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LANGUAGE TRANSLATIONS IN ADVERTISING AND MARKETING RESEARCH: NEED FOR RECOGNIZING MEASUREMENT DIFFERENCES

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LANGUAGE TRANSLATIONS IN ADVERTISING AND MARKETING RESEARCH : NEED FOR RECOGNIZING MEASUREMENT DIFFERENCES

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There is a common practice among marketing research and advertising agencies in this country to first develop questionnaires in the English language, with which most research executives in these organizations have greater flare and comfort, and if the study involves covering sampling units from non-English speaking strata, to translate these questionnaires into appropriate language versions. All the data arethen generally pooled together without realizing that different language versions of the questionnaires often suffer from a peculiar problem of measurement differences arising out of translations into regional languages. The present paper provides an empirical test of this hypothesis.

Research Design

Consumer ratings of six print advertisements were used as a situation in this study. A print ad. is generally evaluated on seven different dimensions, namely, its vigour, sensuousness, uniqueness, credibility, information content, irritativeness (or its reverse, attractiveness) and personal relevance. A number of words or phrases can be used by the consumers to give their opinions of an advertisement on each of the above mentioned dimension. A total of 197 words (positive as well as negative) were used in the study to represent all the above seven dimensions. Each word or phrase in the list was translated into Gujarati language.

use of judges was made to make sure that translation into Gujarati was not merely a dictionary version but was also borne out by usage as being the closest to the original English version. The presentation order of the words in the two lists was randomized and a sample of 100 well-educated consumers in Ahmedabad, who knew both English and Gujarati well, were asked to rate each of the test ad on a 5-point scale. The respondent was first asked to carefully examine all aspects of the ad. He was then requested to read the list of words one by one, and carefully consider how well each word described the advertisement he had just seen. His job then was to simply put a number from 1 to 5 against each word. He was asked to put 1 if he thought that the word did not fit the advertisement at all, 2 if the word fitted the ad a little bit, 3 if the word fitted the ad quite a bit, 4 if the word fitted the ad well and 5 if the word fitted the ad extremely well. While one-half of the respondents first rated the ads on English words and then on Gujarati words, the reverse order was followed for the other half. Since order of words in the two lists was randomized, the ratings on a word in one language hopefully had no or little effect on the ratings of the similar word in the other language.

Test Advertisements

The study used six black and white advertisements from a single issue of a popular weekly magazine. The following were the specific advertisements selected for the research :

Advertisement 1: This was an Amul Milk Powder advertisement with the headline "Amul - Your Dudhwala" and the primary message that Amul Milk Powder is like having a dairy in your home.

Advertisement 2: This was a Kali Brand Stainless Steel Utensils advertisement with the headline "The Space-Age 'Cook-fast' utensils with Copper Bottom" and the primary message of savings upto 60% in cooking time and fuel costs.

Advertisement 3: This was an Agfa Camera advertisement with the headline "Memories Fade - Pictures Don't" with primary emphasis in the message on technical, price and performance information about Isoly II - The Aim and Shoot Camera.

Advertisement 4: The fourth advertisement included in the study was on Bru Coffee with the headline "Bru: Its No. 1 in Taste and Flavour. Even its Price is Right", and the primary message that Bru is Instant blend of Coffee and Chicory, its use saves money and Bru is the largest selling 'Instant' in India.

Advertisement 5: This was a Binny advertisement with the headline "From Binny's Gallery of Originals", and primary focus on Grand Prix Suitings and Apsara Shirtings as Contemporary Creations.

Advertisement 6: The sixth and final advertisement included in the study was that of Max Factor Cold Cream with the headline "Light-Deep Cleanser" and copy emphasis on its gentle Cleansing - protecting formula which leaves the skin soft, clean, supple and youthful.

Since the primary interest of the study was in comparing the consumer ratings on each of these six advertisements obtained through the use of a word in its two language versions, the choice of these

advertisements was somewhat random and had no particular significance. The only criterionused in the choice was that advertisements be as different as possible on the seven dimensions mentioned so that evidence about the comparability or otherwise of the ratings in the two languages is produced through a variety of stimuli. Also, the use of widely different advertisements made it possible to compare the relative discriminatory power of the two languages.

Hypotheses

The following were the specific hypotheses to be tested in this research :

H1: When consumers rate the same advertisement on two language versions of the same word (adjective), the mean ratings of the advertisement in the two languages are not statistically different.

H2: When consumers rate the same advertisement on two language versions of the same word (adjective), the correlations of the ratings between the two language versions would be positive, high and statistically significant.

H3: When consumers rate the same advertisement on two language versions of the same word (adjective), the distribution of the ratings in the two language versions would not be statistically different.

H4: When consumers rate a number of advertisements on a single word (adjective), the language of the word should not make a difference in the discriminatory power of the word in differentiating between the advertisements.

Data Analysis

Each test ad was rated on two language versions of each word by a sample of 100 consumers. The data werefirst subjected to an analysis of variance where ratings on each word in its two versions were tested for significance of differences between the means. The two ratings on each word were then correlated to examine the extent of correlations that result. Thirdly, the distribution of ratings of each word in English and Gujarati were compared using K-S test for ranked categories (Kolmogorow-Smirnov) to see if the two versions at least provide a similar distribution. Finally, ratings of all the six ads obtained through the use of each language were subjected to Anova to see the discriminatory power of the word in each of its two language versions. For testing the significance of differences between means, correlations, frequency distribution and discriminatory power, .05 level of significance was used. Exhibits I to VII present data on the seven dimensions respectively, covering all these four aspects of the analyses for the 197 words used in the study and for each of the six ads. included. Tables in the text summarise the major findings emerging out of these analyses.

Results

Hypothesis 1:, Do the two language versions of the same word provide the same mean ratings for a particular ad.?

Table 1

No. of words with significant mean differences between two languages

Dimensions \ Ads	Ad 1	Ad 2	Ad 3	Ad 4	Ad 5	Ad 6	Total no. of words in each dimension
1. Vigour	3	4	4	4	3	4	16
2. Sensuousness	14	14	19	14	18	16	54
3. Uniqueness	15	16	15	11	15	14	33
4. Credible	7	7	10	7	4	12	29
5. Information content	4	2	3	5	5	5	14
6. Irritativeness	3	4	6	4	6	4	30
7. Personal relevance	3	3	4	4	4	5	21
Total	49	50	61	49	55	60	197

As is evident from this table, between 25% to 30% of the words failed to produce the same ratings across the six ads, differences between mean ratings of the two language versions being statistically significant. The differences were relatively more pronounced for words representing the dimensions of Uniqueness, Sensousness and Credibility. Difference in mean ratings of words representing the remaining four dimensions were less serious. Though 70% to 75% of the words did produce similar ratings, the fact that 25% to 30% words resulted in producing significantly different means raises serious doubts about the advisability of pooling the data generated by different language versions of the questionnaire together for analysis and interpretation.

Hypothesis 2: When the same ad is rated by the same sample of 100 respondents on the same word in its two language versions, one would expect that ratings in the two languages will at least be significantly correlated. To get significant correlations for such a large sample size is in fact a very non-stringent expectation. Table 2 provides ad-vise data on these correlations for the words grouped by their dimensions.

