IMPACT OF COMMUNICATION CUES ON BRAND ATTITUDE, AND ASSOCIATION WITH BRAND, ACROSS DIFFERENT AGE GROUPS : AN EXPERIMENTAL ANALYSIS

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Abstract

The target segment for many marketers, cuts across diverse age groups and this is also true for marketers of mobile handsets. It is important for marketers to understand how best to leverage their communication strategy to maximize appeal across diverse age groups or at least to ensure positive attitudes across the age groups covered in its target audience. This paper attempts to study if exposure to same communication cues results in variances in attitude towards brand and association with the brand across five different age groups. The impact of two different types of communication cues are studied in a controlled environment for a mobile handset brand and the analysis indicates that there are significant variations across age groups, though the size effects of these variations is not strong.

Key Words

Attitude towards brand, brand association, communication cues, age groups

Introduction and Objectives

This paper seeks to study the difference if any in attitude towards a brand and association with the brand across different age groups in response to the same communication cues.

Attitude towards the Brand (Abr) is the consumers' evaluation of particular brands on an overall basis from poor to excellent (Assael, 1995). Many studies have focused on understanding how advertisements affect consumers' attitudes toward advertised brands (Gardner 1985). Research has shown that attitude toward a brand significantly impacts intention to buy that brand (Brown and Stayman, 1992; Homer, 1990; MacKenzie *et al.*, 1986). Attitudes towards a brand have two components, an evaluation component that is influenced by beliefs about the brand and a brand-specific 'liking 'component that cannot be explained by knowledge about beliefs. This liking component is presumed to be based on the attitude towards the ad as well as by exposure effects (Batra et al 2001). Since a brand is not a physical entity but what the consumer thinks and feels and visualizes when he/she sees the brand's symbol or name, it is important to understand the

how attitude towards the brand can be shaped and influenced by the type of communication cues used.

Further one also needs to analyse whether the same set of cues evoke similar associations across different customers. The category of mobile handsets was chosen for this study. For marketers of mobile handsets, the target customers cut across many age groups. Though some brands may target only specific age groups usually it is not age but benefit sought, psychographics, type of usage etc which are used as segmenting variables. Even if some age groups like tweens and early teens are not owners of mobile handsets they are usually adept users through shared consumption with family members. Further they are also influencers and future customers. It is important for marketers to understand how best to leverage their communication strategy to maximize appeal across diverse age groups. This paper attempts to study if differences exist and if yes then what is the nature and magnitude of these differences.

Literature review

There has been considerable research on the impact of communication cues on effectiveness of advertising and attitude formation. Advertisements use contextual cues to create the theme and / or imagery of an advertisement. Previous research has shown that the type of music used in an ad (Sullivan 1990) or the dress of individual shown (O' Neal and Lapitsky 1991) can imply the perceived quality and credibility of a business. Ad size signals information about reputation and credibility (Moriarty 1986, product or service quality (Kirmani 1990), and product assortment (Homer 1995).

Various studies have attempted to analyse the set of associations consumers have about brands, how these are affected by different influences and how they vary across culture, gender, demographic profiles, geographies, product categories, etc.

Escalas and Bettman (2003) studied the differences in consumers' connection to brands based on the varying influence of reference groups on different types of individuals. Wood (2003) has studied differences in brand preferences, influences and purchasing behaviour across product categories for age the group 18-24 years. She found that there is significant difference in dimensions of brand selection, parental influence and linking of associations to self-image across product categories within this age group.

Another aspect of brand associations has been covered by Piron (2000), who explored the differences in brand associations, preferences and purchase intentions across brands within same product categories but with different countries of origin. He found that differences were stronger for luxury products vs necessity products. Garretson and Burton (2005) studied the differences in brand associations and attitudes resulting from different types of communication specifically those using spokescharacters and others. Their studies demonstrated that for the same target audience the communication with spokescharacters resulted in more favourable brand associations and attitudes .

Day and Stafford (1997), explored the impact of depicting an older persons in the advertisement on attitudinal measures and patronage intentions among young adults. Stout and Rust (1993), found that demographic characteristics influenced descriptive emotional response, with older viewers indicating more descriptive emotional response than younger viewers.

Rossiter and Percy (1987) and Mitchell and Olson (1981) state that pictorial information in print advertising creates more favorable attitudes. Pallak (1983) also finds more favourable attitudes using a photograph in vivid color than when using black and white. Despite considerable literature on the use of color in capturing attention, results are mixed on the use of color to influence consumer choice behavior. For example, both Kelly and Hoel (1991) and Rouse (1991) find that color ads did not lead to a significant increase in advertiser selection. Results from the Lohse and Rosen study show that color and graphics can influence perception of quality and credibility but these effects vary by product category.

Bulmer and Buchanan-Oliver's study of advertising in the television media supports the findings of Forceville and Phillips in that there is considerable, but not unanimous consensus about the nature of the features projected from the visual imagery onto the brand. Apart from the more or less shared interpretations, the participants voiced a wide range of more idiosyncratic ones. This supports the fact that the relevance of an advertisement cannot be established objectively but must be considered in the terms of each individual.

