



A Comparative Study of Factors Influencing Purchasing Decisions at D-Mart and Metro in Vijayawada City.

D. Satish Kumar^{1*}, P. Bindu², D.S. Rao³, S. Anusha⁴, J. Srinivas⁵

^{1,2,4}Department of Mathematics, Koneru Lakshmaiah Education Foundation, Vaddeswaram- 522502, India

³Business School, Koneru Lakshmaiah Education Foundation, Vaddeswaram- 522502, India

⁵Department of Mathematics, NIT Meghalaya, Shillang-793003, India

*Corresponding author E-mail: satish9441321888@gmail.com

Abstract

Corporate retail stores are today the focal points for purchasing decisions of middle and high-income groups in urban India. However, each corporate retail store has its own model of retailing. Storing different varieties of products at same locality, location advantage, self-servicing outlets, window shopping, large scale discount, specialty stores are some of the models retailing stores have adopted. But all these retail models are not being popular among the consumers. Consumer's preferences and choices are varying across different retail models. In this context the present study wants to explore significant difference among corporate retail stores in Vijayawada in consumer preference and choices.

Keywords: Retail Shopping, Shopping Behavior, Convenience store, Discount store, Specialty Store, Corporate Retail Stores.

1. Introduction

Consumer decision making has long been of interest to researchers. Companies in retail industry are interested in the study of consumer behavior as it makes them familiar with the emerging needs and desires of their current and prospective buyers. To find out what satisfies customers, marketers must examine the main influences on what, where, when and how customers buy goods and services [1]- [6]. By understanding these factors marketers are better able to predict how consumers will respond to marketing strategies. Ultimately, this information helps modern retail malls as well as conventional retail stores to compete more effectively in the marketplace and leading to more satisfied customers [7]- [12].

The present study aims to analyse the differences in shopping behaviors of customers in two leading corporate retail stores in Vijayawada city namely Metro and D-Mart, Andhra Pradesh, India. Of late customers are focusing mainly on quality, quantity, and cost of the products. In this context consumer shopping behavior in respect of retail shopping was analyzed to identify the various factors influencing it. The results of the study reveal that except for average monthly purchasing expenditure, there is no significant differences between Metro and D-Mart in respect of factors that influence purchasing decision.

2. Objectives of the Study

The major objectives of the present study are

1. To study the differences in consumer purchasing behavior towards the two corporate retail stores namely D-Mart and Metro in the city of Vijayawada
2. To understand the significant differences in customers habits

and choices in their purchase decisions at corporate retail stores in terms of convenience, location advantages, offering discounts and specialty products.

3. To suggest certain interventions to the retailer that could enhance their service quality.

3. Hypothesis for Study

H_0 = There is no significance difference between D-Mart and Metro with regard features influencing to shop from a specific retail shop.

H_0 = There is no significance difference between D-Mart and Metro with regard in consumer intention of visiting the retail store.

H_0 = There is no significance difference between D-Mart and Metro with regard on the duration of time spent on time.

H_0 = There is no significance difference between D-Mart and Metro with regard in spending the amount to purchase the items in these retail stores.

H_0 = There is no significance difference between D-Mart and Metro with regard features influencing purchasing on constantly visibility of newly launched product.

H_0 = There is no significance difference between D-Mart and Metro with regard features influencing on most of the times the product or offer makes you to purchase the product.

H_0 = There is no significance difference between D-Mart and Metro on shopping is raising or decreasing on retail shop.

4. Research Methodology

To analyse the consumer behavior in the selected corporate retail stores in Vijayawada two convenient sample of 70 respondents

from Metro, and 79 respondents from D-Mart were taken respondents were taken, and a structured questionnaire was designed to gather information on six important variables related to consumer behavior from the respondents. The questionnaire was tested for reliability and validity through a pilot study. Information was gathered personally from the consumers when actually they are making purchases. The data gathered was processed and analyzed with descriptive statistics like tables, percentages and bar charts. To test the significance difference between two retail stores in terms of factors influencing their purchasing decision at Independent Samples Mann-Whitney U test was used as the samples were not normally distributed.

