A comparative study of traditional and modern retail outlets - a discriminant function approach

The retail sector of India is one of the largest sectors, which accounts for over 13 per cent of the country's gross domestic product (GDP) and around 8 per cent of employment next only to agriculture. It has emerged as a dynamic and fast growing sector with international players eager to enter the market. The contemporary retail sector in India is reflected in sprawling shopping centers, multiplex- malls that offer shopping, entertainment and food all under one roof besides the unorganized individual retails. With significant growth of the economy of the country, the concept of retail market is now changing in terms of format and consumer buying behaviour. Hence, the present study has been undertaken in Dharwad with the objectives to analyze the influence of promotional activities undertaken by two types of retail outlets on consumer purchase, to know the opinion of selected respondents of two retail outlets, and to identify the factors influencing the consumer purchases.

For the purpose of analyzing the objectives, Dharwad city was purposively selected. One modern retail outlet and one traditional retail outlet from Dharwad were selected for comparison. Primary data were collected using pre-tested schedule through the personal interview method. A sample of 30 respondents each was selected randomly from modern and traditional retail outlets so that the total sample size for the study becomes 60. Further, four commodities *viz.*, rice, sugar, oil and tur dal were selected for comparison.

Logit model was employed to capture the probability of respondents visiting modern retail outlet. In order to determine the most important variables that discriminate the groups *i.e.*, visitors of traditional and modern retail outlets, discriminant function analysis was applied. T test was used to know the mean difference in the opinion of the selected respondents of two types of outlets.

The type of promotional activities undertaken by traditional and modern retail outlets in Dharwad district are furnished in Table 1. In Dharwad district with respect to traditional retail outlet for rice, about 73 per cent of the respondents expressed that traditional retail outlets offer better price for the consumers followed by 70 per cent of the respondents expressed that traditional retail outlets provide display of items and 60 per cent for attractive packing, 37 per cent for advertisement and 33 per cent for discount. About 30 per cent (9 numbers) of the respondents expressed that traditional retail outlet provide bonus (extra). The promotional activities with respect to sugar in Dharwad revealed that about 83 per cent of the respondents expressed that traditional retail outlets provide display of items and prices for the consumers followed by 70 per cent of the respondents expressed that traditional retail outlets provide offer price, 37 per cent for attracting packing, 27 per cent each for discount and advertisement. About 20 per cent (6 numbers) of the respondents expressed that traditional retail outlet provide bonus (extra). The promotional activities opined by the respondents with respect to oil in Dharwad indicated that about 70 per cent of the respondents expressed that traditional retail outlets provide display of items and prices for the

Table 1. Type of promotional activities under taken by traditional and modern retail outlets in Dharwad City

Items	Type of promotional		Modern	1		Traditional			
_	activities	Yes		No		Yes		No	
	Particulars	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Rice	Attractive packing	21	70	9	30	18	60	12	40
	Advertisements	14	47	16	53	11	37	19	63
	Discount	21	70	9	30	10	33	20	67
	Bonus (extra)	12	40	18	60	09	30	21	70
	Offer price	26	87	4	13	22	73	8	27
	Display of items and prices	27	90	3	10	21	70	9	30
Sugar	Attractive packing	11	37	19	63	11	37	19	63
	Advertisements	09	30	21	70	08	27	22	73
	Discount	18	60	12	40	08	27	22	73
	Bonus (extra)	11	37	19	63	06	20	24	80
	Offer price	25	83	5	17	21	70	9	30
	Display of items and prices	22	73	8	27	25	83	5	17
Oil	Attractive packing	16	53	14	47	19	63	11	37
	Advertisements	18	60	12	40	10	33	20	67
	Discount	15	50	15	50	07	23	23	77
	Bonus (extra)	10	33	20	67	07	23	23	77
	Offer price	20	67	10	33	20	67	10	33
	Display of items and prices	23	77	7	23	21	70	9	30
Tur dal	Attractive packing	07	23	23	77	10	33	20	33
	Advertisements	07	23	23	77	05	17	25	83
	Discount	15	50	15	50	09	30	21	70
	Bonus (extra)	07	23	23	77	08	27	22	73
	Offer price	18	60	12	40	22	73	8	27
	Display of items and prices	28	93	2	7	06	20	24	80

consumers followed by 67 per cent of the respondents expressed that traditional retail outlets provide offer price, 63 per cent for attracting packing, 33 per cent for advertisement and 23 per cent for discount. About 23 per cent (7 numbers) of the respondents expressed that traditional retail outlet provide bonus (extra). The promotional activities opined by the respondents with respect to tur dal in Dharwad are discussed as follows. About 73 per cent of the respondents expressed that traditional retail outlets provide offer price for the consumers followed by 33 per cent of the respondents expressed that traditional retail outlets provide attracting packing, 30 per cent for discount, 27 per cent for bonus (extra) and 20 per cent for display the items and prices. About 17 per cent (5 numbers) of the respondents expressed that traditional retail outlet provides advertisement. These results are in line with the results obtained by Memon (2007).

