Users' Motivation and Attitude Towards Print Media Among College Students in Kerala : Implications for the Design of Dissemination Strategies

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Abstract

Conducting a survey with 352 students pursuing higher education in Arts and Science colleges in Kerala, under a multivariate statistical framework, this research investigated the users' motivations and value importance to the reported news from the readers' perspectives in Kerala. The study employed multi - dimensional scaling (MDS) technique to segment the newspaper market according to the perceived similarities in the respondents' motivations, and the findings offer evidence for the presence of diverging motives among young readers in the State. Multiple discriminant analysis administered in the research was able to make out the perceptual differences of readers based on their newspaper choices. The findings suggested the presence of two dimensions of discrimination among the newspaper brands - language simplicity and news credibility on one side and political bias and coverage of news on the other end. Language simplicity along with political reasons separated Malayalam newspaper brands from the leading English dailies, while the latter were favored in terms of the quality of news contents. In sum, youth in Kerala was inclined to adopt a utilitarian approach towards newspaper reading. Hence, the newspaper brands should be more familiar with the perceptual differences among the readers on a wider and richer perspective based on which they should design dissemination strategies to expand their business frontiers.

Keywords : newspapers, reader motivations, MDS, discriminant functions

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Everyone in today's modern and fast changing society, despite their income or affiliation, wishes to be well informed about all aspects of human lives. Information is the prime commodity of the present age (Issa, 2002). In a society, the quality of life and the prospects of both social and economic development depend more and more on information and its efficient usage (Martin, 1995). The awareness and admiration of the significance of information for socioeconomic development led to the development of the information infrastructure (Ojiambo, 1992).

Modern man gets much of his information from the Press. Newspapers are the creations of professional initiatives and have a significant role in publicizing information relating to the newest trends and events that happen in national and international contexts. Newspapers maintain strong presence in the communities in a fast shifting media setting based on their relative influence in public affairs and trust among citizens (Boswell, 2009). A modern newspaper virtually covers every sphere of human activity that includes economics, politics, education, letters, business, sports, movies, and others. It widens the scope of our knowledge and outlook; thereby, we can become part of an elegant society. A newspaper is a tool of preaching positive thinking despite its abuse as a weapon of propagating wrong ideas.

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Newspaper reading is the easiest means of getting up to date with facts. It makes a man to be considerate and practical in a democratic and civilized society. Reading newspapers is important in forming public opinion and the people can access all news and updates at their fingertips. Even in this digital world, newspapers in the print form rule out the sleep of passionate readers who are waiting for their morning dailies. Newspaper reading, catering to diverging tastes and outlook, thus has become embedded into the daily lives of people. Newspaper reporters or journalists, on the other end, should infuse a sense of social responsibility among them while providing news, views, and analyses on various issues important to the advancement of the society.

Print media is one of the cheapest, but right medium to facilitate quick dissemination of information. Newspapers report a wide range of news that has social relevance and that demand attention of the public. However, everyone, due to their busy daily routine, go through the newspapers only for the sections that appeal to them the most. When looking for newspapers, people are usually interested in those that integrate their beliefs and help them to take in their identity. It would be highly imperative for the publishers to bring out the creations that increase the readership and circulation.

The newspaper market in India is growing very fast, fuelled by strong economic fundamentals and demand from an emerging urban and literate middle class with higher purchasing power and rising standards of living (Hooke, 2012). Literacy rate in rural areas was pegged at 71% in 2014, compared to 86% in urban areas (NSSO, 2015). Increased literacy is playing an important role in the impressive ascent of the newspaper industry (Nolen, 2011). India is in the second position among the world's five top countries in terms of daily circulation of newspapers (World Association of Newspapers and News Publishers, 2010). Moreover, the economy has gained relatively significant growth during the post reform period. Such growth creates a new, more literate consumer class, and the country's print industry has been growing at a notable rate of about 10% since the last few years. Another important reason for this growth is that the newspapers in India are shared communally and Indians now increasingly prefer to buy their own paper (Rodrigues, 2010).

Growing literacy rates, particularly in regional languages, has widened the potential readership base (Hooke, 2012). This observation is relevant in the context of Kerala. The state has always been a star performer in terms of Human Development Index in India with higher literacy rate and improved standard of living. Kerala has achieved an effective literacy rate of 93.91%, which is much higher than the national average (Planning Commission, Census Report, 2011). The high literacy rate holds up large circulation publications in the local Malayalam language. The continuing literacy growth and the expanding income base of a growing population will not let down the newspaper market of Kerala. However, the aspects like the content and depth of news, segmentation choices, credibility and impartiality of news, after all emotional attributes delivered are extremely important in determining their success. The newspaper publishers should make out the value importance and instrumentality of the news they report from their readers' perspective. A research of this kind is a great way to find out how the newspapers are doing from their readers' perspectives.

Review of Literature

Newspaper reading and reader preferences and motivations in general have often been a topic of interest in both business and behavioral research. Prior scholarly studies probing into different dimensions of newspaper marketing and reader perception form the basis literature for most of the studies in the area. My research mainly stems out of three streams of literature: (a) work studying the reader preferences and motivations among youth, (b) problems faced by them, and (c) strategic focus of newspaper firms in the market.