Table:1 Basic descriptive statistics of sample from Metro

Variable	Type	Label	N	Missings (%)	Mean	SD	SE	Median	Trimmed Mean	Min	Max	Range	Skewness	Kurtosis
Q3	integer	Q3	70	0	2.67	1.42	0.17	3	2.59	1	5	4	0.22	-1.25
Q4	integer	Q4	70	0	2.76	1.42	0.17	3	2.7	1	5	4	0.01	-1.4
Q8	integer	Q8	70	0	1.46	0.61	0.07	1	1.38	1	3	2	0.93	-0.19
Q9	integer	Q9	70	0	3.96	1.01	0.12	4	3.98	1	5	4	-0.25	-1.12
Q13	integer	Q13	70	0	3.43	1.22	0.15	3	3.45	1	5	4	-0.05	-1.32
Q14	integer	Q14	70	0	2.375	0.75	0.09	2	2.38	1	3	2	-0.53	-1.07
Q15	integer	Q15	70	0	1.679	0.79	0.09	1	1.5	1	3	2	0.81	-0.93

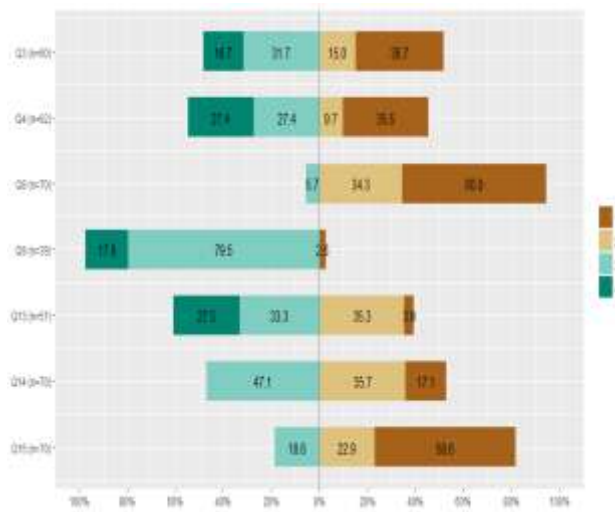


Fig 1: Pattern of Responses for Metro

Table2: Basic descriptive statistics of the sample from D-Mart

Variable	Type	Label	N	Missings (%)	Mean	SD	SE	Median	Trimmed Mean	Min	Max	Range	Skewness	Kurtosis
Q3	integer	Q3	79	0	2.6	1.4	0.2	3	2.6	1	5	4	0.2	-1.31
Q4	integer	Q4	79	0	2.6	1.4	0.2	3	2.6	1	5	4	0.2	-1.34
Q8	integer	Q8	79	0	1.6	0.7	0.1	1	1.5	1	4	3	1.2	1.79
Q9	integer	Q9	79	0	3.5	1.2	0.1	3	3.5	1	5	4	0	-1.37
Q13	integer	Q13	79	0	3.2	1.4	0.2	3	3.2	1	5	4	-0.2	-1.23
Q14	integer	Q14	79	0	2.4	0.8	0.1	3	2.5	1	3	2	-0.8	-1.12
Q15	integer	Q15	79	0	1.7	0.8	0.1	1	1.6	1	3	2	0.6	-1.23

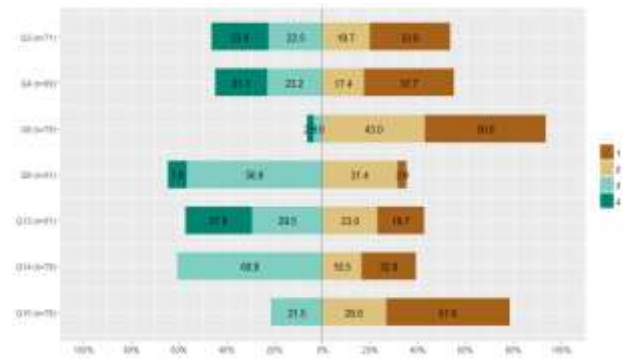


Fig2: Pattern of Responses for D-Mart

5. Testing of Hypothesis

5.1. Hypothesis -I

H₀: There is no significant difference between D-Mart and Metro with regard to features influencing to shop.

The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:3) show that the p-value is greater than 0.05. Thus we may accept the null hypothesis that D-Mart and Metro are similar in features that influence shopping at 5% level of significance.

Table3: Independent Samples T-Test

	Test	statistic	df	p
Q3	Student's t	-0.168	147	0.867
	Mann-Whitney U	2738		0.917

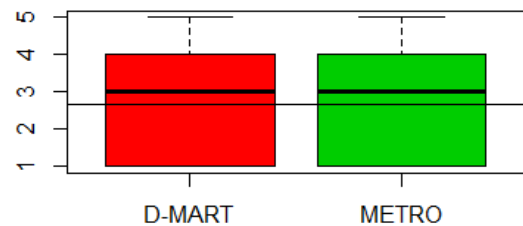


Fig 3: Features influencing to shop

5.2. Hypothesis – II

H₀: There is no significance difference between D-Mart and Metro with regard to consumer intention of visiting the retail store.