Table 2

No. of words with non-significant correlations between ratings generated by two languages

Dimensions \ Ads.	A_1	A_2	A_3	A_4	A_5	A_6	Total no. of words in each dimension
1. Vigour	2	3	4	3	4	4	16
2. Sensuousness	8	13	18	14	18	20	54
3. Uniqueness	6	9	10	8	5	9	33
4. Credible	3	3	9	10	5	11	29
5. Information content	0	3	5	1	3	5	14
6. Irritativeness	0	13	23	16	6	19	30
7. Personal relevance	3	1	3	2	2	3	21
Total	22	45	72	54	43	71	197

It can be seen that as high as 36% of the words failed to have significantly correlated ratings on ad. 6. Non-significant correlations for all the ads. were in the range of 11% to 36%. These data again [illegible]

are suggestive of extreme caution to be exercised in translations. Words representing the dimensions of sensuousness, irritativeness, credibility and uniqueness performed relatively more poorly in this analysis.

Hypothesis 3: Table 3 gives data on the number of words that generated significantly different distributions when ratings of the same ad. on the same word in its two language versions were compared.

Table 3

No. of words on which distribution of ratings generated in the two languages were significantly different

Dimensions / Ads	A_1	A_2	A_3	A_4	A_5	A_6	Total no. of words in each dimension
1. Vigour	4	3	6	3	3	5	16
2. Sensuousness	18	20	27	22	21	31	54
3. Uniqueness	21	20	16	15	19	21	33
4. Credible	10	11	9	11	6	11	29
5. Information content	4	4	3	5	6	8	14
6. Irritativeness	2	6	3	8	7	2	30
7. Personal relevance	5	5	8	5	8	10	21
Total	64	69	72	69	70	88	197

The extent to which these distributions differed varied from 33% of words on ad. 1 to 45% on ad 2, other ads lying somewhere in between these two extremes. The words associated with dimensions of uniqueness, sensuousness, information

content and personal relevance produced relatively more distributions that were different. Least differences were found in words representing irritativeness dimension.

Hypothesis 4: Since the six ads. included in the study were deliberately chosen so that they were quite different in their representation of various dimensions, it was expected that significantly different ratings would be generated on the words on which the ads. were rated. Also this was expected to be true of the ratings generated in any of the two languages. Ratings generated by a word in a language across six ads. were subjected to an analysis of variance to see if the word was able to generate ratings which discriminated significantly between ads. In other words, if the ads. were different, their ratings on a word in one language should also be significantly different.

Table 4

No. of words which discriminated between the ads.

Dimension	No. of words which discriminated between ads only in English and not Gujarati	No. of words which discriminated between ads only in Gujarati and not Eng.	No. of common words which discriminated between ads both in English as well as Gujarati	Total no. of words in each dimension
1. Vigour	2	4	4	16
2. Sensuousness	8	6	32	54
3. Uniqueness	5	3	8	33
4. Credible	12	7	6	29
5. Information content	4	2	7	14
6. Irritativeness	11	3	12	30
7. Personal relevance	3	1	8	21
Total	45 (23%)	26(13%)	77 (39%)	197

Table 4 presents data on this hypothesis. Sixty two per cent of the words in English version and 52% of the words in Gujarati version were able to discriminate significantly between mean ratings across ads. Thus nearly 48% of the words in Gujarati version produced ratings on the six ads., where none of the means was different. For English version, a lesser number of words, namely, 38% failed to discriminate between different ads. English version, thus, performed relatively better on this criterion compared to Gujarati version. Major differences were found in words representing dimensions like irritativeness and credibility where English version was far more effective in discriminating between the ads. The only dimension on which words in their Gujarati version performed slightly better than English version was 'Vigour'.

Conclusions & Recommendations

It is thus clear that a large number of words, when translated into a regional language, produce significantly different data on the two language versions even though the stimulus provided to the respondent is the same. For instance, on the first three criteria of same mean, significant correlations and similarity of distributions, only 7% of the words produced ratings in the two languages that were similar. These 14 words or phrases were clever, powerful, attractive, delightful, sensational, general, believable, honest, ideal, reasonable, professional, easy to remember, makesme want to buy,and not for me. These were, thus, the only words which continued to convey the same meaning in its translated version as it did in the English version. Most of these words represented the dimensions of credibility and personal relevance.

As many as 35% of the words produced different ratings across all the three above mentioned criteria. Rest of the 58% words produced different ratings in its two language versions on at least one of the three criteria. Examples of words that conveyed almost completely different meanings and thereby produced significantly different ratings on all the criteria and across the ads were stimulating, amusing, most of t appealing, homely, different, distinctive, remarkable, superficial, pertinent, heavy and influential. More than half of these words belonged to the dimensions of sensuousness and uniqueness. It, thus, appears that for emotional dimensions such as these two, regional languages have certain expressions of their own and translated versions don't effectively match upto them. This may not be as true of more mundane dimensions of personal relevance and perceived credibility, where most of the earlier listed 14 words conveying similar meanings belonged.

The study, therefore, conclusively indicates that languages used in market research questionnaires are of considerable significance and extreme care needs to be taken in the choice of words and phrases included in the questionnaires, particularly when data generated by these questionnaires to be pooled for analysis. Language effects are significant and can substantially affect the findings and their interpretations. The least that the market researcher or copy writer should do is to extensively pre-test different language versions of the questionnaire or test ad. through play backs of the received communications, reverse translations into English from which language translation was derived, and through a careful analysis of the data which accounts and adjusts for such language

differences. Unless adequate care is taken, a confounding in the data may occur without the researcher fully realizing the magnitude of this phenomenon. The problem is particularly serious in a country like India because of the presence of a large number of languages. Both for communications as well as for market research across linguistic regions, the marketer or a researcher has to deal with this issue rather than ignore or evade it. To the extent many organizations today restrict their marketing efforts to middle-class educated urban segments, for reasons of accessibility as well as availability of effective buying power, the impact of this 'language effect' has not been fully appreciated but as marketers penetrate deeper into lower segments of the market, the implications of this phenomenon would become more serious. Even today marketers and market researchers engaged in social marketing related efforts and activities can ill afford to ignore this issue.

Words or phrases are used in many different types of market research studies. Their use is particularly widespread in studies on brand or company image, product testing, advertising and communications research, package selection, etc. Similarly many commonly used techniques in market research resort to use of words or phrases as a part of measurement procedure. This is particularly true when one is using semantic differential, multi-attributes models, word association tests, etc. It is imperative, therefore, that for all such studies as well as for the use of these techniques, it is consciously realized that language on which data is collected has its own peculiar connotations and calls for adequate attention to the fact of 'language effect'.