At first, the study roots its rationale from the literature on readership bias which shows the existence of heterogeneity among readers in terms of preferences and motivations. Chaudhry and Low (2009) attempted to adopt a pragmatic and utilitarian approach towards reading. The editorial content of the newspaper made it distinct and positioned it in the first place in yielding information to the readers (Meyer, 1985). Flavian and Gurrea (2009)

corroborated the significant positive association of readers' motivations with the knowledge of latest news, exploration for specific information, and search for updates in the newspaper market. Nevertheless, entertainment holds an inverse relation with the readers' preferences. News should be reliable in priority, and exaggerated news has least preference among youth (Costera Meijer, 2007). Fendrick (1941), based on his applied research among high school and college students, proved that ideologies and excitements appear to preponderate among the factors that influence the readers' reading interests. Newspapers are the base of the entire media channel, herald news game, and guide other news sources. Readers favored newspapers whose thoughts agreed with their own (Gentzkow & Shapiro, 2010). Webster and Phalen (1997) claimed that people have ultimate aims to seek out news, but the media setting significantly influences them. Media could directly influence the effectiveness of even a social campaign (Mendiratta & Mehta, 2011). However, in recent times, social media has been taking over a significant role in dissecting the details of each piece of news in spread (Sharma, 2012).

With regard to the reading barriers also, the research is relatively extensive. Newspapers can equip readers, particularly students, with reliable information, knowledge, and insights, to   find the needed edge to become successful in their professional as well as social career (Channaptna & Awari, 2015). Oliveras, Marquez, and Sanmatri (2013) were able to detect some of the aspects of critical thinking where the students have the most difficulties in identifying the writer's purpose and searching for evidence in a text.

Zerba (2004), based on his survey, identified inconvenience and lack of time as the prime reasons for not reading newspapers by the younger generation. General newspaper research executed in studies like Lauf (2001) found the variables, including the role of habit, surveillance needs, and social environment as the major reading barriers among youngsters. However, regular access to a newspaper at home was able to develop reading habits amongst the youngsters, and they might be inclined to spend more time for reading (Bogart, 1989). Moreover, the parents' reading behavior moulded the children's reading habits in the early days of childhood itself (Peiser, 2000).

A strategic shift in the newspaper market is quite revealing in many studies. Earlier, for withstanding the competition and to sustain themselves in the market, newspapers went for the change in the material aspects such as publishing more pictures, color spreads, less editorials, and increase the size of headlines (Zhou, 2005). The newspaper publishers should think graphically which in other ways means to invite the reader into each page with attractive, provocative, and orderly use of photos, typography, and illustrations (Garcia, 1981).

Gentzkow, Petek, Shapiro, and Sinkinson (2012) analyzed the strategic orientations of media firms under a competitive framework, and their findings showed that competition in the media market during the beginning years of the 20th century forced newspapers in many countries, including the U.S., to embrace different party affiliations. Readers of newspapers often showed consensus in terms of their serious social and political ideas. Personal political views of the editor truly reflected in the editorial position, although such views reduced profits (Balan, DeGraba, & Wickelgren, 2009 ; Weaver & Wilhoit, 1996).

Larkin and Grotta (1976) portrayed the consumer attitudes toward the use of advertising content in a small daily newspaper. Their study found that the advertising content of the newspaper was viewed as local news by its subscribers and subsequently had the highest readership. Moreover, most of the respondents recorded positive attitude towards advertisements and preferred to see more advertising in the future. However, the empirical work of Levy and Nielsen (2010) attributed the recent declines of news industry to their over dependence on advertising for revenues and to the reverberations of global recession. The study found that the impact of Internet's reach and spread was least on this issue.

Some related literature in newspapers (Reddaway, 1963 ; Rosse, 1970) highlighted the significance of fixed costs in advertising, circulation, and content development and the consequential formation of well-focused markets with fewer product options. During the times of declining demand for products, normally, it is optimal for the producers to go for price cuts (Tirole, 2007). Studies like the ones of Parker and Van Alstyne (2005) and Rochet and Tirole (2003) claimed that since newspapers derive their revenues from two sources, that is, readers and advertisers, the prices at the receiving side (readers) might be subsidized at the cost of the other side (advertisers).

With the dissemination of free news through digital sources and news aggregators like Yahoo, readers were more and more reluctant to pay for the print newspapers (Fallows, 2010 ; Lisa, 2008). However, in a survey conducted among Boston Globe editorial employees, Barthel (2016) found that around half of the newspaper readers relied only on the print edition. Weber and Poyar (2012) and Filloux (2012) proposed that newspapers must focus on small but more loyal readership base to stabilize their circulation revenues. Sivankutty and Sudhakaran (2011) showed that the librarians in India preferred digital dailies to print media.