The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:4) show that the p-value is greater than 0.05. Thus we may accept the null hypothesis that D-Mart and Metro are similar in features that consumer intention of visiting the retail store at 5% level of significance

Table: Independent Samples T-Test

	Test	statistic	df	p
Q4	Student's t	-0.53	147	0.597
	Mann-Whitney U	2632		0.605

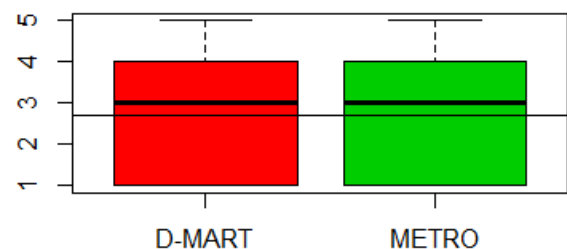


Fig 4: consumer intention of visiting the retail store

5.3. Hypothesis -III

H_0 : There is no significance difference between D-Mart and Metro with regard on the duration of time spent on time. The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:5) show that the p -value is greater than 0.05. Thus, we may accept the null hypothesis that D-Mart and Metro are similar in features on the duration of time spent on time at 5% level of significance

Table5: Independent Samples T-Test

	Test	statistic	df	p
Q8	Student's t	1.17	147	0.245
	Mann-Whitney U	3020		0.271

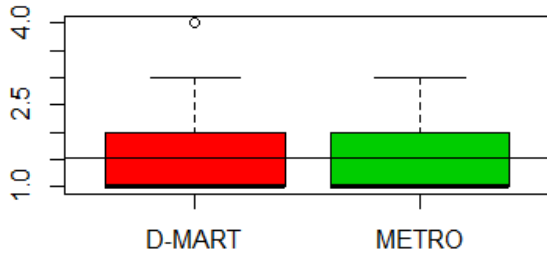


Fig 5: Duration of time spent on time

5.4. Hypothesis-IV

H_0 = There is no significance difference between D-Mart and Metro with regard in spending the amount to purchase the items in these retail stores. The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:6) show that the p -value is less than 0.05. Thus, we may reject the null hypothesis that D-Mart and Metro are similar in features on spending the amount to purchase the items at 5% level of significance

Table6: Independent Samples T-Test

	Test	statistic	df	p
Q9	Student's t	-2.41	147	0.017
	Mann-Whitney U	2164		0.014

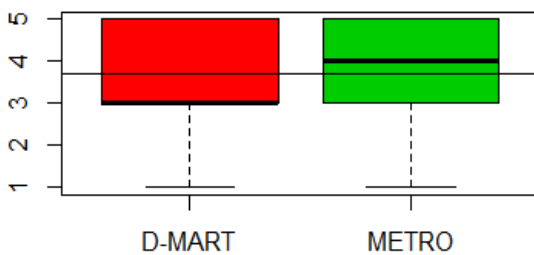


Fig 6: spending the amount to purchase the items

Mean Spending(Out of 5 Categories)

D-MART METRO
3.506329 3.957143

Median Spending(Out of 5 Categories)

D-MART METRO
3 4

5.5. Hypothesis-V

H_0 = There is no significance difference between D-Mart and Metro with regard features influencing purchasing on constantly visibility of newly launched product. The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:7) show that the p -value is greater than

0.05. Thus we may accept the null hypothesis that D-Mart and Metro are similar in features influencing purchasing on constantly visibility of newly launched product at 5% level of significance.

Table7: Independent Samples T-Test

	Test	statistic	df	p
Q13	Student's t	-1.11	147	0.268
	Mann-Whitney U	2516		0.333

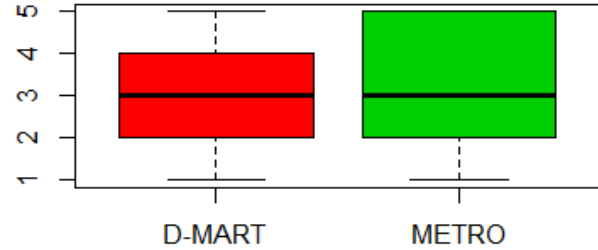


Fig 7: Purchasing on constantly visibility of newly launched product.

5.6. Hypothesis-VI

H_0 = There is no significance difference between D-Mart and Metro with regard features influencing on most of the times the product or offer makes you to purchase the product. The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:8) show that the p -value is greater than 0.05. Thus we may accept the null hypothesis that D-Mart and Metro are similar in features in flouncing on most of the times the product or offer makes you to purchase the product at 5% level of significance

Table8: Independent Samples T-Test

	Test	statistic	df	p
Q14	Student's t	0.61	147	0.543
	Mann-Whitney U	2994		0.335

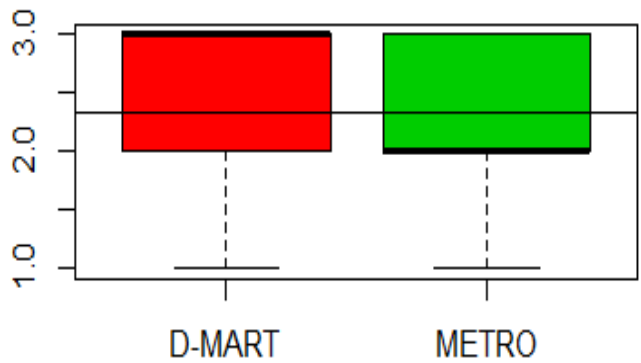


Fig 8: product or offer makes you to purchase the product.

