kruskall-wallis test – Distribution of variables in second group under preferenceoftime concentric and trendy customers

How do you decide on which shop to buy your goods and services, I buy mostly from the shop,	N	Mean Rank	df	Chi-square	P-value
which sells current, fashionable or trendy goods **(R₅)**	207	548.67	4	29.012	0.000
where I'm treated with respect and in a friendly manner **(R₆)**	207	587.53			
where I spend less time during transaction **(R₇)**	207	456.74			
which is located where transportation, transiting is easier **(R₈)**	207	484.64			
where the needed items can be easily located **(R₉)**	207	512.42			

Table 3 shows that chi-square value obtained = 29.012 and p = 0.000 < 0.05. Thus the alternate hypothesis is accepted and it states that all the variables are not identically distributed. This concludes that all the five factors influence differently to the buying behaviour under the category of time concentric and trendy customers. The most preferred variables are ranked under Dunn's Test which tests for any significant difference of the distribution of each pair of variables.

Table 4.Kruskall-wallis test – Distribution of variables in third group under preferenceof reward based loyal customers

How do you decide on which shop to buy your goods and services, I buy mostly from the shop,	N	Mean Rank	df	Chi-square	P-value
which has the best rewards for the loyal customers **(R₁₀)**	207	223.49	1	7.938	.005
which has granted me with a loyalty card **(R₁₁)**	207	191.51			

Table 4 shows that chi-square value obtained = 7.938 and p = .005 < 0.05. Thus the alternate hypothesis is accepted which means that the two variables are not identically distributed and thus the buying behaviour of reward based loyal customers are differently influenced by the two variables.

Other three groups contain only one variable each and hence they are the only variables which influence on the group.

Table 5.Kruskall-wallis test – Distribution of variables under preferenceof discounted products

Category	N	Mean Rank	df	Chi-square	P-value
Vegetables/Fruit (R$_{15}$)	207	618.07	4	95.941	0.000
Beverages(R$_{16}$)	207	451.01			
Grocery (R$_{17}$)	207	611.32			
fish/meat (R$_{18}$)	207	518.49			
Bath-ware (R$_{19}$)	207	391.11			

Table 5 was obtained by ranking the preference under a scale from 1 to 5 where the first choice of preference is given a rank of 5 and the last choice of preference was given a rank of 1.The table shows that chi-square value obtained = 95.941 and p = .000 < 0.05. Thus the alternate hypothesis is accepted which means that the five variables are not identically distributed and thus the buying preference for discounted products are influenced by the respondents. The most preferred variables are ranked under Dunn's Test.

When the Kruskal-wallis test suggests that the variables are not distributed identically due to preference scores, we conclude that the variables are significantly different. Therefore to test which variables are significantly different from each other in order to rank them Dunn's test was used as a multiple comparison test between variables.

The test hypothesis is,

Null hypothesis (H$_0$) : The pair of variables is not significantly different.

Alternative hypothesis (H$_a$) : The pair of variables is significantly different.

H$_0$ is accepted if, $/R_i - R_j/ < \Delta_{ij}$

Table 6.Comparison of the observed mean rank differences of variables i and j under Time Concentric and Trendy Customers with calculated critical differences(Δ_{ij})= 33.05

Variable		R$_5$	R$_6$	R$_7$	R$_8$	R$_9$
	Mean rank	548.67	587.53	456.74	484.64	512.42
R$_5$	548.67	0	38.86> Δ_{ij}	91.93> Δ_{ij}	64.03> Δ_{ij}	36.25> Δ_{ij}
R$_6$	587.53	38.86> Δ_{ij}	0	130.79> Δ_{ij}	102.89> Δ_{ij}	75.11> Δ_{ij}
R$_7$	456.74	91.93> Δ_{ij}	130.79> Δ_{ij}	0	**27.9 <Δ_{ij}**	55.68> Δ_{ij}
R$_8$	484.64	64.03> Δ_{ij}	102.89> Δ_{ij}	**27.9 <Δ_{ij}**	0	**27.78 <Δ_{ij}**
R$_9$	512.42	36.25> Δ_{ij}	75.11> Δ_{ij}	55.68> Δ_{ij}	**27.78 <Δ_{ij}**	0

Table 6 suggests that except between the variable R7,R8 & R8,R9 all the other variables are significantly different from each other. Hence according to the mean rank scores, Time Concentric and Trendy Customers prefer mostly to buy from the shop where they are treated with respect and in a friendly manner (R6). Then the preference is given to buy mostly from, the shop which sells current, fashionable or trendy goods.(R5). R8, R9 and R7, R8 are not significantly different and hence we cannot exactly say the highest influencing variable out of these three variables.

As the Kruskall-wallis test suggests that the variables are not distributed identically and since there are only two variables exists, the variables are ranked according to their mean rank values. Hence the reward based loyal customers give their first priority to buy mostly from the shop, which has the best rewards for the loyal customers and next to buy mostly from the shop, which has granted them with a loyalty card.

To test whether there is a difference in the distribution of each variable according to the gender the Wilcoxon-Mann-Whitney U test was used under the following hypothesis.

