Linguistic Variation among Newspapers in Pakistani Print Media: A Multidimensional Analysis

Sajid Ahmad
Asim Mahmood

Abstract

The present study uses multi-dimensional analysis to elaborate the internal variation among the leading newspapers taking into account the press reportage in Pakistani print media. From variationist's perspective, previous quantitative studies have just focused on the individual linguistic features of the language of Pakistani press reportage but the internal variation among the newspapers as well as among the sub-categories of Pakistani news register have not so far been explored which is a marked feature of register studies. The present study is pioneering in nature and investigates new textual dimensions in Pakistani press reportage after applying new factor analysis on Pakistani News Corpus. Drawing on a special-purpose corpus based on the sub-categories of press reportage from Pakistani media, the present study identifies four new textual dimensions and labelled them: "Reporting of Concrete Issues vs Discussion of Abstract Information", "Opinion-based reporting", "Policy-based Discourse vs Other Concerns" and "Event-based reporting vs Person-based reporting". Significant statistical linguistic differences among the newspapers of Pakistani print media with reference to each sub-category of press reportage are observed through factorial ANOVAs and different patterns of linguistic variability are interpreted on newly explored four textual dimensions. Factorial ANOVAs are applied among the leading Pakistani newspapers on each sub-category of Pakistani press reportage and the interpretation of linguistic variation among newspapers on each sub-category is elaborated on the new textual dimensions. Among all the newspapers, the analysis of the study reveals that the language of The Frontier Post newspaper is the most distinct on all four textual dimensions.
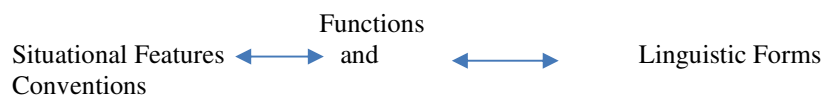
Keywords: *Newspapers, statistical interaction, multi-dimensional analysis, press reportage.*

1. Introduction

The primary purpose of the present study is to explore the linguistic differences among newspapers in Pakistani press reportage after identifying the key textual dimensions in this register. Corpus studies have demonstrated the fact that "registers are the predictors of linguistic variation" (Biber, 1994). The language of the press reportage register in Pakistani print media represents certain linguistic features which need a detailed analysis. Print media in Pakistan generates a lot of language that is heard and spoken in society.

Leitner (1997) states the importance of media: "Media brings into the public arena whatever is of public interest" (p.07). Linguistic studies of journalism are certainly based on the idea that messages originating from journalism are not always clear and need deep insight towards the real understanding of the news messages. Language of press reportage in Pakistani print media has been a key area for research due to cross-cultural background differences and the indigenous norms which seem to have been absorbed in language of Pakistani media with the passage of time. Grover and Deepak (2004) ascertain the fact that the language of newspapers in Pakistani print

media shows certain features that need detailed analysis: "Language of news media published in Pakistan carries many linguistic characteristics taken from local linguistic features for the sake of successful communication with the local readership; there is no barrier to communication to restrict the conveyance of the meaning" (p.15).Certain cross-cultural factors and postcolonial scenario have necessitated the new register explorations in Pakistani English. Therefore, the current study explores the internal variation in press reportage register of Pakistani print media.Registers are defined by situational characteristics and therefore termed as situationally defined varieties. Register studies typically have three basic features: the elaboration of situational characteristics, description of key linguistic characteristics and the analysis of functional associations between the situational and linguistic features:

$$\text{Situational Features} \longleftrightarrow \overset{\text{Functions}}{\underset{\text{Conventions}}{\text{and}}} \longleftrightarrow \text{Linguistic Forms}$$

(Biber, 1994, p.33)

Register variation is innate in human language and a single speaker always makes choices in pronunciation, morphology, word choice, and grammar which exhibit a range of situational factors. "Register differences are realized through the relative presence or absence of register features---core lexical and grammatical features----rather by the presence of a few distinctive register markers" (Biber, 2009, p.823). Register analysis focuses on linguistic features and thereby benefits quantitative and comparative analysis of these linguistic features. Register analysis may be conducted on individual linguistic features. Anwar and Talaat (2011) and Muhabat et.al. (2015) have studied the individual distinct linguistic features of Pakistan journalese register. However, Biber and Conrad (2009) have emphasized that register studies based on individual linguistic features are often inadequate and subjective in nature. Ervin-Tripp (1972), Hymes (1974) and Brown and Fraser (1979) identified the importance of co-occurring features of register analysis. Biber (1988) also conducted a study of co-occurring features required for register analysis and established it as a powerful method for comprehensive description of register variation.

The present study aims to explore the following key question:

Are there differences among the different newspapers in Pakistani print media with reference to each sub-category of press reportage in their use of the linguistic features associated with a new set of textual dimensions?

2. Literature Review

From the variationist's perspective, the language of media has been the focus of interest for the researchers for a long time. The characteristic features of the headlines of a range of English newspapers were revealed by Mardh (1980). The different features of newspapers language like sentence length and passive verbs were investigated by Wallace (1981). The tense ties between BBC English and the range of accent types in U.K broadcasting were studied by Montgomery (1986). Verb tenses, deixis, quotations, and conversation structure in the six American television broadcasts were also studied by Geis (1987).The work conducted by Bell (1991) shed light on the

deletion of determiners in the descriptive framework of a noun phrase name apposition drawing on the data from different British newspapers.

Compared to foreign researches, the language of Pakistani print media has not been explored to the same extent. Most of the studies have been conducted from the content analysis framework in Pakistani print media. Sadaf (2011) investigated the language of Pakistani English and Urdu newspapers. From variationist's perspective, Uzair et.al. (2012) studied the role of Pakistani English newspapers in promoting the lexical deviations. Muhabat et.al. (2015) also claimed Pakistani Journalistic register as independent register in comparison with British English and worked on the divergence in hyphenated lexemes in Pakistani Journalistic English. Biber in his well-acclaimed work (1988) established that any effort to study linguistic variation based upon individual linguistic features instead of co-occurring linguistic features is partial and likely to produce misleading results. Instead he suggested a multidimensional approach to study linguistic variation which is corpus-based, empirical, quantitative and comparative in nature. The present study explores the internal variation among newspapers in Pakistani print media through multidimensional (MD) analysis.