On reviewing the literature, it is obvious that the studies on newspaper reading are relatively scanty in India, particularly with reference to Kerala. In fact, the research exploring the newspaper reading behavior and the underlying dimensions in the context of a high literate State like Kerala have yet to come out. The high literacy rate with its continuing momentum and the consolidating earnings conditions in the State offer ample scope for the further growth of the newspaper market in Kerala. Therefore, the present study expects to fill the research gap in the sphere of newspaper research by providing some convincing exhibits on how can the newspapers in Kerala better off their readership base by designing news contents that ensure at least minimal level of acceptable values, which will vary with the information needs and wants of individuals.

Data and Methodology

Given the nature of the research, the study made formal quantitative data collection using survey method. The sample for this study covers 352 students who were pursuing Under Graduate or Post Graduate education in colleges in Kerala. The study considered Arts and Science (Govt. or Private Aided) colleges in the State and chose 15 colleges (five each from three regions) as the primary sample units. Then the teaching departments of the selected colleges were identified under four broad streams: Science, Commerce, Humanities, and Literature; and 88 students from each stream were picked. My personal judgment formed the basis for the final sample selection.

The theoretical underpinnings and the related empirical literature enable the current research to develop a conceptual framework. The study groups the variables explaining the reading behavior of the youngsters under two dimensions: reader motivations and the newspaper choices. The research measures the underling variables explaining each of these behavioral components separately using appropriates scaling techniques.

The survey instrument used in this study consisted of four parts. In the first part, students were asked about their demographic conditions. In the second part, they were asked to rank the major attributes that determined their motivation behind the reading of newspapers. The questions in the third part of the survey asked about the determinants of newspaper choices. The survey was made during the month of April 2017.

Some descriptive statistics relative to the sampled consumers are reported in the Table 1. Majority of the respondents (57.4%) were women (Table 1). In recent times, in colleges in Kerala, the women students outnumber the men students ; hence, more participation of women in the survey definitely ensures better representation. The under graduate students formed a large chunk of the participants. Most of the students belonged to the age group of 18 to 20 years. The maximum age of a student who is pursuing higher education in Kerala is normally 22 years. Indeed, only a marginal part of the respondents were above the 22 years category. Furthermore, average annual family income of the respondents was relatively low. Approximately one-half of the sample respondents came from families having income of less than ₹ 1 lakh per annum and 36% of the respondents' family earning income was between ₹ 1 lakh - ₹ 5 lakhs. Regarding the household size, 52% of the respondents lived in a 4-people family (two children), while people that lived in families formed by five or more people (three or more children) amounted to 42%. Families with a single child were negligible (6%).

Table 1. Some Descriptive Statistics of the Sample Respondents

Demographic Variable	Category	No of Respondents	%	Demographic Variable	Category	No of Respondents	%
Gender	Male	150	42.60	**Age (Years)**	18-20	272	77.27
	Female	202	57.40		20-22	69	19.60
Course	UG	278	78.98		Above 22	11	3.13
	PG	74	21.02	**No of Family Members**	Single child	21	6.0
Annual Family Income (in ₹)	Below 1 lakh	173	49.15		Two Children	183	52.0
	1 - 5 lakhs	127	36.08		Three or more children	148	42.0
	Above 5 lakhs	52	14.77				

Analysis and Results

Analysis is performed in three steps. First, scale reliability was tested based on Cronbach's alphha. Secondly, I employ multi - dimensional scaling (MDS) techniques to readers' motivations spatially by means of visual display. The third step consists of a multiple discriminant analysis to differentiate the popular newspaper brands in Kerala in terms of the news attributes.