Null hypothesis (H$_0$) : The considered two samples are identically distributed.

Alternative hypothesis (H$_a$) :   The considered two samples are not identically distributed.

Table 7.Effects of gender on each variable

How do you decide on which shop to buy your goods and services. I buy mostly from the shop,	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	Pvalue
which is closest to me (R₁)	male	103	109.38	11266.5	4801.5	-1.392	.164
	female	104	98.67	10261.5			
which offers low prices (R₂)	male	103	107.48	11070.5	4997.5	-.878	.380
	female	104	100.55	10457.5			
where the shop offers additional products, services for free (R₃)	male	103	113.71	11712.5	4355.5	-2.459	.014
	female	104	94.38	9815.5			
which offers regular sales promotion or Discounts (R₄)	male	103	114.63	11807.0	4261.0	-2.684	.007
	female	104	93.47	9721.0			
which sells current, fashionable or trendy goods (R₅)	male	103	102.66	10574.0	4801.5	-.348	.728
	female	104	105.33	10954.0			
where I'm treated with respect and in a friendly manner (R₆)	male	103	109.09	11236.5	4997.5	-1.363	.173
	female	104	98.96	10291.5			
where I spend less time during transaction (R₇)	male	103	106.91	11012.0	4355.5	-.731	.465
	female	104	101.12	10516.0			
which is located where transportation, transiting is easier (R₈)	male	103	108.19	11144.0	4261.0	-1.146	.252
	female	104	99.85	10384.0			
where the needed items can be easily located (R₉)	male	103	100.10	10310.5	4261.0	-1.007	.314
	female	104	107.86	11217.5			
which has the best rewards for the loyal customers (R₁₀)	male	103	105.26	10842.0	5226.0	-.315	.753
	female	104	102.75	10686.0			
which has granted me with a loyalty card (R₁₁)	male	103	103.45	10655.5	5299.5	-.136	.892
	female	104	104.54	10872.5			
which granted me the first loyalty card (R₁₂)	male	103	105.78	10895.0	5173.0	-.437	.662
	female	104	102.24	10633.0			
where they are experts in the area of business (R₁₃)	male	103	103.12	10621.0	5265.0	-.218	.827
	female	104	104.88	10907.0			
where attendants show concern about my problem (R₁₄)	male	103	108.33	11158.0	4910.0	-1.082	.279
	female	104	99.71	10370.0			

Table 7 suggests that only the P value for variables (R3) and (R4) are less than 0.05 (p<0.05) which suggests that only these variable are significantly different and hence gender affect these two variables. Considering the mean rank values it can be suggested that males prefer mostly to visit the shops where the shop offers additional products, services for free and which offers regular sales promotion or Discounts than females. Variables except (R3) and (R4) are not significantly different from each other and hence under 5% significant level it can be concluded that gender does not effect on those variables.

To test whether there is a difference in the distribution of each variable according to the number of loyalty cards that the customer holds, the Wilcoxon-Mann-Whitney U test was used under the following hypothesis.

Null hypothesis (H_0): The considered two samples are identically distributed.

Alternative hypothesis (H_A) : The considered two samples are not identically distributed.

Table 8.Comparison of the observed mean rank differences of variables i and j under the preference given to the discounted productswith calculated critical differences(Δ_{ij})= 33.05

Variable		R_{15}	R_{16}	R_{17}	R_{18}	R_{19}
	Mean Rank	618.07	451.01	611.32	518.49	391.11
R_{15}	618.07	0	167.06> Δ_{ij}	**6.75< Δ_{ij}**	99.58> Δ_{ij}	226.96> Δ_{ij}
R_{16}	451.01	167.06 > Δ_{ij}	0	160.31> Δ_{ij}	67.48> Δ_{ij}	59.9> Δ_{ij}
R_{17}	611.32	**6.75 < Δ_{ij}**	160.31> Δ_{ij}	0	92.83> Δ_{ij}	220.21> Δ_{ij}
R_{18}	518.49	99.58> Δ_{ij}	67.48> Δ_{ij}	92.83> Δ_{ij}	0	127.38> Δ_{ij}
R_{19}	391.11	226.96> Δ_{ij}	59.9> Δ_{ij}	220.21> Δ_{ij}	127.38> Δ_{ij}	0

Table 8 suggests that except for the two variables R_{15} and R_{17} all other pairs are significantly different from each other. According to the mean rank values the most considered variables are also R_{15} and R_{17}, therefore we cannot suggest that according to the preferences of discounts which variable would be the first. Hence it can be suggested that vegetables/fruits and grocery are the highest preference for discounts and then the preference is for fish/meet, beverage, and bath-ware.