3. Research Methodology

A Pakistani news corpus (PNC) based on eight sub-categories of press reportage was compiled for the present study. The compilation of PNC required a careful process. This included selecting the leading newspapers on circulation basis according to the list provided by ministry of Information Govt.of Pakistan and making it representative of Pakistani press reportage including the representation of five provinces of Pakistan. It was decided to collect the leading newspapers based on its edition representing each province of Pakistan. Top five leading newspapers were selected in the following way: Daily Dawn newspaper (Quetta edition representing Baluchistan province of Pakistan) The Daily Times newspaper (Karachi edition representing Sindh province of Pakistan), the Frontier Post (Peshawar edition representing KPK province of Pakistan), the Daily Newspaper (Lahore edition representing Punjab province of Pakistan) and the Daily Nation newspaper (Islamabad edition representing capital of Pakistan). The leading newspapers decided the following eight sub-categories of Pakistani press reportage: Business press reportage (BU category), Crime press reportage (CR category), Cultural reportage (CU category), International press reportage (IN category), Metropolitan press reportage (ME category), National press reportage (NA category), Political press reportage (PO category) and sports press reportage (SP category).

The next step was to select the number of words for each text in the sample to be taken as representative of press reportage of Pakistani Print media and for this purpose, Pakistani leading newspapers were explored and accessed. It was found that all of the leading newspapers of Pakistani press reportage are available online, so access to these newspapers was relatively convenient. The number of words for each sample of the text was the issue to be sorted in the process of collection of the texts. It was advised to collect the whole text of news item from each Pakistani newspaper because the access was quite easy. The researcher decided to collect 50 texts per sub category of every newspaper to draw conclusive judgment about the linguistic differences of each category in the data. So, 50 texts of each category were collected from each leading newspapers in the Pakistani print media. The complete details about PNC are given below in the following table 1.

Table1: **Details about Pakistani News Corpus.**

Total no. words of PNC	23,11,410
Total number of newspapers	5
Total number of sub-categories	8
Average no.of words per newspaper	4,62,282
Total no. of texts per category	50
Total no.of texts per newspaper	400
Average no. of words per category	57,786
Average no. of words per text	1156
Total texts of PNC	2000

Once the corpus was compiled, the corpus was sent to Prof. Douglas Biber at Northern Arizona University America in the US. Using the Biber Tagger and additional program called Tag Count, the corpus was tagged for part of speech and more than 150 linguistic features were counted and normalized(per thousand words) for each text. However, only some of those features which was determined to be interesting and relevant to analyze in press reportage, were included in this study. Factor analysis was performed on the normed rates of occurrences for features we selected. The factor analysis was performed in R, using principal axis factoring and a promax rotation. The matrix shows the loading for each of the features that exhibit strong tendency to c-occur on one dimension. The minimum factor loading cut-off point was set at +/- .30 (this was set +/- .35 in Biber's 1988 study). The required minimum cut-off point is called as 'salient Loading'. Some of the features show more loading at more than one dimension. Biber (1988) suggests that researchers select the features in the factor with highest loading (ignoring +/- sign): "Each linguistic feature is included in the factor score on which it has the highest loading (in terms of absolute magnitude, ignoring plus or minus sign" (p.93). It is also notable fact that at least five linguistic features are needed for any factor to be interpretable. Later, factorial ANOVAs were applied to measure the statistical differences among/between categories of press reportage.

4. Results of Multidimensional Analysis

This section offers interpretation of the linguistic features resulted from the factor analysis. Our analysis of the scree plot supported a four factor solution. Each of these four dimensions includes both positive and negative features and both positive and negative features on same dimension point towards a complementary distribution of features i.e. if the text has large frequency of positive features, the negative features will decrease in that text and vice versa. Table 2 given below shows the sets of co-occurring grammatical features identified in the factor analysis.

Table 2: **Co-occurring Linguistic Features on the Four Dimensions of Pakistani Press Reportage**

Factor	Loading	Features

1 Positive factual adverbs, concrete nouns, present verbs, privateverbs, demonstrative pronouns, first person pronoun, pronoun it ,coordinating conjunction, connecting clause, concrete nouns ,All wh-relative clauses, topic adjectives, coordinating_conj_, phrasal connector, 'THAT'

comp.clauses controlled by nouns, nominal pronouns, adverb likely, to-complement clause controlled by adjectives, contractions

Negative	abstract nouns, word length, prepositions, common nouns, attributive adjectives, all passives.

2Positive stance verb, perfect verbs, adverbs that -complement
clauses controlled by stance verbs, communication verbs,
passive short, public verbs, All passives ,suasive verbs, other verbs , sum 'to' comp. clauses controlled by stance verbs, THAT-deletion, to-clauses controlled by desire, mental verbs

Negative No negative features

3   Positive BE as main verb, modals of prediction, modals of
necessity, All modal verbs, subordinate conjunction-other, cognitive nouns, new stance nouns, infinitives,

Negative past verbs, adverbs of place,

4. Positive occurrence verbs, all adjectives, pre-modifier nouns,quantity nouns, common nouns,

Negative second personal pronoun,third person pronouns,action verbs, proper nouns
Dimension 1: Reporting of Concrete Issues vs. Discussion of Abstract

Information

Dimension 1 is the most powerful predictor of linguistic variation with 19 positive and 05 negative features. All these features need to be studied for the functional interpretation of these features. It is also a notable fact that some of the features of Dimension 1 are similar to Dimension 1 of Biber (1988) study but some new features have been found which need further functional interpretation keeping in view the non-native context of Pakistani press reportage. Among all positive features on dimension 1, factual adverbs (0.60) carry the highest weight on this dimension and co-occur with concrete nouns (0.51) which seem to be quite meaningful for the functional interpretation of this factor.

The frequent co-occurrence of concrete nouns with factual adverbs on this dimension tends to refer to concrete issue reporting in the Pakistani Press reportage register. Co-ordinate conjunctions clause (0.53) co-occur with the present verbs(0.46) and this co-occurrence is always used to build up the continuous discourse based on certain factual argument ;whereas, To-complement clauses controlled by stance adjectives (0.43) frequently occur than the likelihood adverbs which seems to strengthen the fact-oriented stance in reporting of Pakistani Press reportage. Keeble and Reeves (1994) asserted the factual reporting in the print media: "The language of news also seeks to simplify events, to make the complex dynamics of history intelligible. News language is always concrete, dwelling on facts, colour, narrative and is very rarely abstract" (p.143). Nominal pronouns (0.49) carry more weight than adverb-likely (0.45) which help writer communicate

statements based upon arguments and facts. This co-occurrence seems to strengthen the factual aspect and authentic stance of Pakistani news genre. Overall the positive features on Dimension 1 seem to highlight the focused and concrete stance of Pakistani news genre. The following example refers to factual and concrete stance of Pakistani press reportage as the concrete nouns have been supported by factual adverbs in dense quantity. Positive loading features are bolded:

Example 1:
Pakistani leading **5 banks** cut **assets** by **2 million rupeeslast year** and are set to cut them again **in 2014** as regulatory pressure prompts investment banks to shrink and retail **banks** sell some **of 2 trillion loans** into a rising market (Dawn newspaper, BU42).