Exhibit I

VIGOUR

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Aggressive	.20	0.7	0.02	.19	1.3+	0.29*	.24	0.4	0.01	.18	0.5	0.11	.12@	1.0	0.07	.26@	0.6+	0.20	1.75	2.03
2.	Assertive	.25	1.2+	0.26	.19	0.9	0.26	.33	0.7	0.16	.21	0.9	0.17	.20	0.4	0.08	.09@	2.5+	0.47*	0.61	0.64
3.	Clever	.40	0.7	0.14	.44@	0.3	0.05	.27	0.6	0.12	.31	0.2	0.01	.39	0.8	0.03	.56	0.2	0.03	0.47	0.19
4.	Dramatic	.46	0.8	0.20	.15@	0.4	0.12	.38@	0.5	0.11	.29	0.5	0.05	.43	0.6	0.22	.50	0.5	0.09	7.00**	8.71**
5.	Effective	.56	0.8	0.04	.39	0.8	0.14	.10@	0.9	0.38	.27@	0.6	0.07	.31	0.8	0.10	.24	0.5	0.13	2.55**	1.77
6.	Forceful	.40	0.7	0.15	.31	1.1	0.35*	.20	0.4	0.05	.02@	0.5	0.24	.23	0.8	0.27	.20	0.9	0.29	0.56	2.37**
7.	Lively	.33	0.9	0.07	.29	0.4	0.17	.31	1.9+	0.58*	.40	0.9	0.08	.37	0.8	0.02	.26	0.3	0.07	9.21**	5.43**
8.	Polite	.24	1.0	0.06	.35	0.2	0.02	.30	1.5+	0.17	.26	0.4	0.01	.26	0.9	0.28	.40	0.7	0.05	1.69	1.56
9.	Powerful	.55@	0.5	0.06	.54@	0.7	0.11	.53@	0.4	0.09	.35@	1.1	0.31	.34	1.0+	0.24	.35	0.6+	0.00	1.23	1.28
10.	Stimulating	.05@	3.2+	0.83*	.07@	2.4+	0.49*	.00@	3.8+	1.01*	.08@	1.9+	0.67*	.20	2.4+	0.66*	.18@	2.6+	0.69*	2.00	2.35**
11.	Striking	.47	0.4	0.14	.13@	0.9	0.16	.02@	1.2+	0.32	.06@	0.5	0.02	.37	0.6+	0.05	.15@	1.4+	0.30	3.34**	2.90**
12.	Thrilling	.24	2.2+	0.37*	.19	1.8+	0.35*	.31	2.8+	0.65*	.30	2.5+	0.53*	.16	2.2+	0.49*	.14@	3.0+	0.86*	0.95	4.91**
	Negative																				
13.	Defensive	.12@	0.3	0.11	.42	0.6	0.19	.20@	0.7	0.04	.35	1.1	0.31*	.05@	0.6	0.20	.18	0.6	0.09	0.57	2.53**
14.	Dull	.60	0.5	0.07	.45	0.3	0.09	.13@	0.3	0.04	.54	0.3	0.02	.25	1.0	0.21	.30@	0.5	0.02	5.45**	5.06**
15.	Lifeless	.41	0.3	0.15	.39	0.3	0.03	.32	1.0	0.09	.25	0.4	0.12	.27@	0.4	0.14	.15@	0.3	0.01	3.18**	0.69
16.	Passive	.19	2.1+	0.43*	.22	0.2	0.00	.34	1.2+	0.27*	.38	1.5+	0.27*	.07@	1.7+	0.32*	.22	1.5+	0.44*	1.70	1.50

r refers to correlations of two language versions of a word. K values were generated for Kolmogorow-Smirnov test to see if the two versions of a word provide a similar distribution. M.D. refers to the difference in the mean ratings of the two versions of a word. F-values were generated from Anova where ratings of all the six ads on each word were compared for mean differences.

* Where means of ratings in two versions of a word are significantly different at .05 level.(F-value above 3.92)

** Words where at least one of the means of ratings across all the six ads is significantly different at .05 level.(F-value above 2.17)

\+ Significant K value at .05 level.(K-value above 1.22)

@ Words where correlations between two languages are not significant. (r below .164)

SENSUOUSNESS*

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Absorbing	.19	0.7	0.08	.40@	1.5+	0.29	.18@	0.8	0.20	.08@	0.5	0.11	.01@	0.8+	0.20	.14@	0.7+	0.11	2.04	3.19**
2.	Aesthetic	.34@	1.4+	0.28	.08@	1.0	0.08	.07@	1.8+	0.60*	.24@	1.5+	0.18	.04@	3.4+	0.78*	.01@	4.0+	1.44*	3.13**	38.79**
3.	Amusing	.06@	2.6+	0.58*	.02@	1.6+	0.23*	.07@	3.2+	0.64*	.07@	2.4+	0.41*	.13@	2.4+	0.33*	.11@	3.3+	0.60*	3.95**	4.95**
4.	Apologetic	.69@	0.5	0.07	.09@	0.3	0.01	.01@	0.7	0.05	.17@	0.3	0.07	.31@	1.1+	0.15	.01@	0.8+	0.13	1.85	1.13
5.	Appealing	.03@	6.0+	1.19*	.04@	5.7+	1.15*	.02@	8.8+	1.80*	.04@	5.0+	1.05*	.10@	6.9+	1.47*	.06@	6.4+	1.45*	4.55**	1.31
6.	Artistic	.50	0.8	0.21	.45	0.8	0.16	.36	1.2+	0.21	.34	1.0	0.21	.49	0.7	0.08	.36	1.4+	0.25	8.39**	6.90**
7.	Attractive	.60	1.1	0.18	.37	0.3	0.05	.28	1.1	0.14	.37	0.7	0.16	.46	1.0	0.19	.40	0.5+	0.09	6.66**	5.72**
8.	Beautiful	.49	0.8	0.13	.51	1.0+	0.16	.37	0.4+	0.06	.60	1.0	0.14	.44	1.0	0.15	.40	1.2+	0.18	14.14**	8.10**
9.	Charming	.45	1.1+	0.17	.49	1.2+	0.34*	.44	1.3+	0.20	.48@	0.4	0.10	.41	1.0	0.20	.30@	1.0	0.15	17.08**	8.35**
10.	Comical	.30	1.3+	0.16	.27	0.9	0.04	.24	1.7+	0.24	.02@	0.9	0.12	.17	0.4	0.01	.02	0.6	0.03	4.33**	5.29**
11.	Delightful	.40	0.8	0.20	.51	0.2	0.03	.43	0.9	0.21	.29	0.8	0.16	.57@	0.9	0.12	.47	0.4+	0.05	5.38**	4.49**
12.	Dreamy	.26	0.1	0.03	.30@	0.5	0.19	.23	1.0	0.14	.44	1.1	0.28	.16@	0.6	0.10	.41	1.2+	0.37	18.27**	11.51**
13.	Ego-boosting	.25	0.8	0.21	.14	0.3	0.05	.24	0.2	0.01	.36	0.	0.11	.37	0.8	0.24	.20	0.6	0.10	4.05**	1.85
14.	Emotional	.48	0.3+	0.04	.27	1.8+	0.28*	.37	1.1	0.08	.27	0.6	0.09	.44	0.8	0.10	.32	0.4+	0.02	10.60**	5.00**
15.	Enjoyable	.58	1.5+	0.37*	.40	0.8	0.20	.38	0.6+	0.13	.47	0.6	0.02	.41	0.5	0.21	.29	1.3+	0.23	4.69**	6.45**
16.	Exciting	.37	1.0	0.23	.34	0.6	0.09	.24	2.1+	0.36*	.21	0.9+	0.30	.27	0.9+	0.21	.32	0.9+	0.20	2.94**	5.98**
17.	Eyecatching	.44	0.8	0.06	.44	0.8+	0.20	.29	1.8	0.50*	.40	1.2+	0.18	.37	1.6+	0.07	.46@	1.8+	0.43*	10.11**	3.60**
18.	Fascinating	.57	0.6	0.17	.25	2.1+	0.25	.30	0.6	0.00	.29	0.6	0.10	.34	0.4	0.08	.09	2.2+	0.68*	0.93	6.03**
19.	Feminine	.31@	0.6	0.06	.35	2.2+	0.49*	.17	0.5+	0.05	.47@	0.6+	0.20	.21@	1.0+	0.08	.32@	0.5+	0.14	36.91**	37.72**
20.	Funny	.16@	1.1	0.28	.45	1.0	0.12	.34	2.6+	0.44*	.11	2.8+	0.53*	.14	1.8+	0.31*	.12	1.4+	0.22	1.88	4.67**
21.	Gentle	.31	0.7	0.18	.51	0.5+	0.03	.38@	1.8+	0.25	.31@	1.0	0.19	.39	0.9+	0.23	.36	0.9	0.15	6.63**	5.28**
22.	Glamorous	.53	1.2+	0.17	.20	1.3+	0.24	.02	2.7+	0.67*	.12	0.7+	0.15	.32	1.2+	0.02	.18	0.7+	0.14	13.31**	5.45**
23.	Heartwarming	.43@	1.8+	0.40*	.46	1.8+	0.37*	.38@	2.4+	0.55*	.26@	2.1+	0.39*	.27@	2.2+	0.39*	.32@	2.1+	0.55*	2.79**	1.61
24.	Homely	.12	3.8+	1.11*	.23	2.8+	0.94*	.02@	2.6+	0.77*	.13	1.9+	0.56*	.13@	1.4+	0.41*	.01	1.3+	0.10	7.77**	1.39
25.	Humorous	.32	1.5+	0.37*	.38	0.9	0.21*	.04	1.3+	0.26*	.18	1.	0.25	.01	1.5+	0.17	.24	1.2	0.24*	3.57**	3.77**
26.	Intelligent	.50	0.7	0.11	.52	0.3	0.00	.48	1.6+	0.46*	.50	0.3	0.05	.45	0.9	0.10	.53	0.4	0.08	5.45**	0.77
27.	Likeable	.32	2.5+	0.61*	.13@	2.7+	0.47	.32	2.1+	0.41*	.07@	2.6+	0.30	.22	2.6+	0.51*	.17	2.4+	0.59*	1.33	0.50
28.	Lovely	.50	1.4+	0.37*	.43	1.1	0.04	.56@	1.3+	0.09	.59	0.9	0.01	.64	0.7+	0.11	.46	1.3+	0.24	6.36**	4.22**
29.	Natural	.34	0.3	0.06	.31	0.9	0.12	.08	1.4+	0.33	.22	0.7	0.12	.22	2.0+	0.41*	.32	1.3+	0.30	6.38**	1.24
30.	Pleasant	.43	1.3+	0.22	.48	1.1	0.14	.18	1.3+	0.24	.36	1.2+	0.38*	.27	0.8	0.12	.36	1.1	0.02	5.75**	7.67**