   This part discusses the results of the analytical methodology pursued along with its practical implications in assessing the reader motivations and preferences in the newspaper market of Kerala. As mentioned earlier, at first, we compute the Cronbach's alpha for testing the reliability of the scale used in the research. The computed Cronbach's alpha coefficient of 0.824 indicates the scale used to measure the perception of readers was highly reliable. The further discussions are spanned into two sections. The first section evaluates the reader motivations using MDS procedure, and the results on discrimination among popular newspaper brands in terms of their news attributes are corroborated in the second section.
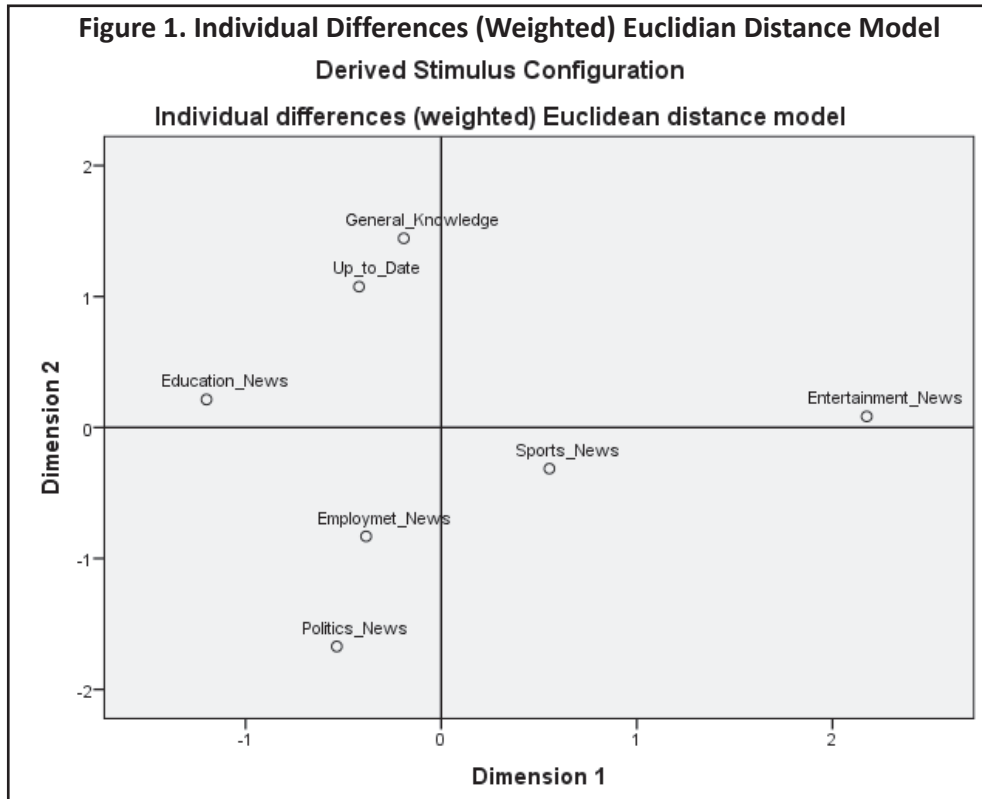
(1) Readers' Motivations in Newspaper Market - Multi - Dimensional Scaling : The Table 2 reports the preference ranking of newspaper attributes by readers. Most of the respondents who participated in the survey considered newspaper reading as the prime source of their information search. According to 94% of the sample respondents, they read newspapers primarily to get information or to broaden their general knowledge. Among them, 70% read papers for gaining daily information and 24 % of the respondents considered newspaper reading as a source for widening their general knowledge, 7% each give prime importance to getting employment news

Table 2. Purpose of Reading Newspapers by the Respondents

S l no.	Reading Purpose	Preferences		
		1st (%)	2nd (%)	3rd (%)
1.	To get information	70(47.3)	17(11.5)	17(11.5)
2.	To broaden the horizon of general knowledge	24(16.2)	41(27.7)	16(10.8)
3.	For educational purpose	11(7.4)	19(12.8)	18(12.2)
4.	For entertainment	7(4.7)	16(10.8)	17(11.5)
5.	To know the sports news	6(4.1)	6(4.1)	13(8.8)
6.	For getting various employment news	7(4.7)	7(4.7)	7(4.7)
7.	To know political news	1(0.7)	6(4.1)	10(6.8)

Table 3. Matrix Stress

Variable Matrix	Stress	R^2
	0.03725	0.98975

Figure 1. Individual Differences (Weighted) Euclidian Distance Model

Derived Stimulus Configuration

Individual differences (weighted) Euclidean distance model

and being up to date about the happenings of the world through newspaper reading. Knowing sports news was primal for 6% of the respondents and all other purposes were secondary to almost all readers.

Multi-dimensional scaling (MDS) is a powerful mathematical procedure that can systematize data by representing similarities of objects spatially as in a map (Schiffman, Reynolds, & Young, 1988). It describes a set of techniques that deal with property space in a more general way than which is possible to scale objects, individuals, or both with minimum of information. MDS procedures, which use direct similarity or dissimilarity measures as inputs, have the advantage of being low in experimental contamination (Krishnaswamy, Sivakumar, & Mathirajan, 2013). They do not need a-priori knowledge of the attributes of the stimuli to be scaled. MDS is characterized by respondent judgment concerning the degree of similarity of pairs of stimuli on 'similarity on distant bases.' The scale value reflects the similarity or dissimilarity of each stimulus pan. In addition, this concept of psychological distance is central to the theory behind MDS as a measurement technique.

In this research, I examined the motives of the students in newspaper reading by using MDS. The respondents were asked to rank their intentions behind reading newspapers from the *most preferred* to *least preferred*. Accordingly, they gave their responses on seven aspects that included keeping up to date with the world ; widening their GK base ; for educational needs ; getting information on employment opportunities ; interest in politics, sports, and entertainment. When the spatial maps are based on preference data, distance implies the differences in preferences.

The index of fit or R square should be examined to decide how well the MDS model fits the input data. The higher value of R- square, 0.9897 (Table 3) indicates that almost full proportion of variance of the optimally scaled data is explained by the MDS procedure, which perfectly fits the input data. Stress value, on the other hand, measures badness of fit. Such value measures the proportion of variance of the optimally scaled data, which is unexplained by the MDS model. A stress value less than 5% indicates the excellent reproduction of the similarity (Krishnaswamy et al., 2013). Hence, the stress value of 0.0372 warrants a fair fit and indicates a good solution.

The preference data provides a simple rank order of the motives according to the readers' choice. The use of multidimensional scaling enables newspaper brands in Kerala to have a better understanding of what motives are most important to readers, and the knowledge of which can help them to leverage their positioning in the market. The Figure 1 shows the MDS map of selected reader motives from similarity data. In the figure, the horizontal axis may be labeled as education news to entertainment news and vertical axis may be interpreted as rational information to irrational political bias.