On the negative polarity in Dimension 1, the functional interpretation seems quite obvious one to interpret as abstract nouns (-0.57) become prominent on this dimension among all other types of nouns and co-occur with prepositions (-0.54) and attributive adjectives (-0.48). Together, these features point to the nominal description and elaboration in the reporting of the press reportage register as pointed out in the studies of Biber (1988). The high loading of abstract nouns along with prepositions and attributive adjectives seem to indicate to the abstract information discussion in Pakistani print media. Therefore, as compared to concrete stance on the positive polarity, the focus of information seems to be abstract in Pakistani Press reportage register on the negative polarity. On the basis of positive and negative features on factor 1, this dimension may be labelled as 'Reporting of Concrete Issues vs. Discussion of Abstract Information. The words in bold in following example refer to abstract information in Pakistani Press reportage register.

Example 2:
China's **economic growth** slowed in **the first three months** of **this year**, according **to** The Frontier Post's survey, and remains **on** track for its worst annual performance in nearly a quarter-century as **reform priorities trump growth concerns** (Daily Dawn, BU15).

It is also possible to draw a clear similarity of between Biber'1988 (Involved vs. Informational production) and Dimension1 in this study (Reporting of concrete issues vs discussion of abstract information) especially on the negative polarity, as both have been found to be informational in nature.

Dimension 2: Opinion-Based Reporting
The Dimension 2 consists of only 11 positive features. It has been observed that most of the grammatical features on this dimension are different from the earlier Biber(1988) MD study and emphasize on the fact that these grammatical features should be further functionally interpreted in the non-native context of Pakistani press reportage register. The features on the positive end of this dimension belong to different grammatical categories. Stance verbs (0.49), the highest loading feature, points towards functional interpretation of reporting. The presence of stance verbs with high loading on this dimension seems to be very important because they seem to co-occur with that complement clauses (0.35) and to-complement clauses of probability and desire which relate to use of text indicating some concern and thought of interaction (Biber, 1988). The presence of stance verbs seems to relate to the writer's opinion in the Pakistani press reportage. The presence of mental verbs (0.51) seems to also co-occur with to-complement clauses of desire (0.36) which also highlights the personal, direct and opinion-based nature of this discourse. The frequent co-

occurrence of communication verbs (0.59) with all other verbs (0.56) also seems to be purposeful and points towards the focus of personal stance in the newspaper discourse. Therefore, the strong presence of stance verbs on this dimension coupled with complement clauses seems to lead this factor towards opinion-oriented, indirect and focused reporting in the Pakistani press reportage register. On the basis of positive features, this dimension may be labelled as Opinion-based reporting.

Barnhurst (2005) andEsser and Umbricht (2014) ascertain that reporting in media has become more interpretive, opinion oriented, biased and slanted in twentieth century. Barnhurst (2005) categorically exclaims in his study on news style: "News reporting today is more densely populated, more action-packed, opinion-based, more localized, more event-centred, and above all much briefer (p.01).The following example in bold words speaks high of the opinion-oriented discourse in Pakistani Press reportage register.

Example 3:
He **has ascertained** the **fact that he could move his voice with ease for almost three octaves** and too, effortlessly on all tempos. It is reaffirmed **that he enjoyed the beauty of classical music lay in leisurely improvisation.** He **believed that the audience would get restless listening to long 'Alaaps'**(Dawn newspaper, CU 23).

Dimension3: Policy-Based Discourse vs Other Concerns
Dimension 3 is also important as it is marked with 8 positive and 3 negative features. Again, the grammatical features on this dimension have been found to be different in some ways from the dimension in previous MD studies. This suggests the need for a functional interpretation that takes into account the characteristics of press reportage in Pakistani print media. On the positive polarity, the presences of Prediction modals with more weight (0.60) are more dominant than the weight of modals of necessity (0.40) on this dimension. The occurrence of modals of prediction on this dimension with modals of necessity certainly highlights the necessity and a sense of advisability of action in Pakistani press reportage register. It also seems to refer to discourse generated purposefully to follow the ideology and the policy of news organization agencies. Steinberg (2007) highlighted the fact that newspapers follow certain policies in reporting the news: "Policy refers to the criteria laid down by particular organization in media especially in newspapers to adopt a particular political point of view which is reinforced in their interpretation of news stories. You would have probably noticed while covering the same events, three different newspapers interpret those events to coincide with their respective point of view" (p.261).

Nouns of different types on positive polarity reflect the rich source of information and arguments in the news reporting of Pakistani print media. Moreover, the prevalence of modals along with infinitives (-0.38) on this factor seems to refer to authoritative and reflect the expressions of organizational policy. Similarly, the verb be (0.32) seems to be dominant and seems to point towards the controlled discourse in Pakistani Press reportage register as well. Overall, the presence of modal *be* along with other modal verbs on this dimension seem to be purposeful on this factor and seem to point towards the policy of the Pakistani print newspapers in reporting the discourse based upon the concerns of the media organization. The following example in Pakistani Press reportage on positive loading speaks of such discourse.

Example 4:
While talking to UK media group, Leader of the House in the Senate said his party **would** oppose the Protection of Pakistan Bill in the Senate. Pakistan **needs stringent laws to deal with extremism** but that they should be within the constitutional limits, he emphasized (Daily Dawn, PO).

Similarly, the negative features on this dimension are: Place adverbs (-0.32), past verbs (0.59) which seem to reflect the clarity of information in the Pakistani news reporting. Past verbs are often used to enhance the narrative nature in the discourse which seems to be leading concern of the news agencies in increasing their readership. On the basis of positive and negative features, this dimension may be labelled 'Policy-based Discourse vs Other Concerns'. The following example in bold words speaks high of the other concerns in Pakistani print media.

Example 5:
Two persons **sustained** injuries in an explosion **at NADRA office in Tehsil Tangi on Friday here,** Local TV reported. NADRA office employee and a child **included** among the injured. Rescue teams arrived **at the scene of incident**, while the security organizations **cordoned off** the area (Daily Dawn, CR.07).