(contd....)

Exhibit II (contd...)

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
31.	Pretty	.39	0.3	0.02	.52	0.4	0.14	.32	0.5+	0.05	.52	1.5+	0.35*	.42	0.6	0.17	.34	0.6+	0.04	14.69**	12.03**
32.	Refreshing	.55	1.6+	0.44*	.18	1.4+	0.29	.27	2.2+	0.48*	.34	1.5+	0.36	.35	0.8+	0.23	.42	1.4+	0.36	12.34**	4.09**
33.	Romantic	.45	1.1	0.18	.34	1.8+	0.22	.35	1.3+	0.25	.60	0.5	0.10	.49	1.3+	0.37*	.44	1.0	0.18	25.56**	9.12**
34.	Sensational	.25	0.3	0.05	.26	1.0	0.15	.22	0.2	0.01	.49	1.1	0.16	.40	0.6	0.18	.30@	0.3+	0.18	1.76	0.62
35.	Sensitive	.29	0.3	0.03	.27	0.8	0.04	.31	1.0	0.10	.23	0.6	0.07	.25@	0.9	0.03	.01@	1.3+	0.23	3.50**	4.52**
36.	Sexy	.53@	0.5	0.06	.43	0.5+	0.03	.27@	0.7	0.05	.34@	0.5+	0.00	.10@	3.1+	0.69*	.07@	3.5+	0.71*	21.20**	2.78**
37.	Sober	.00@	0.5	0.13	.26	2.8+	0.72*	.09@	3.4+	0.96*	.14@	2.7+	0.61*	.03@	2.1+	0.53*	.46@	3.2+	0.83*	2.57**	2.60**
38.	Soothing	.34	0.4	0.11	.38@	0.6	0.16	.06@	1.9+	0.30	.18	0.7+	0.19	.26	1.4+	0.30*	.05@	1.4+	0.27	5.95**	4.17**
39.	Sweet	.20	3.4+	0.93*	.03@	2.3+	0.69*	.29	5.3+	1.17*	.18	3.1+	0.75*	.31	3.8+	0.89*	.11@	3.8+	1.02*	6.94**	3.42**
40.	Tempting	.42	0.9	0.22	.44	0.5	0.11	.30@	0.6	0.08	.23	0.8	0.23	.42	0.4	0.06	.36	1.2+	0.39*	1.23	1.70
41.	Touching	.29	0.6	0.10	.44@	0.3+	0.03	.15@	0.7	0.21	.17	0.7+	0.13	.27@	0.6+	0.15	.22@	1.7+	0.51*	7.90**	1.92
42.	Witty	.34	1.0	0.27	.03@	1.6+	0.20	.17	3.1+	0.61*	.21	1.7+	0.14	.11@	2.3+	0.21	.01@	1.0+	0.07	3.73**	3.09**
43.	Wonderful	.47	2.1+	0.58*	.49	3.5+	0.86*	.15@	3.0+	1.05*	.31	2.8+	0.84*	.42	2.6+	0.81*	.19	2.1+	0.83*	3.23**	2.41**
	Negative																				
44.	Controversial	.27	0.5	0.01	.16@	0.2	0.02	.51@	0.7	0.19	.28@	0.3	0.02	.38@	1.0	0.28*	.09@	0.8	0.13	2.25**	2.72**
45.	Depressive	.28@	0.6	0.01	.28	0.7+	0.09	.05@	0.4	0.09	.08@	0.7+	0.15	.09@	0.3	0.03	.14@	0.4+	0.06	1.74	0.89
46.	Frightening	.08@	0.8	0.17	.31	1.5+	0.18*	.39@	0.6	0.06	.31@	1.8+	0.34*	.10@	0.9	0.16	.14@	1.5+	0.24*	0.28	1.21
47.	Gloomy	.20@	0.8+	0.26*	.18@	0.6	0.12	.14@	0.5+	0.11	.02@	1.2+	0.07	.09@	0.7+	0.12	.16@	0.3+	0.04	0.87	1.19
48.	Indifferent	.15@	1.6+	0.43*	.11@	3.8+	0.57*	.13@	3.7+	0.70*	.10@	3.2+	0.64*	.05@	2.7+	0.47*	.28	2.3+	0.45*	1.68	0.43
49.	Mischievous	.53	0.6	0.07	.15@	0.4	0.00	.31@	0.6	0.07	.21@	0.7	0.21	.15@	0.3	0.04	.21	0.3	0.08	2.74**	2.92**
50.	Sad	.42	0.2	0.02	.24	0.3	0.00	.01@	0.1	0.00	.05@	0.2+	0.00	.40	0.2	0.00	.30	0.3+	0.02	2.31**	2.15
51.	Serious	.33	0.2+	0.01	.41	0.5+	0.04	.27@	0.4	0.08	.45	1.6+	0.20	.43	0.9+	0.16	.48@	1.5+	0.34	2.87**	6.45**
52.	Shocking	.46	1.2+	0.14	.28@	1.7+	0.22*	.08@	1.1	0.10	.30	1.4+	0.25*	.27@	1.6+	0.26*	.06@	1.3+	0.16	2.03	2.83**
53.	Snobbish	.38@	0.7+	0.08	.01@	0.5	0.07	.02@	0.8	0.14	.21@	0.5+	0.02	.05@	0.6+	0.04	.04	1.2+	0.23	0.66	2.47**
54.	Tense	.09@	1.5+	0.34*	.02@	1.0	0.14	.18	1.1	0.24*	.05@	3.0+	0.69*	.09	1.6+	0.27*	.23	1.4+	0.18	0.86	2.33**

* Same explanatory notes as under Exhibit I.