5.7. Hypothesis – VII

H_0 = There is no significance difference between D-Mart and Metro on shopping is raising or decreasing on retail shop. The results of the parametric t-test and non-parametric Mann-Whitney U test (Table:8) show that the p -value is greater than 0.05. Thus we may accept the null hypothesis that D-Mart and Metro are similar in features shopping is raising or decreasing on retail shop at 5% level of significance.

Table9: Independent Samples T-Test

	Test	statistic	df	P
Q15	Student's t	0.735	147	0.464
	Mann-Whitney U	2949		0.438

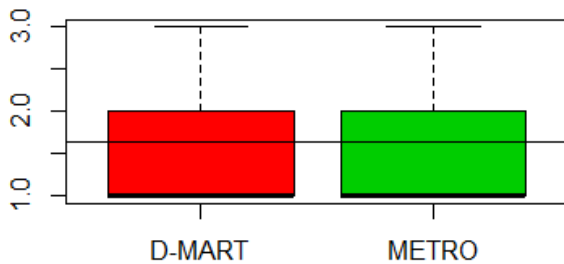


Fig 9: On shopping is raising or decreasing on retail shop

5. Conclusions of the Study

Form the testing hypothesis done above the following broad conclusions can be drawn

1. Both D-Mart and Metro attract consumers constantly by enabling visibility of newly launched products.
2. Both D-Mart and Metro attracts customers by offering discounts on purchases.
3. Intentions of the consumer visiting D- Mart and metro are almost similar
4. Metro and D-Mart are similar in features that influence shopping at these stores.
5. The average time spent by a consumer in both D-Mart and Metro is about one and half hrs.
6. There is a significant difference between D-Mart and metro in average spending expenditure by a consumer.
7. Both D-Mart and Metro are witnessing raising trend in Customer spending at their stores

Acknowledgement

This research was Partially supported by **S. Anusha**, Asst.Professor, Department of Mathematics, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P, India, To provided valuable time and thoughts to complete this paper. We thank our colleagues **Srinivasa Rao. D** Professor, Business School, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P, India who provided insight and expertise that greatly assisted conclusions of this paper. I thank **Bindu. P**, Assistant Professor Department of Mathematics, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P, India to provided financial support for this work.

References

- [1] Nadira Bessouh, (2016), Effects of Family Roles on the Purchase Decision Process: Empirical Evidence from Algeria, International Journal of Research in Finance and Marketing (IJRFM), Vol. 6 Issue 10, pp. 135~150
- [2] Srinivasa Rao. D, Bhoganadam, Syamala. (2016). A study on socio-cultural factors affecting entrepreneurial activity: A conceptual framework. Man in India. 96. 1585-1598, Arpan, K. (2015). Business Fundas. Brand personality dimensions. <http://businessfundas.com/2011/brand-personality-dimensions/>
- [3] Perreau, F. (2014), The Consumer Factor . The Consumer Buying Decision Process. [http:// theconsumerfactor.com/en/5-stages-consumer-buying-decisionprocess/](http://theconsumerfactor.com/en/5-stages-consumer-buying-decisionprocess/) Accessed on 29 December 2014.
- [4] Mark D Griffiths, Lisa K Gundry, & Jill R Kickul. (2013). The socio-political and cultural determinants of social entrepreneurial activity. Journal of small Business and Enterprise Development, 20 (2), 341-357.
- [5] Akpor-Robaro, & Masoje Oghenerobaro Mamuzo. (2012). The impact of socio cultural environment on Entrepreneurial emergence: A theoretical analysis on Nigerian society. European journal of Business and Management, 4 (16), 172-182.

- [6] Watney, T., & Brennan, L. (2011). Behavioral change starts in the family: the role of family communication and implications for social marketing. Journal of Nonprofit & Public Sector marketing, 13(4), 367-386
- [7] Kardes, F. Cline, T. Cronley, M. (2011). Consumer behavior: Science and Practice. South-Western Cengage Learning.
- [8] Aaker, J. (1997). Dimensions of brand personality. Journal of Marketing Research. Volume 34.347-356.
- [9] Kotler, P. & Armstrong, G. (2009). Principles of Marketing. Pearson Education. Thirteenth Edition. New Jersey,
- [10] Folke ölander, John Thøgersen.,(1995), Understanding of consumer behaviour as a prerequisite for environmental protection , Journal of Consumer Policy, Volume 18, Issue 4, 345–385