Dimension 4: Event-based Reporting Vs Person-based Reporting
Dimension 4 consists of 9 features, 5 positive and 4 negative features. As with the previous dimensions, there are also found some grammatical features on this dimension which require functional interpretation in the non-native context of Pakistani Press reportage register.

Occurrence verbs had the highest loading (0.57) and they frequently co-occur with adjectives (0.55) on this dimension. This suggests the function of reporting activities and events reported in the Pakistani press reportage. Noun pre-modifiers (0.42) co-occur with the quantity nouns (0.35) also reflect the rich source of information about any event or incident in press reportage of Pakistani press reportage. The presence of adjectives with the occurrence verbs and noun pre-modifiers seem to refer to activity-oriented reporting in Pakistani press reportage. Moreover, the quantity nouns (0.35) co-occurring with occurrence verbs also hint at the coverage of major events in Pakistani culture and the reporting of Pakistani press focuses on events, incidents and issues. The following example validates the event-based reporting in Pakistani Press reportage.

Example 6:
It is aimed at **documenting**and **preserving traditional folk crafts** and *projecting*craftspeople. The **glimpses of simple rural**folk and **traditional heritage of different provinces and regions,** including far off areas, have **coloured**the grounds of Lok Virsa*(The Nation Newspaper ME.26).

On the other hand, the negative features seem to have purposeful shared communicative function on this dimension as well. Action verbs (-.61) frequently co-occur with the common nouns (-.42) which reflect the reporting focused on persons and not on incidents or events. Similarly, the negative weight of all pronouns (-.46) seem to again reflect that reporting is focused on individuals not on issues. On the basis of positive and negative features on this dimension, this dimension may be labelled 'Event-based Reporting vs. Person-based reporting'. The following example in bold words speaks of the event-based reporting in Pakistani press reportage.

Example7:
Just wanted to let them know that **they** can´t beat us down. **I** think it makes us all stronger when something like that happens. .Also among the spectators near the finish line was **Jeff Bauman**, who lost his legs in the bombing. It was the first time **you** returned to the area since the attack.

4.1 Variation among Pakistani Newspapers on New Textual Dimensions
This section discusses the ANOVA results which indicate the presence of statistically significant differences among the categories of different newspapers in Pakistani Press Reportage. In this study, factorial ANOVAs were used in order to account for possible interaction effects between the two main variables in this corpus: newspaper and category (Egbert, 2015). The present section discusses these results. The results of these analyses reveal that on Dimension 2 (D2) and Dimension3 (D3), there lie significant statistical differences among the categories whereas, no significant statistical differences were found among the categories on Dimension (D1) and Dimension (D4). Thus, it will be interesting to further explore the extent of differences on D2 and D3.

4.2 Variation Across Press Reportage among Newspapers with reference to Business Category
Table 3 reveals that there are statistical differences among newspapers on D2 and D4. This requires further exploration to analyse the variation among these newspapers. The table shows that all newspapers on D1 with positive features seem to have been found focusing to be reporting on concrete issues in Pakistani print media. On the other hand, the Frontier post newspaper has been found least focused on reporting on concrete issues as compared to other newspapers on D1. Similarly, all of the newspapers show positive dimension scores on D2 and have been found to be using opinion-based discourse in Pakistani print media. On D2, *Dawn* newspaper has been found to be using opinion based discourse to greater extent as compared with other newspapers. On D3, all newspapers prefer to use policy-based discourse projecting the certain ideology of newspapers. Jan et al. (2013) highlights the interpretive journalism in Pakistani media: "Currently, the phenomenon of 'popular and crispy' style of news is being explored for enhancing the ratings of the media outlet in the race for commercialization. The opinionated news or soft news is a common phenomenon in Pakistani print as well as electronic media. Media people like reporters, anchors, sub editors, editors and even owners do not feel any hesitation in doing subjective approach"(p.119). Pakistani print media seems to be following the same norm and using opinionated discourse to a greater extent in all categories of press reportage.

Table 3: **Analysis of Variance among newspapers with reference to BU Category**

Dimension	DQ	DT	Newspaper FP	NI	NL	Mean
D1	30.16±0.17b	30.11±0.15b	30.58±0.15b	30.60±0.20b	30.25±0.17b	30.34±0.08B
D2	35.68±0.19a	35.50±0.25a	35.90±0.19a	35.30±0.24a	35.68±0.27a	35.61±0.10A
D3	8.33±0.20fg	8.88±0.24fg	8.11±0.16g	9.29±0.25f	9.40±0.22f	8.80±0.10D
D4	12.94±0.25e	13.74±0.29de	13.19±0.22e	15.28±0.34c	14.67±0.32cd	13.96±0.14C
Mean	21.78±0.82B	22.06±0.79B	21.94±0.83B	22.62±0.77A	22.50±0.78A	

Means sharing similar letter in a row or in a column are statistically non-significant ($P > 0.05$). Small letters represent comparison among interaction means and capital letters are used for overall mean.

On D3 certain significant statistical differences have been found among newspapers which require a detailed analysis.

	DQ	DT	FP	NI
vb_BE	44.266	23.7	45.44	43.66
infinitive	11.328	6.3	11.46	11.201
mod_necess	6.156	8.3	7.37	6.35
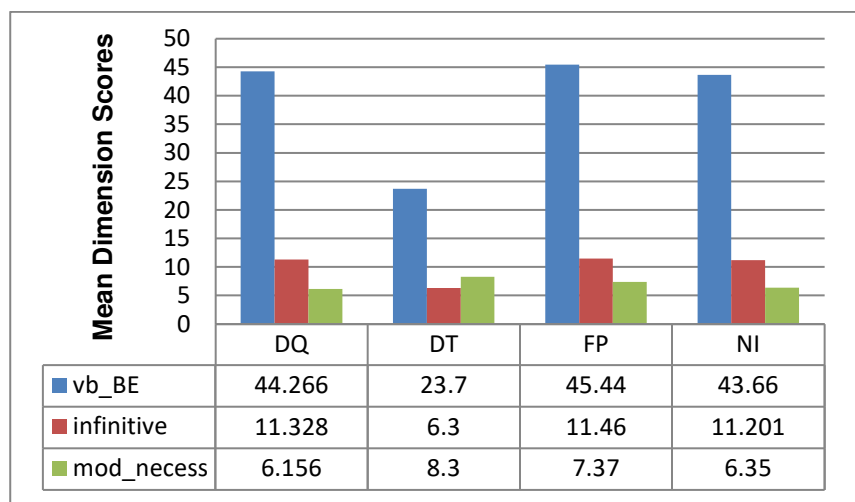
Fig. 1 Features of Policy-Based Discourse among Newspapers on D3

Fig. 1 compares the grammatical features of present verb, modals of necessity and infinitive construction among five newspapers with reference to BU category. It seems quite obvious that *Dawn* newspaper which contains high frequency of modals of necessity (7.37), infinitive (11.328) and BE (44.266) used much more policy based discourse as compared to other newspapers. This speaks for the concerns of news agencies in producing the news discourse; Whereas, *Daily Times* newspaper with less frequency of modals of necessity (6.3), infinitive 8.3) and BE verbs (23.26) has been found to be using policy-based discourse for its readers to lesser extent.