UNIQUENESS*

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Arouses Curiosity	.35	1.1	0.23	.42	0.8	0.09	.24	0.4	0.07	.40	0.6	0.31	.39	1.4+	0.18	.04@	1.4+	0.26	1.52	1.87
2.	Attention getting	.50	1.5+	0.29	.37	1.4+	0.36*	.22	0.9	0.20	.48	0.9+	0.23	.39	2.1+	0.37*	.44@	1.3+	0.39*	3.38**	3.62**
3.	Classic	.21	2.0+	0.35*	.32	1.4+	0.34*	.47	0.8+	0.10	.22	1.4+	0.37*	.20	0.6	0.04	.13	0.9	0.21	2.08	0.83
4.	Creative	.32	1.3+	0.16	.32@	0.9+	0.11	.27@	1.7+	0.49*	.27@	1.1+	0.26	.44	0.7+	0.06	.43@	0.3+	0.02	4.99**	1.81
5.	Different	.24@	2.6+	0.46*	.10@	3.0+	0.57*	.14@	2.4+	0.59*	.12@	2.6+	0.67*	.21@	2.0+	0.28	.03@	3.7+	0.64*	0.63	1.70
6.	Distinctive	.15@	2.5+	0.75*	.22@	3.9+	0.92*	.16@	3.6+	1.12*	.12@	3.9+	1.07*	.04	2.5+	0.91*	.07@	3.0+	0.81*	0.33	1.49
7.	Exceptional	.49	0.8	0.10	.14@	1.1	0.24	.24	1.4+	0.26	.28	0.7	0.13	.25	0.7	0.09	.27	1.3+	0.30	1.09	1.88
8.	Fresh	.47	1.5+	0.38*	.52	0.8	0.17	.44	2.3+	0.53*	.32	0.5	0.03	.54	1.1	0.35*	.33	1.8+	0.58*	8.97**	4.43**
9.	Full of ideas	.47	1.1+	0.30	.40@	0.5+	0.10	.40	1.5+	0.48*	.34@	0.8	0.25	.17	0.9+	0.25	.45	0.4	0.01	2.01	1.54
10.	Imaginative	.31	2.3+	0.43*	.15@	2.0+	0.38*	.21	0.9	0.21	.13@	0.9+	0.02	.19	1.9+	0.38*	.28	1.1+	0.13	6.40**	2.01
11.	Memorable	.22	1.1	0.23	.55	1.2+	0.14	.26	0.8	0.07	.38	1.5+	0.21	.48	0.8	0.05	.36	1.4+	0.20	6.01**	3.31**
12.	Modern	.49	1.0	0.17	.49	1.5+	0.17	.53	0.5	0.03	.53	0.5	0.03	.40	0.7	0.02	.48	0.7+	0.18	4.28**	4.31**
13.	New	.58	1.2+	0.25	.56	1.1	0.22	.50	0.7	0.17	.48	0.6	0.15	.55	0.5+	0.09	.27	1.8+	0.41*	1.73	2.59**
14.	Novel	.29@	0.4	0.01	.22	0.8+	0.02	.22	0.8+	0.26	.35	1.1+	0.07	.32	1.4+	0.07	.20	0.9+	0.17	1.64	1.81
15.	Peculiar	.13@	1.5+	0.37*	.20@	2.4+	0.67*	.25	2.1+	0.38*	.24	1.9+	0.46*	.20	2.7+	0.58*	.38@	2.9+	0.45*	2.29**	0.48
16.	Radical	.27	1.2+	0.23	.10@	1.7+	0.21	.24@	1.0	0.08	.20	1.5+	0.15	.21	2.1+	0.42*	.09@	1.3+	0.17	3.54**	1.09
17.	Rare	.28@	1.3+	0.26	.38	0.6	0.30*	.08@	0.7+	0.11	.21@	0.8+	0.09	.24	1.3+	0.29*	.42	1.5+	0.22	0.73	0.37
18.	Remarkable	.14@	3.0+	0.62*	.21@	3.4+	0.66*	.06@	3.7+	0.74*	.10@	3.4+	0.73*	.20@	2.7+	0.68*	.47@	3.4+	0.80*	0.81	1.23
19.	Strange	.27	0.7	0.16	.01@	1.4+	0.25	.06@	0.2	0.01	.16@	0.3	0.03	.10@	0.5+	0.12	.09@	0.6+	0.16	2.06	2.15
20.	Thoughtful	.17	2.6+	0.72*	.47	3.2+	0.63*	.27	3.3+	0.82*	.11@	2.6+	0.54*	.27	3.1+	0.71*	.57@	2.8+	0.81*	1.31	0.18
21.	Unequalled	.23@	0.5	0.10	.35	0.5	0.02	.28@	1.3+	0.33*	.19	1.1+	0.19	.37	0.4+	0.01*	.11	0.4+	0.04	0.43	2.01
22.	Unique	.08@	2.4+	0.63*	.23@	2.5+	0.54*	.15@	4.2+	0.68*	.30@	2.0+	0.36*	.26@	2.3+	0.46*	.19@	1.5+	0.37*	1.83	0.29
23.	Unusual	.14@	1.0	0.21	.14@	1.5+	0.27	.04@	0.9	0.14	.05@	1.2+	0.42*	.12@	1.1	0.10	.11@	0.6	0.16	2.12	2.79**
	Negative																				
24.	Common	.29	1.6+	0.47*	.36@	0.4+	0.01	.24@	1.1	0.32	.41	0.7+	0.05	.22	0.9	0.19	.21@	3.6+	0.91*	2.76**	6.85**
25.	Conforming	.29@	2.7+	0.58*	.16@	1.8+	0.52*	.16@	0.8	0.06	.17	2.4+	0.66*	.25	2.4+	0.67*	.01	2.6+	0.52*	1.81	1.37
26.	Conventional	.10@	3.0+	0.50*	.16@	1.6+	0.41*	.12@	2.3+	0.49*	.43	2.1	0.54*	.22@	2.3+	0.55*	.36	1.9+	0.35*	1.17	1.34
27.	Familiar	.33	1.3+	0.35*	.42	1.3+	0.38*	.33	2.5	0.67*	.28	1.2+	0.30	.13	2.0	0.56*	.37	2.7	0.67*	0.85	0.91
28.	General	.40	0.9	0.10	.24	0.9	0.14	.38	0.6	0.07	.28	0.5	0.09	.17	0.7	0.15	.41	0.7	0.11	2.42**	4.08**
29.	Imitation	.20	1.5+	0.14	.02@	2.6+	0.53*	.05@	1.6+	0.25*	.45	0.2	0.04	.09@	1.5+	0.45*	.17	1.3+	0.17	5.79**	4.24**
30.	Old fashioned	.47	2.0+	0.35*	.33	1.1	0.30*	.19	1.0	0.20*	.28	0.5	0.09	.47	0.4	0.10	.40	0.4	0.09	3.32**	2.25**
31.	Popular	.30	2.8+	0.65*	.23	2.1+	0.43*	.23	2.9+	0.83*	.04@	2.6+	0.86*	.20	2.2+	0.74*	.28	3.5+	1.25*	4.97**	1.46
32.	Recognizable	.35	0.5	0.04	.45	1.4+	0.34	.41	0.5	0.15	.22	1.5+	0.33	.24	1.3+	0.21	.40	0.9	0.12	1.42	1.26
33.	Simple	.38	0.8	0.18	.45	1.0	0.06	.46	1.7+	0.36	.32	0.4	0.03	.37	1.2+	0.30	.33	1.2+	0.32	1.63	2.73**