In this spatial representation, each motive is identified by its distance from other motives. The closer the two motives (general knowledge and up-to-date information), the more similar they are perceived to be. The farther apart are the two intentions (entertainment and education), the less similar they are. Small distance indicates greater similarity between reader motives. To illustrate the motive, 'for getting general knowledge' closely matches with 'the need of up-to-date information' and 'education news' to an extent, but contradicts with 'entertainment news' and 'political base news'. The position of different reader groups can be easily determined and the newspaper dailies can design their strategies accordingly to widen their readership base in the state.

Often, the dimensions represent more than one attribute. The configurations can be interpreted by examining the coordinates and relative positions of the motives. Motives located near to each other are considered similarly. An isolated motive creates a distinctive reader group. Motives that are farther along in the direction of a descriptor reveal diverging reader groups.

(2) Youth Preferences in Newspaper Market - Discriminant Analysis : People reading newspapers generally have a unique perception towards different newspaper brands. If a researcher would like to identify newspaper attributes, which discriminate newspaper brands, he/she can develop attribute - based perception map using discriminant analysis.

Discriminant analysis is the appropriate statistical technique when the dependent variable is a categorical variable and independent variables are metric variables (Hair, Black, Babin, Anderson, & Tatham, 2012). The dependent variable consists of two or more groups/classifications. The analysis involves a variate, which is a combination of independent variables that will discriminate best between objects. We can derive the variate for a discriminant analysis (also known as discriminant function) from equation (1) and involves the linear combinations of the following :

$$D = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots\ldots b_k n_k \quad \text{--- (1)}$$

Table 4. Group Statistics and Test of Equality for the Estimation Sample

	Malayala Manorama	Mathrubhumi	The Hindu	The Indian Express	Wilk's Lambda	F	Sig.
Simple Language	4.69	4.76	3.67	3.79	0.605	61.545	0.000*
News Content	4.25	4.34	4.47	4.57	0.977	2.248	0.083
Political Reasons	4.18	3.08	3.20	3.82	0.696	41.217	0.000*
Credibility	4.02	4.44	4.27	4.04	0.887	11.976	0.000*
News Coverage	4.27	3.97	4.43	4.21	0.948	5.178	0.002*

Note : * significant at the 1% level

where,

D = Discriminant score,
b_s = discriminant coefficients,
X_s = predictor or independent variable.

Discriminant analysis is the appropriate statistical technique for testing the hypothesis that the group mean of a set of independent variables for two or more groups are equal. To do this for the study, I have taken newspaper brands as groups and newspaper attributes as brand discriminating variables. Thus, the dependent categorical variable is a newspaper selected by respondents from a set of four leading newspaper dailies (*Malayala Manorama, Mathrubhumi, The Hindu,* and *The Indian Express*), and independent variables are five newspaper attributes - simple language, quality of news contents, political bias, credibility of news published, and coverage of news. The respondents had to rate their perceptions on a 5 - point scale based on the importance they gave to these attributes while choosing a specific newspaper brand. As mentioned in the methodology part, the study collected responses in this regard from 352 students who were pursuing higher education in colleges in Kerala, to select newspaper brands and rate attributes on importance. I split the sample further into analysis and held out samples of 287 and 65, respectively.

Initially, the mean scores should be analyzed for each group to make visual inspection of the independent variables to know whether they discriminate among the groups or not. Also, there is a need to report values of Wilk's Lambda and univariate F ratios for each independent variable to infer its statistical significance. An examination of group means reported in Table 4 indicates that language simplicity appears to separate the newspaper brands more widely than other performance parameters. Both of the Malayalam dailies are much closer in terms of this parameter, and such relation subsists between English dailies. Hence, this variable provides discrimination between the Malayalam dailies and English dailies. There also exists considerable separation in political bias and credibility of the news. The political bias provides discrimination, in varying degree, between all the newspaper brands simultaneously. Substantial variations are evident for group means of news coverage, and it persists at a relatively higher scale between the Malayalam and English dailies. The content of news covered by both Malayalam and English dailies are found to be similar despite marginal differences in their group means.

Wilk's Lambda and the F test are the typical measures of significance of differences across groups (Malhotra & Dash, 2011). However, they assess the overall differences and do not guarantee that each group is significant from others. Accordingly, the validity of the inferences on their overall differences largely depends upon the presence of individual group differences. On a univariate basis, four out of five attributes display significant differences between their group means. It is evident that language, political bias, credibility, and news coverage significantly discriminate newspaper brands, while news contents do not exhibit significance in this regard. Most significant variables have the lowest Wilk's Lambda values, which add to the validity of the findings. Although greater statistical significance corresponds to higher overall discrimination, it does not always correspond to the greatest discrimination between all the groups.