The language of *Dawn* newspaper has been found to be using the highest number of linguistic features associated with policy-based discourse which certainly highlight the controlled discourse of this newspaper as compared to other newspapers. The BU category is known for its technical information and it conveys information to certain readers of business community. The highest use of policy-based discourse certainly accounts for the liberal policy of this newspaper in producing less frequent policy-based discourse in Business category.

It is worthwhile to note that very few modals of necessity are used by *Daily Times* newspaper to produce less policy-based discourse in comparison to other newspapers. On D4, all newspapers exhibit positive features and thus have been found to be using event-based reporting The high frequency of focused reporting in bold letters of the Frontier Post of newspaper in the following example speaks of its high concrete reporting in BU category.

Example
A **Western security source** in Kabul confirmed *Mutassim* had been put under house arrest, and **that the UAE was considering deporting him to Afghanistan**. **It was not immediately clear why** *Mutassim* was confined to his home, or **who was behind his arrest.** Authorities in the UAE declined to comment (Frontier Post newspaper).

4.3 Variation among Newspapers with reference to Crime Category
Table 4 also displays the variation among newspapers with reference to Crime (CR) category in Pakistani Print media on new four dimensions. On D1, it seems obvious that all newspapers with positive features have been found to be using concrete issues reporting in CR category. On D2, all newspapers exhibit opinion based discourse in CR category with all positive features and the ANOVA results reveal statistical significant differences among newspapers on this dimension with reference to CR category.

Table 4:**Analysis of Variance among newspapers with reference to CR Category**.

Dimension	Newspaper					
	DQ	DT	FP	NI	NL	Mean
D1	29.10±0.12d	28.94±0.11d	29.55±0.11d	28.92±0.11d	28.84±0.10d	29.07±0.05B
D2	37.48±0.21ab	36.91±0.21bc	38.42±0.19a	36.12±0.21c	36.46±0.21c	37.08±0.10A
D3	7.52±0.15g	8.02±0.22g	7.99±0.14g	8.04±0.13g	7.71±0.16g	7.86±0.07D
D4	12.30±0.21f	13.04±0.22ef	12.74±0.27f	13.70±0.31e	12.83±0.21ef	12.92±0.11C
Mean	21.60±0.87B	21.73±0.83B	22.17±0.88A	21.69±0.81B	21.46±0.83B	

On D3, positive features of all newspapers offer policy-based discourse production in the CR category according to needs of organizational news agency. On D4, all Pakistani newspapers in the CR category have been found to be using information based reporting as the norm of news press reportage. D2 is further analyzed to evaluate the grammatical features in this dimension among newspapers. The bold words in the following example CR category of the Frontier Post clearly demonstrate the high opinion-based discourse in Pakistani Print media. THAT-clauses

with stance verbs seem to have been the focus in following example to enhance the opinion-based reporting and capture the maximum readership.

Example.
Talking to The Nation on Wednesday, Shah **suggested that** any negative impact of the two terror attacks on two consecutive days were clear. **He believed that Tehreek-e-Taliban Pakistan** spokesman Shahid Ullah Shahid has not only dissociated TTP from these attacks but also condemned killing of innocent people*(Frontier Post newspaper).*

4.4 Variation among Newspapers with reference to Cultural Category
Table 5 discusses variation across newspapers with reference to the Cultural (CU) category on the four MD dimensions. On D1, all newspapers with positive features exhibit concrete issues reporting whereas, on D2, all newspapers seem to have been producing opinion-based discourse. The Frontier Post newspaper has been found to be using more opinion based discourse in comparison to other newspapers. On D3, all newspapers have been found to be using policy-based discourse in producing discourse about CU category. On D4, all newspapers have been found to be event-based reporting in Pakistani print media according to norm of Press reportage genre.

Table 5: Analysis of Variance among newspapers with reference to CU Category.

Dimension	Newspaper					
	DQ	DT	FP	NI	NL	Mean
D1	30.14±0.19c	30.07±0.18c	30.17±0.11c	30.31±0.14c	30.37±0.15c	30.21±0.07B
D2	33.34±0.29b	33.37±0.29b	36.34±0.25a	32.51±0.29b	32.65±0.30b	33.64±0.15A
D3	9.53±0.24g	9.59±0.25g	8.95±0.15g	9.39±0.19g	9.32±0.20g	9.35±0.09D
D4	16.96±0.39e	16.87±0.38e	15.07±0.28f	18.97±0.39d	18.58±0.38d	17.29±0.19C
Mean	22.49±0.70A	22.48±0.70A	22.63±0.79A	22.79±0.67A	22.73±0.68A	

The language of the *Nation* newspaper has been found highly event-based as compared to other newspapers which also seem quite logical taking into account the context of this newspaper. Critics (Barnhurst, 2005; Jan et al. (2013) have agreed that news in Pakistani media has become more event-centred and more interpretive to capture the audience.

4.5 Variation among Newspapers with reference to International Category
Table 6 displays the variation of press reportage in Pakistani print media among newspapers with reference to International (IN) category.

Table 6: **Analysis of Variance among newspapers with reference to IN Category**.