Exhibit IV

CREDIBLE*

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Agreeable	.25	0.4	0.01	.35	0.6	0.04	.53	1.1	0.21	.39	1.1	0.12	.26	2.1+	0.42*	.26	2.0+	0.62*	2.02	3.93**
2.	Assuring	.40	1.3+	0.38*	.34	1.0	0.13	.37	0.6	0.02	.27	0.8	0.23	.28	0.6	0.05	.25	1.1	0.34*	1.91	3.13**
3.	Believable	.41@	0.4	0.07	.39	0.9+	0.20	.51	1.0+	0.14	.41	0.8+	0.10	.27	0.6+	0.04	.21@	0.3+	0.03	4.35**	2.99**
4.	Convincing	.13@	2.6+	0.58*	.20	1.4+	0.45*	.20	3.5+	0.92*	.23	1.7+	0.45*	.22	1.2+	0.25	.10@	1.6+	0.37*	3.82**	1.43
5.	Genuine	.27	1.5+	0.78*	.21	1.4+	0.37*	.32	2.1+	0.40*	.17	1.5+	0.35*	.28	1.3+	0.31	.25	1.2+	0.36*	3.13**	1.08
6.	Honest	.51	0.9	0.14	.43	0.8	0.12	.27	0.8	0.12	.29	0.8	0.09	.44	0.5	0.04	.58	0.4	0.18	1.46	2.79**
7.	Ideal	.42	0.8	0.12	.19	0.4+	0.03	.46@	0.5	0.09	.45	0.6	0.10	.33	0.5	0.10	.42	0.6+	0.20	1.14	1.14
8.	Logical	.42@	2.0+	0.50*	.30	1.2+	0.31	.07@	1.1+	0.37*	.31	0.4+	0.14	.20	0.9+	0.21	.29@	1.2+	0.38*	2.64**	2.06
9.	Practical	.15@	3.6+	1.18*	.30@	4.2+	1.61*	.02@	3.9+	1.19*	.17@	2.6+	0.97*	.27@	2.9+	1.05*	.01@	3.2+	0.91*	2.57**	1.85
10.	Rational	.30	2.9+	0.59*	.14@	3.5+	0.77*	.21	3.2+	0.62*	.08@	2.2+	0.39*	.08@	2.9+	0.50*	.21@	2.3+	0.45*	3.33**	1.40
11.	Realistic	.27	0.3	0.05	.27	0.8	0.19	.42	0.7	0.24	.22	0.5	0.03	.45	0.6	0.07	.15@	0.6	0.15	4.07**	2.06
12.	Reasonable	.30	0.6	0.16	.37	0.5	0.03	.36	0.5	0.01	.40	0.4	0.02	.36	0.7	0.19	.28	0.4	0.07	0.72	1.46
13.	Reliable	.42	0.7	0.27	.43	0.4	0.01	.31	0.6	0.08	.39	0.4+	0.09	.36	0.4	0.08	.50	1.1	0.41*	2.21**	3.59**
14.	Responsible	.39	1.0+	0.22	.47	1.1	0.19	.45	0.6+	0.04	.37@	1.3+	0.18	.40	0.3	0.07	.55	1.1	0.18	2.66**	0.97
15.	Sensible	.28@	1.4+	0.26	.34	0.5	0.02	.31	1.8+	0.19	.07@	0.9+	0.00	.35	1.0	0.29	.26	0.9	0.15	2.96**	2.30**
16.	Trustworthy	.15@	0.5	0.08	.38	1.0	0.25	.59	1.1	0.06	.22	1.2+	0.41*	.27	0.9	0.13	.23	0.4	0.06	2.50**	1.84
17.	Truthful	.33	0.8	0.22	.51	0.6	0.06	.45	0.9	0.00	.36	1.4+	0.04	.41	1.0	0.01	.22	1.0	0.06	3.76**	2.12
	Negative																				
18.	Biased	.25	1.5+	0.00	.31	1.2+	0.18	.07@	0.5+	0.03	.13@	0.7+	0.07	.28@	0.3	0.31	.01@	1.1	0.32	2.35**	1.18
19.	Boastful	.40	1.8+	0.12	.32	1.9+	0.46*	.05@	1.2+	0.29*	.33	1.2+	0.44	.10@	0.9	0.18	.02@	0.6	0.15	4.50**	5.21**
20.	Bogus	.49	0.3	0.07	.27	0.8	0.18	.21	0.4	0.11	.19@	0.4	0.05	.43	0.5	0.04	.07@	0.4	0.10	2.13	3.83**
21.	Conflicting	.42	0.3	0.07	.15@	0.3	0.00	.46@	0.8	0.16*	.03@	0.4	0.04	.37	0.3	0.07	.01@	1.0+	0.16	0.85	2.55**
22.	Deceptive	.30	0.4	0.03	.45	1.2+	0.13	..	1.1+	0.13	.02@	1.3+	0.33*	.13	0.8	0.21	.1@	1.2+	0.18	1.09	3.46**
23.	Exaggerated	.17	0.5	.06	.41@	1.9+	0.42*	.27@	1.2+	0.21*	.12@	0.7	0.07	.24	0.7	0.17	.08	2.1	0.54*	4.13**	6.92**
24.	False	.58	0.2	0.03	.06	0.2+	0.05	.08@	0.1+	0.03	.10	0.8+	0.20	.50	0.6	0.14	.40	0.4+	0.05	3.79**	2.30**
25.	Fictitious	.33	0.6	0.02	.17	1.5+	0.02	.01@	2.0+	0.23	.33@	1.6+	0.22	.28@	1.0	0.17	.20	3.9+	0.75*	2.07	5.67**
26.	Misleading	.35	0.2	0.05	.28	0.4	0.01	.09@	1.0	0.21*	.14	0.4	0.05	.13@	0.6	0.19	.23	1.2	0.31*	3.92**	0.69
27.	Professional	.42	0.3	0.01	.47	0.7	0.03	.20@	0.7+	0.03	.50@	0.9+	0.74	.26@	0.7	0.08	.40@	0.9+	0.80	1.55	1.45
28.	Superficial	.37	2.5+	0.45	.39	2.9+	0.34*	.07@	2.5+	0.27*	.11@	2.3+	0.54*	.06@	3.3+	0.74*	.04@	3.0+	0.54*	6.20**	1.94
29.	Suspicious	.50	0.8	0.13	.25	0.7	0.13	.21	0.3	0.03	.15@	0.4	0.01	.17	0.6	0.03	.12@	0.4	0.02	1.93	1.02