Table 5. Results of Stepwise Discriminant Analysis

Step	Number of Variables	Wilk's Lambda	df	F	P value
1	1	.605	287	61.545	0.000*
2	2	.403	287	54.033	0.000*
3	3	.324	287	44.803	0.000*
4	4	.300	287	35.587	0.000*

Note : * significant at the 1% level

Table 6. Variables in the Analysis after Step 4

Variables	Tolerance	*F* to Remove	Wilk's Lambda	Min. D Squared	Between Groups
Political Reasons	.810	39.899	.556	.151	*The Hindu and The Indian Express*
Simple Language	.860	79.665	.428	.355	*The Hindu and The Indian Express*
News Coverage	.706	29.473	.395	.434	*The Hindu and The Indian Express*
Credibility	.813	7.379	.324	.419	*The Hindu and The Indian Express*

Table 7. Pairwise Group Comparisons

Newspaper		*Malayala Manorama*	*Mathrubhumi*	*The Hindu*	*The Indian Express*
Malayala Manorama	F	-	50.366 (0.000*)	42.468(0.000*)	28.994(0.000*)
Mathrubhumi	F	50.366(0.000*)		41.592(0.000*)	39.112(0.000*)
The Hindu	F	42.468(0.000*)	41.592(0.000*)		1.640 (0.164)
The Indian Express	F	28.994(0.000*)	39.112(0.000*)	1.640 (0.164)	

Note : Figures in parentheses indicate significant level ; *significant at the 1% level.

Table 8. Summary of Canonical Discriminant Functions

Function	Eigen value	% of Variance	Cumulative %	Canonical Correlation	Wilk's Lambda	Chi-square	*df*	Sig.
1	.935	56.5	56.5	.695	.300	339.505	12	.000
2	.716	43.3	99.8	.646	.581	153.365	6	.000
3	.004	.2	100.0	.061	.996	1.063	2	.588

Four brands and five attributes taken in the research imply that maximum number of discrimination is three. Looking at the values of canonical discriminant functions, it is clear that three functions significantly discriminate brands.

The information provided in Table 5, Table 6, and Table 7 summarizes the steps of the four - group discriminant analysis with the following results. The attributes of simple language, political reasons, credibility, and coverage of news are the variables in the final discriminant function. The overall model fit is statistically significant and all the variables to be included in the function have significantly higher values of 'F to remove' (Table 6).

Discrimination increases with the addition of each variable, which is evident from the declining Lambda values (Table 5). By comparing the final Wilk's Lambda for the discriminant analysis (0.30) with the Wilk's Lambda for the best result from a single variable (political reasons), a striking improvement in the discriminant function through consideration of most of the variables in the model is observed. With no variables reaching the significance level necessary for addition or removal, the stepwise procedure terminates.

The last section of Table 6 provides the significance tests for group differences between each pair of newspaper brands. The Table 7 reveals that all pairs of brands except that of English dailies show statistically significant differences, denoting that the discriminant functions created separation not only in the overall sense, but for most brands as well.

Among the three functions that were used in the analysis, the first two functions are statistically significant (Table 8). The values of Wilk's lambda are relatively low and statistically significant at the 1% level. The Lambda value of the third function is not found to be significant at any level. The first and second functions, respectively account for 56.5 % and 43.3% of the variance explained by the three functions. The contribution of the third function is negligible and is not considered in further procedures. The total amount of variance explained by the first function is $(0.695)^2$, that is 48.3%, while the second function explains $(0.643)^2$ or 41.73% of the remaining variance (58.23%) that comes to 24.29%. Consequently, the two functions together explain 72.59% of the total variance in the newspaper choice of the readers.

Table 9. Standardized Canonical Discrimination Function Coefficients

	Function		
	1	2	3
Simple Language	1.029	.240	.173
Political Reasons	.032	.940	-.192
Credibility	.295	-.340	.031
News Coverage	-.653	.562	.820

Table 10. Structure Matrix of Newspaper Attributes

	Function		
	1	2	3
Simple Language	.818*	.189	.509
Political Reasons	-.051	.778*	-.554
News Coverage	-.189	.158	.966*
Credibility	.123	-.396	.424*
News Content	.011	-.087	.221*

Note : * indicates larger coefficient

Table 11. Canonical Discriminant Function Coefficients

	Function		
	1	2	3
Simple Language	1.969	.459	.331
Political Reasons	.042	1.218	-.249
Credibility	.539	-.621	.057
News Coverage	-.921	.793	1.157
(Constant)	-7.446	-7.165	-5.669

The interpretation of earlier results is supported by standardized discriminant functions coefficients and structure matrix reported in Table 9 and Table 10, respectively. The standardized coefficients indicate a large coefficient for simple language and credibility of news reported ; whereas, Function 2 has a relatively large coefficient for political reasons and news coverage. The analysis of the structure matrix also helps to make a similar conclusion.

The Table 11 provides the discriminant weights of four attributes and the group means of each brand on both functions. On looking into the group means of each brand, the first function primarily distinguishes the *Malayala Manorama* from the remaining newspapers. However, marked differences can be observed between Malayalam newspapers and the English dailies. The second function also separates *Malayala Manorama* from other brands and by this, most separation is found between *Malayala Manorama* and *The Indian Express*. Therefore, we can form an impression that both functions are almost same in their capacity to discriminate the newspaper brands under study. As we found earlier, the third function is the weakest in the system.