Dimension	Newspaper					
	DQ	DT	FP	NI	NL	Mean
D1	29.58±0.14b	29.35±0.14b	29.56±0.16b	28.96±0.13	29.28±0.14b	29.35±0.07B
D2	35.78±0.25a	34.97±0.23a	35.82±0.36a	35.13±0.26a	34.75±0.29a	35.29±0.13A
D3	9.04±0.15d	9.13±0.18d	8.83±0.22d	8.92±0.14d	9.07±0.18d	9.00±0.08D
D4	15.00±0.27c	15.12±0.33c	15.96±0.28c	14.83±0.28c	14.89±0.32c	15.16±0.13C
Mean	22.35±0.77AB	22.15±0.75A	22.54±0.77A	21.96±0.75	22.00±0.75B	

ANOVA results in the table describe that there are no significant statistical differences among newspapers on this dimension. All newspapers with positive features have been found to be using concrete issues, opinion-based, policy-based and event –based reporting in Pakistani Print media with reference to the IN category. *Dawn* newspaper, The *Frontier Post* and *Daily Times* newspapers show significant statistical variation on D2 for further exploration. The analysis of grammatical features on D2 makes it quite clear that the *Frontier Post* newspaper seem to be using the highest frequency of grammatical features i.e. perfect verbs (66.25), stance verbs (10.39), THAT-complement clauses (9.86) thereby producing the least opinion-based discourse in press reportage of Pakistani print media. *Dawn* newspaper, on the other hand, seem to have been using the lowest frequency of grammatical features of perfect aspect verbs(59.11), stance verbs(10.51) and THAT- complement clauses (6.82) suggesting an effort on the part of this newspaper agency to take into account the needs of readership and thus enhancing the circulation of the respective newspaper.

4.6 Variation among Newspapers with reference to Metropolitan Category
Table 7 displays the variation among newspapers with reference to metropolitan (ME) category on the four dimensions. On all dimensions with positive features, press reportage in Pakistani print media has been found to be producing concrete issues, opinion-based, policy-based and event-based reporting according to readership needs of Pakistani print media. The ANOVA results in the Table 7 reveal that there lie statistical significant differences in this category on D2 and D4 among newspapers. The opinion based discourse features have been explored in the following figure for further exploration of variation.

Table 7: Analysis of Variance among newspapers with reference to ME Category.

Dimension	Newspaper					Mean
	Q	T	P	I	L	
D1	29.38±0.16c	30.45±0.14c	30.23±0.15c	29.68±0.16c	29.69±0.15c	29.89±0.07B
D2	35.05±0.40b	36.50±0.23a	37.24±0.23a	35.05±0.29b	36.69±0.24a	36.10±0.14A
D3	9.00±0.23f	9.08±0.18f	9.03±0.16f	9.32±0.21f	10.04±0.25f	9.29±0.10D
D4	15.51±0.39e	15.99±0.29de	16.01±0.26de	15.97±0.25de	17.00±0.35d	16.10±0.14C
Mean	22.24±0.76B	23.00±0.78A	23.13±0.80A	22.51±0.74B	23.36±0.75A	

The analysis of the grammatical features demonstrates that the *Nation* newspaper uses high frequency of grammatical features of THAT-clauses (7.80), stance verbs (12.09), and perfect aspect verbs (71.50) as compared to other newspapers in producing opinion-based production of discourse in Pakistani print media. *Dawn* newspaper has been found to be using the lowest frequency of grammatical features i.e. THAT-clauses (7.73), stance verbs (10.75), perfect aspect verbs (64.62) associated with opinion-based discourse. The other newspapers seem to be using relatively equal frequencies of opinion based grammatical features according to the demands of their readership.

4.7 Variation among Newspapers with reference to National Category

Table 8 describes the variation among newspapers in the National (NA) category of Pakistani print media. Table 8 elaborates the fact that there are significant statistical differences among newspapers on D2 and D4. All newspapers with positive features have been found to be producing focused, opinion-based, policy based discourse and information based reporting in Pakistani print media.

Table 8: Analysis of Variance among newspapers with reference to NA Category

Dimension	Newspaper					Mean
	DQ	DT	FP	NI	NL	
D1	30.05±0.16c	29.56±0.15c	30.32±0.16c	29.67±0.15c	29.76±0.16c	29.87±0.07B
D2	36.41±0.30ab	35.51±0.29b	37.17±0.23a	35.53±0.27b	35.49±0.30b	36.02±0.13A
D3	9.10±0.17f	9.42±0.19f	9.79±0.20f	9.65±0.20f	9.59±0.24f	9.51±0.09D
D4	15.91±0.28e	15.81±0.30e	17.53±0.28d	16.90±0.31de	16.41±0.30de	16.51±0.14C
Mean	22.87±0.78B	22.57±0.75B	23.70±0.77A	22.93±0.73B	22.81±0.74B	

A simple analysis of grammatical features gives an obvious picture that the *Nation* newspaper exhibits high mean frequencies for the following grammatical features i.e. common nouns (89.66), action verbs (22.1) and all adjectives (76.08). Similarly, the*News*newspaper also exhibits high frequencies of proper nouns (89.43). Pakistani English seem to be using high frequency of event–based grammatical features of nouns, attributive adjectives and action verbs in the NA

category. *Dawn* newspaper seems to have been using lowest frequency of event- based features which account for the policy of this organization. The other newspapers seem to be using relatively equal frequencies of information-based grammatical features according to the demands of the demands of their readership. The following example in bold words of the *News* newspaper speaks high of event-based reporting while the words in italics speak for the person-based reporting in the news newspaper of Pakistani Print media.

Example
World number one ***Lee Chong Wei*turned** on the **style** and even had time **to attem**pt a trick shot as he **sped** into the Singapore Open **semi-finals** on Friday. The*Malaysian* took just 29 minutes to **demolish** Thailand's *Tanongsak Saensomboonsuk* 21-8, 21-14 in breathtaking **fashion**, at one point even trying a shot from underneath **his leg** which fell short of the net (Daily the News).

4.8 Variation among Newspapers with reference to Political Category
Pakistani Print media. ANOVA results in Table 9 reveal the fact that there are statistical differences between *Frontier Post* newspaper and other newspapers on D2, D3 and D4. D2 needs further analysis as it also shows statistical differences

Table 9: Analysis of Variance among newspapers with reference to PO Category

Dimension	Newspaper					
	DQ	DT	FP	NI	NL	Mean
D1	30.11±0.15b	29.70±0.15b	29.78±0.17b	29.79±0.15b	29.46±0.14b	29.77±0.07B
D2	35.97±0.28a	35.32±0.28a	30.48±0.24b	35.65±0.25a	35.21±0.25a	34.53±0.17A
D3	9.74±0.18e	9.79±0.21e	8.08±0.20f	10.02±0.18e	9.74±0.22e	9.47±0.10D
D4	17.33±0.29d	16.53±0.30d	18.55±0.28c	17.30±0.30d	16.60±0.28d	17.26±0.14C
Mean	23.29±0.74A	22.84±0.73B	21.72±0.66C	23.19±0.72AB	22.75±0.72B	