With respect to modern retail outlet in Dharwad district, the promotional activities as opined by the respondents with respect to rice are discussed as follows. About 90 per cent of the respondents expressed that modern retail outlets provide display of items for the consumers, followed by 87 per cent of the respondents expressed that modern retail outlets provide offer price, 70 per cent each for attractive packing and discounts, and 47 per cent for advertisement. About 40 per cent (12 numbers) of the respondents expressed that modern retail outlet provide bonus (extra). The promotional activities opined by the respondents with respect to sugar in Dharwad are discussed as follows. About 83 per cent of the respondents expressed that modern retail outlets provide offer prices for the consumers followed by 73 per cent of the respondents expressed that modern retail outlets provide display of items and prices,

60 per cent for discount, 37 per cent each for bonus (extra) and attractive packing. About 30 per cent (9 numbers) of the respondents expressed that modern retail outlet provides advertisement. The promotional activities opined by the respondents with respect to oil in Dharwad are discussed as follows. About 77 per cent of the respondents expressed that modern retail outlets, provide display of items and prices for the consumers followed by 67 per cent of the respondents expressed that modern retail outlets provide offer price, 60 per cent for advertisements, 53 per cent for attractive packing and 50 per cent for discount. About 33 per cent (10 numbers) of the respondents expressed that modern retail outlet provide bonus (extra). The promotional activities opined by the respondents with respect to tur dal in Dharwad is discussed as follows. About 93 per cent of the respondents expressed that modern retail outlets provide display of items and prices for the consumers followed by 60 per cent of the respondents expressed that modern retail outlets provide offer price, 50 per cent for discount, 23 per cent each for bonus (extra), advertisements and attractive packing. These results were in corroboration with the findings of Pathak and Tripathi (2009).

It could be seen from Table 2, the opinion of the selected respondents regarding retail outlets in Dharwad district. The variables like packing, display of items/prices, processed product availability, temperature maintenance for specific product and availability of branded products, reasonable prices, festival offer, good purchasing atmosphere, shopping as a pleasure and accessibility to shop, the t value calculated for these values were non-significant. Hence, there was no significant difference between traditional and modern retail outlet in Dharwad. In the case of hygienic/clean environment,

Table 2.	Opinion of	of selected	l respondents	regarding	traditional	and mod	lern retail	outlet in	Dharwad city

Particulars	Traditional		Modern			Coefficient	Mean	Coefficient x	Relative
	Mean	Standard	Mean	Standard	T-Test	(Li)	difference	mean	contribution
	score	Deviation	score	Deviation			(di)	difference	(%)
		(Sd)		(Sd)				(Li x di)	
Quality of products	2.73	0.520	2.63	0.490	0.76*	0.520*	0.1	0.052	0.81
Packing	2.50	0.629	2.53	0.507	0.41	2.347**	-0.03	-0.070	1.10
Display of items/Prices	2.23	0.817	2.40	0.621	-0.88	0.949	-0.17	-0.161	-2.52
Processed products availability	1.50	0.900	1.60	0.968	-0.41	-0.367*	0.16	-0.059	-0.92
Hygienic/clean environment	1.76	0.935	2.06	0.583	-1.49**	-1.923	-0.3	0.577	9.03
Temperature maintenance for	2.03	0.999	2.16	0.647	-0.61	-1.915**	-0.13	0.249	3.90
specific products									
Availability of all items	1.30	1.207	2.10	0.758	-3.07**	-1.584*	-0.86	1.362	21.32
Availability of branded products	2.20	0.664	2.23	0.568	-0.16	-0.001*	0.1	0.000	0.00
Reasonable price	2.23	0.626	2.36	0.668	-0.79	-1.876	0	0.000	0.00
Discounts	2.10	0.661	1.40	0.563	2.79**	1.123	-0.26	-0.292	-4.57
Festival offers	1.00	0.982	1.43	0.858	-0.81	-0.875*	-0.4	0.350	5.48
Good purchasing atmosphere	1.06	0.907	1.60	0.932	-2.24	-1.993*	-0.37	0.738	11.55
Shopping as a pleasure	2.10	0.607	1.83	0.592	1.72	-0.212*	0.5	-0.106	-1.66
Credit facility	1.90	0.844	1.36	0.764	2.56**	0.007**	0.07	0.000	0.01
Home delivery	1.90	0.711	1.26	0.868	3.08*	0.069*	0.54	0.037	0.58
Acceptance of defects in materials	1.46	0.937	0.93	0.907	2.23**	-1.366	0.2	-0.273	-4.28
Bargaining	2.10	0.922	0.63	0.718	7.45**	3.383*	1.17	3.958	61.96
Accessibility to shop	1.10	0.583	1.16	0.791	-0.43	2.830*	0.47	1.330	20.82
Availability of local products	2.06	0.583	1.50	1.008	2.66*	-1.097*	0.9	-0.988	-15.46
Organic products	1.63	0.668	1.26	0.827	1.88*	-2.427*	0.13	-0.316	-4.94