* Same explanatory notes as under Exhibit I

Exhibit V

INFORMATION CONTENT*

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Advising	.39	1.3+	0.17	.31	0.7	0.10	.36	0.6	0.12	.30	0.6+	0.21	.17	0.5	0.14	.41	1.2+	0.29	4.26**	5.06**
2.	Clear	.25	0.9	0.09	.19	1.1	0.21	.32	0.9	0.20	.27@	1.5+	0.43*	.35	0.7	0.13	.29	1.4+	0.36*	3.55**	2.42**
3.	Descriptive	.33	0.6+	0.17	.48	1.1	0.13	.51@	0.7	0.00	.13@	0.8	0.07	.17	0.9+	0.01	.44@	0.4	0.07	6.00**	4.18**
4.	Direct	.44	1.3+	0.36*	.50	0.6	0.10	.09@	1.1	0.25	.37	0.6	0.09	.20	1.3+	0.42*	.11	0.5+	0.13	0.72	2.55**
5.	Educative	.28	0.8+	[illegible]	.48	0.7+	0.10	.49@	0.2+	0.01	.33	0.8+	0.04	.36@	1.4+	0.34*	.49	1.3+	0.29	3.78**	6.08**
6.	Explanatory	.17	3.0+	0.35*	.20@	3.6+	1.00*	.08@	3.4	0.85*	.32	2.1+	0.57*	.13@	2.2+	0.68*	.26	2.8+	1.10*	5.01**	3.45**
7.	Factual	.29	0.7	0.11	.13@	1.3+	0.11	.20	1.1	0.26	.41	1.8+	0.53*	.23	2.2+	0.56*	.24	2.0+	0.64*	3.67**	0.48
8.	Informative	.31	0.4+	0.10	.40	1.7+	0.40*	.28@	0.5+	0.03	.41	0.7+	0.11	.20@	0.7+	0.18	.35@	1.2+	0.26	2.51**	2.06
9.	Pertinent	.37	1.3+	0.52*	.22	1.6+	0.34	.15@	1.9+	0.49*	.17	3.1+	0.68*	.13@	3.0+	0.75*	.16@	2.5+	0.79*	2.04	0.40
	Negative																				
10.	Abstract	.21	0.4	0.14	.16@	0.3	0.04	.16@	0.8	0.23	.45	1.9+	0.43*	.00@	0.7	0.02	.15@	0.6	0.19	2.27**	3.12**
11.	Confusing	.49	0.5	0.01	.25	0.5	0.08	.16@	0.4	0.11	.29	1.1	0.05	.22	1.0	0.27	.05@	0.7	0.04	4.96**	2.06
12.	Crowded	.40	1.1	0.34*	.42@	0.3	0.08	.47@	0.5	0.01	.38	0.8	0.03	.42	0.6	0.03	.27@	0.8+	0.06	19.10**	16.09**
13.	Irrelevant	.51	0.4	0.00	.12@	0.7	0.08	.21	0.4+	0.14	.28	0.3	0.04	.31	0.5+	0.00	.09@	1.3+	0.22*	0.86	4.23**
14.	Repetitive	.19	0.5	0.16	.25	0.8	0.01	.21	1.3+	0.31*	.19	1.1	0.09	.28	1.3+	0.27	.29	0.9	0.07	5.64**	0.51

* Same explanatory notes as under exhibit I

Exhibit VI

IRRITATIVENESS*

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Impressive	.45	0.9+	0.23	.38	0.8+	0.15	.43	1.7+	0.47*	.46	1.1+	0.28	.42	1.4+	0.30	.54	1.0	0.22	2.76**	1.73
2.	Interesting	.31	2.8+	0.76*	.27	2.6+	0.71*	.27	2.3+	0.64*	.30	2.0+	0.59*	.56	1.5+	0.42*	.33	0.9	0.00	2.15	4.56**
	Negative																				
3.	Annoying	.19	0.5	0.32	.12@	0.9	0.08	.08@	0.3	0.08	.30@	0.5	0.12	.22	0.6+	0.03	.22@	0.3	0.08	2.92**	2.41**
4.	Awful	.47	0.5	0.06	.18@	0.5	0.07	.02@	0.4	0.03	.08	1.2+	0.21	.24	1.7+	0.23	.10@	0.5	0.06	3.10**	1.38
5.	Boring	.45	0.3	0.01	.09@	0.6	0.13	.04@	0.1	0.02	.32	0.2	0.02	.38	0.3	0.00	.11@	0.8	0.16	3.74**	4.08**
6.	Crazy	.36	0.3	0.02	.05@	0.2+	0.04	.01@	0.4	0.04	.25	1.0	0.19	.36@	0.6	0.02	.03@	0.5	0.08	3.48**	5.28**
7.	Disgusting	.44	0.9	0.06	.03@	1.2+	0.12	.17@	0.5	0.08	.21	0.6+	0.01	.01@	0.4	0.02	.14@	0.6	0.05	3.34**	3.35**
8.	Embarassing	.20	0.8	0.19	.07@	1.2+	0.03	.02@	0.4	0.11	.26	1.5+	0.11	.18	0.7	0.10	.02@	0.4	0.13	1.45	2.85**
9.	Foolish	.67	0.1	0.03	.51	0.5	0.09	.00@	0.4	0.04	.47@	0.3+	0.06	.49@	0.2	0.04	.03@	0.3	0.03	4.07**	4.88**
10.	Frustrating	.42	0.5	0.04	.23@	0.5+	0.39*	.11@	0.9+	0.19*	.12@	1.4+	0.44*	.10@	0.8+	0.05	.08	1.1+	0.24*	1.41	5.43**
11.	Heavy	.36	2.3+	0.41*	.05@	2.5+	0.43*	.06@	2.7+	0.47*	.09@	3.6+	0.56*	.12@	2.9+	0.41*	.29@	3.4+	0.59*	2.88**	0.81
12.	Horrible	.49	0.7	0.17	.51@	0.3	0.04	.04@	0.1	0.02	.25@	0.2	0.03	.36	0.6	0.14	.03@	0.9	0.12	2.76**	0.83
13.	Insulting	.46	0.6	0.15	.09@	0.2	0.03	.01@	0.1	0.00	.02@	0.6	0.12	.35	0.5	0.05	.58	0.2	0.04	3.89**	2.92**
14.	Intolerable	.54	0.2	0.01	.28	0.4+	0.02	.15@	0.5	0.08	.37@	0.4	0.09	.32	0.7+	0.16	.17@	0.9	0.10	2.69**	2.08
15.	Irritating	.51	0.6	0.06	.38	1.3+	0.21	.10@	0.5	0.07	.15	0.8+	0.20	.16@	1.5+	0.32*	.14@	0.7+	0.12	2.89**	2.01
16.	Lousy	.21	0.9	0.08	.48@	1.6+	0.24*	.01@	0.7	0.02	.27@	2.0+	0.39*	.28@	1.8+	0.38*	.05@	1.6+	0.28*	3.77**	3.46**
17.	Negative	.63	0.3	0.06	.14	0.4	0.05	.12	0.8	0.17*	.09	0.4	0.01	.14	0.5	0.17	.10	0.4	0.17	2.85**	2.47**
18.	Nonsensical	.49	0.3	0.06	.22@	1.0	0.13	.29@	0.3	0.06	.37@	0.6	0.15	.18	0.5	0.11	.17	0.7	0.15*	3.96**	3.73**
19.	Odd	.34	0.3	0.02	.16	0.4	0.02	.16	0.9	0.11	.14	0.8	0.18	.29	0.8	0.15	33	0.5	0.13	4.92**	1.53
20.	Offensive	.24	1.0	0.21	.36	0.3	0.09	.22	0.9	0.13	.27@	0.4	0.06	.17	0.9	0.24*	.07@	0.1	0.03	1.21	0.38
21.	Ridiculous	.22	0.8	0.15	.36	0.5	0.05	.22@	0.1	0.01	.05@	0.9	0.16	.27	0.5	0.07	.15@	0.5	0.01	3.85**	3.53**
22.	Rubbish	.55	0.3	0.01	.59@	0.4	0.07	.01@	0.3	0.02	.14@	0.1	0.02	.35	0.7	0.12	.04	0.3	0.03	2.45**	1.38
23.	Rude	.29	0.3	0.01	.01@	0.9	0.14	.06@	0.2	0.02	.04	1.1	0.06	.42	0.6	0.04	.23	0.3	0.08	1.45	1.34
24.	Sarcastic	.39	0.7	0.20*	.25	0.7	0.05	.04@	0.6	0.01	.29@	0.3	0.01	.29	0.0	0.19	.25@	0.7	0.13	0.36	1.81
25.	Silly	.55	0.4	0.12	.43	0.1	0.02	.04@	0.1	0.00	.14@	0.3+	0.08	.48	0.4+	0.06	.11@	0.3	0.06	2.61**	2.17
26.	Stupid	.55	0.6	0.21	.46@	0.3	0.02	.09@	0.8	0.15*	.07@	1.3+	0.09	.23	1.5+	0.42*	.09@	0.9	0.14	3.91**	1.58
27.	Terrible	.39	0.8	0.01	.10@	1.0	0.05	.10@	0.7	0.03	.06@	1.4+	0.18	.29	0.8	0.00	.05@	0.6	0.02	1.40	1.48
28.	Tiring	.26	0.9	0.15	.29@	0.5	0.05	.25@	0.3	0.02	.11@	0.5	0.08	.38	1.1	0.23	.36@	0.3	0.03	5.79**	4.12**
29.	Vague	.24	0.7	0.12	.07@	0.7	0.15	.02@	0.4	0.09	.14@	0.6	0.09	.38@	0.6	0.12	.04@	0.6	0.04	2.55**	1.12
30.	Vulgar	.53	0.4	0.05	.02@	0.4	0.06	.01@	0.2	0.07	.05@	0.1	0.01	.06@	0.4	0.10	.12@	0.6	0.12	3.36**	2.54**