Dawn newspaper has been found to be using least opinion based reporting in PO category of Pakistani print media on D2 than all other newspapers with less frequencies of grammatical features i.e. nominalizations (70.02), stance verbs(10.16) and THAT-deletion(2.68) which speak high for the least amount of opinion-based reporting of *Dawn* newspaper in Pakistani press reportage. On D3, the Frontier Post newspaper seems to be producing the least policy-based discourse in PO category of Pakistani Print media which account for policy of the news organization. On the contrary, on D4, *The Frontier Post* newspaper seems to be using highest information based reporting which also highlights the focus of this newspaper on PO category in Pakistani Print media. On D1, the newspapers are all using relatively equal frequencies of grammatical features in producing focused reporting in PO category all newspapers which seems to be the norm of Pakistani Press reportage. Esser and Umbricht (2014) analysed the fact that interpretive journalism has been a key concern of political newspaper reporting and has become a credible policy: "We conclude that interpretative journalism that explains complicated "policy" matters in ways that help broader publics to comprehend the world of politics is not only a defendable but laudable press practice(p.15). Pakistani political press reportage seems to have adopted the same norm of opinion-based reporting in Pakistani print media over the years.

4.9 Variation among Newspapers with reference to Sports Category
Table 10: Analysis of Variance among newspapers with reference to SP Category

Dimension	Newspaper					
	DQ	DT	FP	NI	NL	Mean
D1	30.11±0.15b	29.70±0.15b	29.78±0.17b	29.79±0.15b	29.46±0.14b	29.77±0.07B
D2	35.97±0.28a	35.32±0.28a	30.48±0.24b	35.65±0.25a	35.21±0.25a	34.53±0.17A
D3	9.74±0.18e	9.79±0.21e	8.08±0.20f	10.02±0.18e	9.74±0.22e	9.47±0.10D
D4	17.33±0.29d	16.53±0.30d	18.55±0.28c	17.30±0.30d	16.60±0.28d	17.26±0.14C
Mean	23.29±0.74A	22.84±0.73B	21.72±0.66C	23.19±0.72AB	22.75±0.72B	

Table 10 displays the variation among newspapers in the sports (SP) category of Pakistani print media. All newspapers on four dimensions with positive features have been found to be using concrete issues, opinion based, policy-based and event-based reporting in Pakistani Print media. ANOVA results describe that there are statistical differences among newspapers on D1, D2 and D4 but D3 has been found non-significant statistically.

On D3, all newspapers seem to be producing equally producing information based reporting which seems to be the norm of press reportage genre. On D2 and D4, *The Frontier Post* newspaper has been found to be a exploiting high level of concrete issues and event- based reporting following the demands of readership of this particular newspaper and taking into account the policy of this news agency. The following example with bold words in SP category accounts for high opinion based reporting in Pakistani print media.

Example
The banned Pakistan fast bowler Mohammad Aamir will not be eligible to play in next year's World Cup ***even if he returns early to domestic cricket***. Chief operating officer, Subhan Ahmed *opined that the PCB was not hopeful about* **t**he ICC clearing the pacer to play international cricket until he completed his five-year ban, ***which would end around August 2015***(Daily the News).

Conclusion

The present study is the first to present a comprehensive linguistic description of Pakistani press reportage. Using a new MD analysis, the linguistic variation among newspapers in each category of Pakistani Press reportage on four new textual dimensions was analyzed on four textual dimensions. Statistically significant linguistic differences among the leading Pakistani newspapers have been observed through series of two-factor ANOVAs along each sub-category of press reportage in Pakistani print media. On D1, all newspapers with positive features have been found to be producing concrete issues reporting and *The Frontier Post* newspaper has been found to be producing more concrete issues reporting in most of its categories in comparison to all other newspapers. We argue that this demonstrates the policy and readership demand of this newspaper. On D2, all newspapers with positive features have been found to be using opinion-based reporting

in Pakistani print media and the Frontier Post newspaper has been found to be producing high level of opinion based discourse as compared to other newspapers. On D3, all newspapers with positive features seem to be producing policy-based discourse equally in most of the categories of Pakistani Press reportage. On D4, all newspapers exhibit positive features and seem to be producing information based reporting in all categories of Pakistani press reportage. On this textual dimension, *Daily Times* and *Frontier Post* newspapers seem to have been producing high level of event- based reporting which accounts for the policy of these newspapers to enhance the readership of these newspapers.

Acknowledgement

References

Anwar, B., &Talaat, M. (2011).English In non-native context: Distinctive features of Pakistani journalistic English.*English Language and Literary Forum, Annual Research Journal, 13*, 11-20.

Barnhurst, K. G. (2005). News ideology in the twentieth century.In S. Hoyer & H. Pottker (Eds.), *Diffusion of the news paradigm* (pp. 1850–2000). Nordic: Nordic Information Center for Media and Communication Research.

Bell, A.(1991). *The language of news media.* Oxford: Blackwell.

Biber, D. (1988). *Variation across speech and writing*. Cambridge: CambridgeUniversity Press.

Biber, D. (1994). An analytical framework for register studies. In D. Biber & E. Finegan (Eds.), *Sociolinguistic perspectives on register*(pp. 31–56). New York: Oxford University Press.

Biber, D. (2009). Multidimensional Approaches. In Ludeling & M. Kyto (Eds.), *Corpus linguistics: An international handbook* (Vol. 2). Berlin: Walter de Gruyter.

Biber, D.,& Susan, C. (2009). *Register, genre and style*. Cambridge: Cambridge University Press.

Brown, P., & Fraser, C. (1979). Speech as a marker of situation. In K. R. Scherer & H.Giles(Eds.), *Social markers in speech* (pp. 33-62). Cambridge: Cambridge University Press.

Egbert, J. (2015). Sub-register and discipline variation in published academic writing: Investigating statistical interaction in corpus data. International Journal of Corpus Linguistics.

Ervin-Tripp, S. (1972). On sociolinguistic rules: Alternation and co-occurrence. In J. J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics* (pp. 213– 250). NewYork: Holt, Rinehart & Winston.

Esser, F., & Umbricht, A.(2014). *The evolution of objective and interpretative journalism in the western press: Comparing six news systems since the 1960s* (Unpublished master's thesis). Institute of Mass Communication and Media Research, University of Zurich.

Geis, M. L.(1987).*The language of politics*. California: Springer-Verlag.

Grover. I., Nishi, S., & Deepak, G. (2004). *Hand of communication and media*. Udaipur: Agrotech Publishing Academy.

Hymes, D. (Ed.). (1974). *Language in culture and society.* New York: Harper and Row.