With the help of Figure 2, we can view that each group has a dispersion around the group centroid. Malayalam dailies are most concentrated with least overlap with the English dailies. The centroids of both of the English newspaper brands are close to each other, showing more similarity in their brand attributes. The overlaps that exist between the two dailies in the centroid suggest probable emergence of a fifth group, a newspaper brand which can be a better choice in terms of parameter identification.

Figure 2. Canonical Discriminant Functions
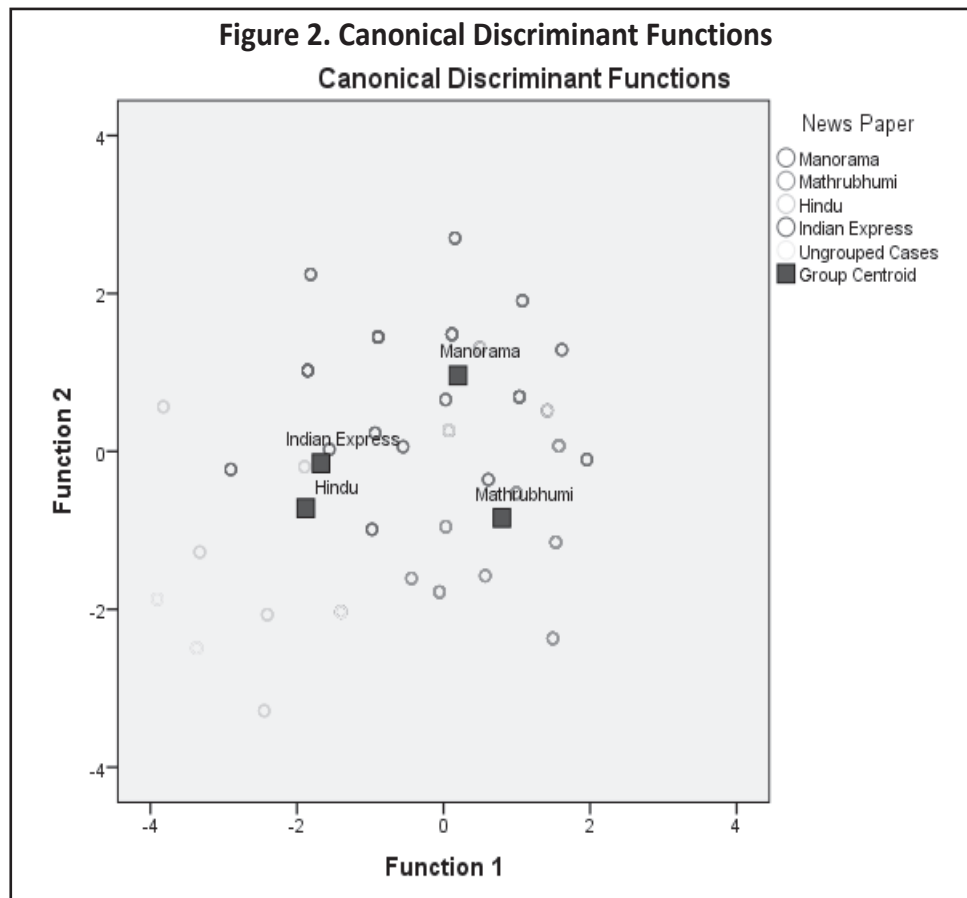
Finally, we should again determine the predictive accuracy level of the discriminant function for assessing the overall fit model. The hit ratios for the estimation sample, holdout sample, and cross validation were computed separately, and the same are reported in Table 12. Both estimation and cross validation samples have the same hit ratio of 72.10%. Therefore, the first two discriminant functions in combination achieve a high degree of classification accuracy. Thus, 72.1% of original grouped cases are correctly classified. However, the hit ratio for the holdout sample falls to 64.61%. The hit ratio must be compared with the proportional chance criteria (threshold value) to assess their internal validity and thereby, the true effectiveness.

The proportional chance criterion is computed by adding the square of proportions of each group in the model, with a calculated value of 33.35% (041.812 + 36.932 + 10.452 + 10.812). In the estimation sample, the level of classification accuracy in all of the individual groups is substantially higher than the threshold value, and the same is true in the case of holdout sample also, which indicates an accepted level of classification accuracy. Thus, discriminant procedures executed in this research are inferred to be valid and effective.

The MDS analysis is done at the individual respondent level, enabling us to segment newspaper market of Kerala according to the similarities in the respondents' expectations. The students, who constitute the respondents, are clustered based upon their similarity with respect to original preference rating and ideal points established for each segment. The respondents ranked their reading motivations in the order where updating the information is preferred first followed by widening general knowledge. Political news is provided the least significance by the students while reading newspapers. The preference ranking along with the coordinates of the spatial map reveals the presence of diverging motives among readers when they read newspapers.