Table 9.Effects of number of loyalty cards on each variable

How do you decide on which shop to buy your goods and services. I buy mostly from the shop,	Number of cards	N	Mean Rank	Sum of Ranks	Mann-Whitney U	Z	P (2-tailed)
which is closest to me (R₁)	1	116	108.63	12601.50	4740.500	-1.360	.174
	≥2	91	98.09	8926.50			
which offers low prices (R₂)	1	116	107.75	12499.50	4842.500	-1.075	.282
	≥2	91	99.21	9028.50			
where the shop offers additional products, services for free (R₃)	1	116	103.91	12053.00	5267.000	-.027	.978
	≥2	91	104.12	9475.00			
which offers regular sales promotion or Discounts (R₄)	1	116	108.53	12589.00	4753.000	-1.296	.195
	≥2	91	98.23	8939.00			
which sells current, fashionable or trendy goods (R₅)	1	116	106.43	12345.50	4996.500	-.716	.474
	≥2	91	100.91	9182.50			
where I'm treated with respect and in a friendly manner (R₆)	1	116	107.08	12421.00	4921.000	-.934	.350
	≥2	91	100.08	9107.00			
where I spend less time during transaction (R₇)	1	116	111.28	12908.50	4433.500	-2.072	.038
	≥2	91	94.72	8619.50			
which is located where transportation, transiting is easier (R₈)	1	116	109.14	12660.50	4681.500	-1.594	.111
	≥2	91	97.45	8867.50			
where the needed items can be easily located (R₉)	1	116	114.08	13233.00	4109.000	-2.953	.003
	≥2	91	91.15	8295.00			
which has the best rewards for the loyal customers (R₁₀)	1	116	103.17	11967.50	5181.500	-.236	.814
	≥2	91	105.06	9560.50			
which has granted me with a loyalty card (R₁₁)	1	116	108.88	12629.50	4712.500	-1.366	.172
	≥2	91	97.79	8898.50			
which granted me the first loyalty card (R₁₂)	1	116	101.25	11744.50	4958.500	-.768	.442
	≥2	91	107.51	9783.50			
where they are experts in the area of business (R₁₃)	1	116	102.98	11945.50	5159.500	-.286	.775
	≥2	91	105.30	9582.50			
where attendants show concern about my problem (R₁₄)	1	116	102.09	11842.00	5056.000	-.543	.587
	≥2	91	106.44	9686.00			

Only the P value for variables (R7) and (R9) are less than 0.05 (p<0.05) which suggests that only these variable are significantly different and hence number of cards affect these two variables. Considering the mean rank values it can be suggested that card holders having one card prefer mostly to visit the shops where they spend less time during transaction and where the needed items can be easily located than card holders with several loyalty cards. Variables except (R7) and (R9) are not significantly different from each other and hence under 5% significant level it can be concluded that number of cards does not effect on those variables.

V. DISCUSSION

The main objective of this research is to identify the factors affecting buying behavior of consumers with loyalty cards. For this purpose a thorough search on theoretical findings about consumers' buying behavior, satisfaction, loyalty, loyalty cards, consumer relationship management, post purchase behavior, etc. were initially conducted and with respect to the theoretical findings a five point preference scale questionnaire was made and tested in order to achieve the goal of this research.

VI. CONCLUSIONS

One of the empirical significance of this study is that the tested variables were able to categorize in to sixpre-defined groupsthat have been established by the theoretical findings, they are cost concerned & opportunistic customers where four variables associated in this group concerns much about their costs and promotions given by the business. Time concentric and trendy customers where five variables associated in, concerns much about time, respect and new trendy items. Reward based loyal customers where customer concern is on rewards for their loyalty. Loyal customers concerns on the loyalty card. Brand concentric customers concerns about the expertise of the brand or business and Emotional customers who likes to have the concern of the attendants about their problem.

The variables in these six groups were then tested for any theoretical significance under the hypothesis of whether there is a difference among variables according to the response from the responders, and they were also tested for any influence on gender or number of cards. And the following conclusions were made.

Cost concerned & opportunistic customers are influenced to visit the shops that are closer to them, sell low price goods, additional products and services for free, and have regular sales promotions in an equal manner. But males prefer mostly to visit the shops where the shop offers additional products, services for free and which offers regular sales promotion or Discounts than females. These factors were unaffected by the number of loyalty cards that a customer holds.

Time concentric and trendy customers preferred mostly to visit the shop that treats them with respect and in a friendly manner and their second preference was to visit the shops that sells current, fashionable or trendy goods. Gender did not make any influence on these factors but however customers with a single loyalty card tends to visit businesses,

prioritizing the facts that they spend less time during transactions and the needed items can be easily located.

Reward based loyal customers responses showed that their first priority to visit the shops that offers the best rewards to the loyal customers, and then the priority is towards the shop that has granted them a loyalty card. Gender or number of cards did not effect on any of these factors.

Last three groups responses were not affected by gender or the number of loyalty cards.

The responses for the discounted items showed that customers have concerned mostly on having discounts on either vegetables/fruits or grocery. The preferences are then given for fish/meet, beverage, and bath-ware respectively.

This study reveals that some factors affecting the buying behaviour of an individual who holds several loyalty cards are treated equally but some treated unequally by different target groups of the society as mentioned above, hence if a product or service is rendered towards a customer the above tested variables and findings can be concerned according to the target customers, when promoting the business.

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