* Same explanatory notes as under exhibit I

Exhibit VII

PERSONAL RELEVANCE*

Sl. No.	Name	Ad. 1			Ad. 2			Ad. 3			Ad. 4			Ad. 5			Ad. 6			F values	
		r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	r	K	M.D.	English	Gujarati
	Positive																				
1.	Appropriate	.31	1.0	0.23	.37	0.5	0.08	.19	1.7^{+}	0.29	.24	0.8	0.08	.32	0.9	0.21	.38	1.9^{+}	0.39*	3.69**	1.44
2.	Easy to Remember	.47	0.4	0.07	.40	0.8	0.13	.17	0.7	0.16	.32	1.1	0.15	.54	1.0	0.15	.43	0.7	0.00	10.03**	5.61**
3.	Easy to Understand	.47	0.7	0.21	.51	1.0	0.12	.45	1.4^{+}	0.33*	.40	1.1	0.13	.36	2.2^{+}	0.39*	.55	2.0^{+}	0.60*	2.83**	2.89**
4.	Helpful	.28	1.9^{+}	0.42*	.44	1.0	0.28	.40	1.1	0.26	.32	1.0	0.31*	.56	0.6	0.19	.37	1.4	0.55*	7.36**	8.93**
5.	Important to me	.50@	0.8	0.12	.49	0.5	0.15	.47@	0.7^{+}	0.01	.42@	0.5	0.14	.54@	1.5^{+}	0.69	.67@	0.2	0.04	2.48**	4.10**
6.	Influential	.09@	2.7^{+}	0.61*	.25	2.4^{+}	0.78*	.11@	5.8^{+}	0.99*	.11@	2.4^{+}	0.49*	.02@	3.5^{+}	0.86*	.01@	3.0^{+}	0.57*	0.93	1.59
7.	In good taste	.53	1.3^{+}	0.34	.26	2.7^{+}	0.55*	.36	3.6^{+}	0.95*	.36	1.1	0.00	.30	1.7^{+}	0.60*	.40	2.5^{+}	0.76*	2.05	9.63**
8.	Makes me want to buy	.32	0.7	0.06	.63	0.5	0.01	.47	0.5^{+}	0.04	.35@	0.5	0.06	.59	0.5^{+}	0.12	.60	0.9^{+}	0.08	1.19	0.34
9.	Meaningful	.40	0.9^{+}	0.20	.43	0.4	0.04	.43	1.3^{+}	0.23	.11@	0.6^{+}	0.06	.43	1.7^{+}	0.43*	.42	1.3^{+}	0.18	2.22**	3.95**
10.	Noteworthy	.25	1.2^{+}	0.29	.35	1.3^{+}	0.21	.17	0.9	0.06	.22	1.2^{+}	0.22	.03@	1.6^{+}	0.26	.19	1.4	0.03	0.66	0.22
11.	Promising	.37	0.3	0.05	.38	1.0	0.29	.52@	1.0^{+}	0.14	.22	0.6	0.04	.30	1.2^{+}	0.30	.48	0.4	0.05	2.05	1.61
12.	Relevant	.30	0.8	0.21	.42	1.0	0.04	.03@	1.6^{+}	0.48*	.26	0.7^{+}	0.10	.26	0.8	0.15	.38	0.6	0.06	1.54	1.10
13.	Satisfying	.67	0.5	0.02	.41	0.8	0.12	.49	0.7	0.00	.29	1.3^{+}	0.41*	.40	0.6	0.04	.44	0.2	0.01	1.52	1.51
14.	Suitable	.41	0.8	0.25	.35	0.4	0.06	.68	0.6^{+}	0.12	.33	1.5^{+}	0.29	.55	1.0	0.18	.33	0.2^{+}	0.05	4.51**	2.91**
15.	Superb	.45@	0.9^{+}	0.04	.31	1.3^{+}	0.20	.59	1.3^{+}	0.22	.53	0.5^{+}	0.16	.54	1.1	0.17	.45	1.2^{+}	0.22	1.01	1.28
16.	Useful	.13@	1.6^{+}	0.54*	.27	1.9^{+}	0.62*	.28	1.6^{+}	0.10	.35	1.5^{+}	0.55*	.40	1.0	0.10	.34	0.7	0.18	10.89**	2.21**
17.	Worth looking at	.33	0.9	0.09	.48	0.3	0.02	.28	0.4	0.08	.32	0.5	0.19	.56	0.5	0.01	.42	1.3^{+}	0.26	7.27**	5.72**
18.	Worth remembering	.27	1.1	0.19	.37	1.0	0.02	.32	0.6	0.08	.26	0.4	0.07	.48	1.2^{+}	0.14	.41	1.4^{+}	0.14	4.00**	1.43
	Negative																				
19.	Inadequate	.09@	0.7	0.03	.12@	0.3	0.06	.18	0.4	0.06	.23	0.6	0.16	.20	0.8	0.13	.16@	0.4	0.03	1.15	1.05
20.	Not for me	.33	0.2	0.05	.40	0.7	0.16	.19	0.9	0.24	.52	0.7	0.05	.51	0.6	0.13	.62@	0.5	0.10	1.26	2.15
21.	Pointless	.30	0.3	0.01	.29	0.1	0.04	.00@	0.4	0.08	.38	0.5	0.03	.36	0.3	0.02	.14@	0.4	0.05	3.14**	1.81

* Same explanatory notes as under exhibit I.