Table 12. Classification Results

		Newspaper	Malayala Manorama	Mathrubhumi	The Hindu	The Indian Express	Total
			Predicted Group Membership				**Total**
Original	No.	Malayala Manorama	86	18	0	16	120
		Mathrubhumi	13	90	0	3	106
		The Hindu	8	0	16	6	30
		The Indian Express	5	0	11	15	31
	%	Malayala Manorama	71.7	15.0	.0	13.3	100.0
		Mathrubhumi	12.3	84.9	.0	2.8	100.0
		The Hindu	26.7	.0	53.3	20.0	100.0
		The Indian Express	16.1	.0	35.5	48.4	100.0
Cross-validated	No	Malayala Manorama	86	18	0	16	120
		Mathrubhumi	13	90	0	3	106
		The Hindu	8	0	16	6	30
		The Indian Express	5	0	11	15	31
	%	Malayala Manorama	71.7	15.0	.0	13.3	100.0
		Mathrubhumi	12.3	84.9	.0	2.8	100.0
		The Hindu	26.7	.0	53.3	20.0	100.0
		The Indian Express	16.1	.0	35.5	48.4	100.0
Holdout	No	Malayala Manorama	16	8	1	3	28
		Mathrubhumi	3	16	0	1	20
		The Hindu	2	0	5	1	8
		The Indian Express	1	0	3.2	5	9
	%	Malayala Manorama	57.14	28.57	3.57	10.72	100.0
		Mathrubhumi	15	80	0	5	100.0
		The Hindu	25	0	62.5	12.5	100.0
		The Indian Express	11.11	0	38.33	55.56	100.0

The discriminant analysis has been administered to make out the perceptual differences of readers based on their newspaper choices. We expect that the analysis of differences in terms of the attributes that the readers consider in the selection of newspapers can widen the readership base in Kerala through efficient news delivery. Four newspaper brands were selected, and readers' perceptions were measured on five broad attributes. The analysis offers valid findings on the attributes that distinguish newspaper brands and suggests the needed changes. There are primly two dimensions of discrimination among the newspaper brands. The first dimension is reflected by language simplicity and news credibility. In contrast, the second dimension is featured in terms of political bias and coverage of news. There is another dimension solely characterized by news content, which does not qualify the statistical tests of validity.

Profiling the four newspapers on the specified dimensions and attributes related thereto would help managements to make out the perceptual differences among the readers and enable them to design apposite strategies to widen their newspaper circulation. The leading Malayalam daily, *Malayala Manorama* is perceived at a higher scale among the groups selected. All the four statistically significant attributes of this brand are perceived at a scale higher than the other brands. Except for political reasons, this brand is comparable to its close competitor,

Mathrubhumi. Language simplicity along with political reasons separate this brand from the leading English dailies circulated in the State.

The Malayalam daily, *Mathrubhumi*, holds similarities to both *Malayala Manorama* and English dailies. As we have already seen on three newspaper attributes, it is comparable to *Malayala Manorama*. For political reasons, the readers' perceptions towards *Mathrubhumi* are much similar to that of *The Hindu*. The newspaper brand holds highest perception of readers on language simplicity and credibility of news.

The two English dailies - *The Hindu* and *The Indian Express* hold the most favored perception in terms of quality of new contents. They are favored least in terms of the simplicity of language. In terms of quality of news contents, *The Indian Express* has been perceived to be the best among the group.

Conclusion

This research investigates the reading motivations and preferences of youth towards the print newspapers in Kerala. A survey of 352 college students between the ages of 18 to 25 years from different parts of the State reveals the youth's inclination to adopt a utilitarian approach towards newspaper reading. The study has been able to validate the findings with the support of a comprehensive statistical framework. The multi -dimensional scaling (MDS) technique employed in the study tells the presence of diverging motives among young readers of newspapers in the State and multiple discriminant analysis unfolds perceptual differences in their newspaper choices. Interestingly, the findings suggest language simplicity and political reasons as prime factors that discriminate Malayalam dailies from the leading English dailies. However, the readers who favored news contents quality preferred English dailies.

Managerial Implications

The study has many policy implications. The findings from this research confirm the fact that the variety and scope of youth preferences towards news attributes is indeed a strong differentiating factor. The Malayalam daily, *Mathrubhumi*, which is striving for its circulation growth, can attract new readers by focusing more on political news and better news coverage. English dailies should reduce the amount of language jargons while reporting news to enhance the level of understanding of news and to build a stronger readership base. *The Hindu* newspaper should cover more political news to uplift readers' interest, a strategy which will help it to counter the circulation strategies of its close competitor, *The Indian Express*. When these changes occur, the potential readers are expected to be more committed to the relationship ensuring long-run reader retentions. The gaps in the spatial map indicate potential opportunities for the newspaper brands in Kerala to increase their subscription rate by satisfying different reader groups.

Limitations of the Study and Scope for Further Research

The study is not free from limitations. The findings of this study are limited to selected student respondents from Kerala, a relatively small state in India. The results of the study stem from the responses on limited questions on newspaper motives and preferences among students in Kerala. Using alternative methodologies, incorporating large samples, and covering different age groups in and outside Kerala would definitely improve further analysis and significance of the study on this issue. These are possible and definitely can be added to the future line of newspaper research in India.

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