Jan, M., Riaz, R. M., Siddiq, M.,& Saleem, N. (2013). Print media on coverage of political parties in Pakistan: Treatment of opinion pages of the'Dawn'and'News'.*Gomal University Journal of Research*, *29*(1), 118-128.

Keeble, & Reeves, I.,(1994). *The newspaper handbook. London:* Routledge.

Leitner, G.(1997). The sociolinguistics of communication Media. In F. Coulmas (Ed.),*The handbook of sociolinguistics*(p.176). Oxford: Blackwell.

Mardh, I. (1980). *Headlines: On the grammar of English front page headlines*. Lund: Gleerup.

Montgomery, M. (1986). *An introduction to language and society*. London: Methuen.

Muhabat, F., Noor, M., & Iqbal, M. (2015). Hyphenated lexemes in Pakistani journalistic English. *International Journal of Research*, *2*(4), 517-527.

Sadaf, A.(2011). Comparative content analysis of the coverage of English & Urdu dailies of Pakistan on the issue of judicial restoration**.** *International Journal of Humanities & Social Sciences, 10*(1), 263-267.

Steinberg, S. (2007). *An introduction to communication studies.* Capetown: Juta & CO.

Uzair, M., Mahmood, A., & Mahmood, A.R. (2012). Role of Pakistani English newspapers in promoting lexical innovations*. International Journal of Physical and Social Sciences, 6*(2).

Wallace, W. D. (1981).How registers register: Toward the analysis of language **Use.** *International Review of Applied Linguistics in Language Teaching, 19*(1-4).

Appendix
Table 4.2 **Descriptive statistics of the New MD analysis of Press Reportage**

PR.		Mean	Min.		Max.		SD
D1		29.76834	26.52553		35.83		1.168906
D2		34.91941	23.31765		41.694		2.907138
D3		8.935891	4.670588		15.006		1.543983
D4		15.8113	9.411111		24.783		2.791572
PR.BU.		Mean	Min.		Max.		SD
D1		30.16	12.17462		32.344		9.888928
D2		35.68	14.65866		39.089		11.88501
D3		8.33	1.194786		14.018		2.068005
D4		12.94	5.608663		19.849		5.950009
PR.CR.		Mean	Min.		Max.		SD
D1		29.1	1.191058		33.35		4.981165
D2		37.48	1.40491		41.264		6.313053
D3		7.52	1.308709		12.847		1.902799
D4		12.3	1.744482		21.65		3.26026
PR.CU.		Mean	Min.		Max.		SD
D1		30.14	1.191058		27.648		5.104572
D2		33.34	1.40491		33.204		6.428055
D3		9.53	1.297984		30.426		5.766313
D4		16.96	1.744482		19.035		3.568608
PR.IN.		Mean	Min.		Max.		SD
D1		29.58	1.191058		33.985		5.096453
D2		35.78	1.40491		41.264		6.404252
D3		9.04	1.308709		13.292		1.983157
D4		15	1.744482		23.599		3.595596
PR.ME.		Mean	Min.		Max.		SD
D1		29.58	1.191058		33.985		5.129241
D2		35.78	1.40491		41.264		6.44839
D3		9.04	1.308709		13.818		2.014262
D4		15	1.744482		23.833		3.645103
PR.NA.		Mean	Min.		Max.		SD
D1		30.05	1.24739		35.787		5.454995
D2		36.41	1.348578		39.485		6.314941

D3	9.1	1.308709	14.254	2.074738
D4	15.91	1.526596	19.349	2.929363
PR.PO.	**Mean**	**Min.**	**Max.**	**SD**
D1	30.11	1.744482	23.936	3.703603
D2	35.97	1.744482	23.936	3.703603
D3	9.74	1.744482	23.936	3.703603
D4	17.33	1.744482	23.936	3.703603
PR.SP.	**Mean**	**Min.**		**SD**
D1	29.79	1.24739	35.787	5.454995
D2	30.47	1.348578	39.485	6.314941
D3	8.45	1.308709	14.254	2.074738
D4	18.53	1.744482	24.444	3.783989

Appendix: F.Values

Table 3: **Analysis of Variance among newspapers on BU Category**

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-alue
Newspaper	4	315.3	78.8	12.39**
Dimension	4	115704.3	28926.1	4547.66**
Newspaper	16	1355.5	84.7	13.32**
Dimension	1225	7791.8	6.4	
Error	1249	125166.9		
Table				

Table 4: **Analysis of Variance among newspapers on CR Category**

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-value
Newspaper	4	168.4	42.1	8.68**
Dimension	6	146479.6	36619.9	7553.48**
Newspaper	1225	475.2	29.7	6.13**
Dimension	1249	5938.9	4.8	
Error		153062.1		
Table				

Table 5: **Analysis of Variance among newspapers on CU Category**

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-value
Newspaper	4	111.7	27.9	2.93 *
Dimension	4	54229.0	13557.3	1420.56 **
Newspaper xDimension	16	133.4	108.3	11.35**
Error	1225	11690.9	9.5	
Table	1249	67765.0		

Table 6: **Analysis of Variance among newspapers on IN Category**

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-value
Newspaper	4	48.7	12.2	2.03^{NS}
Dimension	4	96160.1	24040.0	
Newspaper x Dimension	16	1081.3	67.6	4014.61**
Error	1225	7335.5	6.0	
Table	1249	104625.5		11.29**

Table 7: **Analysis of Variance among newspapers on ME Category**

Source of variation	Degrees of freedom	of squares	Mean squares	F-value
Newspaper	4	173.6	43.4	5.91**
Dimension	4	139186.6	34796.6	4734.81**
Newspaper x Dimension	16	986.5	61.7	8.39**
Error	1225	9002.7	7.3	
Table	1249	149349.3		

Table 8: **Analysis of Variance among newspapers on NA Category**

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-value
Newspaper	4	40.8	10.2	1.71^{NS}
Dimension	4	136220.3	34055.1	570
Newspaper x Dimension	16	393.9	24.6	9.22**
Error	1225	7307.0	6.0	
Table	1249	143962.0		4.13**

Table 9: **Analysis of Variance among newspapers on PO Category**

Source of variation	Degrees of freedom	Sum of squares	Mean squares	F-value
Newspaper	4	124.7	31.2	5.24**
Dimension	4	107263.6	26815.9	4504.19**
Newspaper x	16	2255.7	141.0	23.68**
Dimension	1225	7293.1	6.0	
Error	1249	116937.1		
Table				