Note: * Significant at 5 per cent level of probability, ** Significant at 1 per cent level of probability

availability of all items, discounts, credit facility, acceptance of defect materials and bargaining, the t value calculated for these variables were significant at one percent level. Hence, there was significant difference between traditional and modern retail outlet in Dharwad. The variables like quality of products, home delivery, availability of local products and organic goods, the t value for these variables were significant at five percent level. Hence, there was significant difference between traditional and modern retail outlet in Dharwad. The consumer in Dharwad considered shopping as a necessity than a pleasure. Accessibility hardly matters as they have more time to spend.

The opinion survey of Traditional and Modern shop visitors in Dharwad was analyzed with the help of discriminant analysis. It can be observed from Table 2 that, as many as 20 characteristics were selected for the study based on opinion of selected respondents. It was found that the characteristics such as bargaining, availability of all items and accessibility to shop have shown maximum relative contribution compared to other characteristics. This was because of modernization of people of the city and they have a tendency to ask for bargaining. However, some consumers, even though there was no bargaining, they look for availability of all items and accessibility to shop. But the characteristics such as discounts followed by shopping as a pleasure, acceptance of defects in materials, availability of local products and organic goods found to have negative contribution for shopping. But the availability of branded products and reasonable price has no impact on purchase.

In order to catch the probability of respondent going for modern retail outlet Logit analysis was carried out and the results are depicted in Table 3. The estimated Logit coefficients such as annual income (0.0003) and average expenditure (0.001), increased the probability of respondent visiting modern retail outlet in Dharwad. The variables such as age of respondents, contact with outlet, time spent were found to have negative influence during visiting. The variables found to have a significant influence were average expenditure, annual income, Contact with outlet, Time spent during visiting. These results

Table 3. Probability of respondents visiting modern retail shops

Particulars	Dharwad					
Constant	0.338					
Average expenditure	0.001*					
Annual income	0.0003**					
Size of family	0.061					
Age	-0.024					
Contact with stores	-0.070*					
Time spent during visiting	-0.003*					
R^2	0.68					

^{**}significant at one per cent level of probability *significant at five per cent level of probability

are in line with the results obtained by Panandikar and Gupte (2007).

The T-test significance of mean difference among characteristics showed that hygienic/clean environment, availability of all items, discounts, credit facility, acceptance of defective material, bargaining power were found to be significant at one per cent level. Further, quality products, home delivery, availability of local products and organic goods were found to be significant at five per cent level. The probability of respondents visiting the modern retail outlets analyzed with the help of Logit analysis. Annual income and average expenditure found to have a positive and significant impact in Dharwad. Contact with stores and time spent during visiting found to have negative and significant influence in Dharwad. The opinion survey of traditional and Modern outlet visitors in Dharwad was analyzed with the help of discriminant analysis. It was found that as many as 20 characteristics were selected for the study based on opinion of selected respondents. It was found that the characteristics such as availability of local products, organic products, discounts, acceptance of defects in materials, display of items/prices, bargaining, availability of all items and accessibility to shop have shown maximum relative contribution compared to other characteristics. But the characteristics such as shopping as a pleasure found to have negative contribution for shopping. But the availability of branded products and reasonable price has no impact on purchase.

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