There have been research studies done to explore the impact of distinctiveness on advertising responses (Grier and Brumbaugh 2004). Nondistinctive individuals have been shown to prefer ads they feel target them based on a broader configuration of ad cues, not merely similar sources (Aaker, Brumbaugh, and Grier 2000). Lundstrom and Sciglimpaglia(1977) further reported that some groups of female consumers, usually defined by demographic variable (i.e income, education) were more aware of stereotyped role portrayals in advertising than others and that corresponding prejudices influenced women's attitudes toward firms or products associated with stereotyped role portrayals (Lysonski and Pollay 1990). Orth and Holancova (2004), looked at how male and female consumers respond to sex role portrayals in advertisements for a fictional cell phone service. The study revealed that disapproval had a stronger (absolute) impact on consumer attitudes than did approval.

In a study of 140 children across second, fourth and sixth grades, Vollmers found that recognition of brands was influenced by type of brand placement in the movie and children's ability to recognize the promotional intent of brand placement improved with age .

In their exploratory study examining the relationship between viewers' emotional response and their evaluation of television commercials, Stout and Rust have examined how emotional responses to advertising were affected by demographic characteristics such as age, sex and brand usage. In their study of seven commercials, demographic characteristics were found to influence descriptive emotional response, with older viewers indicating more descriptive emotional response than younger viewers Another study which examines brand communication interpretations, done by DeLorme and Reid, focuses on how brand props are interpreted by movie audiences. Greater distinction in experiences and interpretations emerged between older frequent and infrequent moviegoers than between younger frequent and infrequent moviegoers. In particular the older moviegoers expressed distrust of brands placed in movies.

Though the impact of communication cues on brand attitudes has been studied for specific consumer types and specific age groups, there is a gap in the area of analyzing differences in brand attitude across different age groups resulting from exposure to given communication cues.

Method

An experimental study was designed to study the impact of given communication cues in a controlled environment. Five age groups were taken for the study-

- i) 10-12 years (tweens)
- ii) 13-17 years (teens)
- iii) 18-24 years (youth)
- iv) 25-34 years (young adults)
- v) 35-45 (adults)

Communication cue was the manipulated variable with two variants-

- i) Image
- ii) Copy

As stimuli, two ad treatments were created by manipulating one element in the advertisement for a dummy mobile brand xfone. Each age group was exposed to the same two treatments. Impact of each cue across the five age groups was studied for the following dependent variables-

- i) Attitude towards Brand
- ii) Closeness of association with Brand

The following Hypotheses were tested:

 $H_1 =$ For mobile handset brands, there would be significant variation in the attitude towards brand across tweenagers, teenagers, youth, young adults and adults for an image dominant ad with little copy.

 $H_2 =$ For mobile handset brands, there would be significant variation in the attitude towards brand across tweenagers, teenagers, youth, young adults and adults for a copy dominated ad with no model imagery.

 $H_3 =$ For mobile handset brands, there would be significant variation in the closeness of association with the brand across tweenagers, teenagers, youth, young adults and adults for an image dominant ad with little copy.

 $H_4 =$ For mobile handset brands, there would be significant variation in the closeness of association with the brand across tweenagers, teenagers, youth, young adults and adults for a copy dominated ad with no model imagery.

<u>Participants in the study</u>- The experiment was administered on a total of 210 participants with a mix of males and females. All participants in the experiment belonged to SECA and were residents of the National Capital Region of Delhi. Participants in each age group were randomly assigned to one of the two treatments.

<u>Stimuli and experiment administration</u>- Two variants of a full page colour ad for xfone brand were designed by an advertising professional. Both ads were identical in all respects like size, layout, colour scheme etc except for one difference. The first ad used the image cue, showing the caricature of a young model holding a phone. In the second ad, informative copy about the mobile handset, replaced the model image used in treatment 1. The two communication cues are referred to in this paper as image and copy respectively.

Each ad was inserted in identical dummy magazines with identical placements. The magazine was presented to the respondents as a new in-flight magazine about to be launched. Respondents were instructed to go through the magazine for five minutes after which the magazine was taken away and questions asked about their likes, dislikes about the magazine. Subsequently they were asked to look at page with the test ad for one minute. The magazine was again taken away and questions specific to the ad shown were asked. <u>Control for other extraneous variables-</u> A dummy brand was used to eliminate the impact of previous brand knowledge. A dummy magazine was also used to eliminate previous biases and towards existing publications. Non-test ads of unrelated products and services were placed randomly in the magazine. To control for placement effect, the test ad was neither the first nor the last ad in the magazine. The position of the test ad remained the same for both cue variants. All articles in the magazines were unrelated to mobile handsets or telecom to prevent bias or indirect association. Both the test ads were similar in all aspects except for the replacement of image cue wit the copy cue. Each of the two test ads served as a control for the other.

<u>Measures-</u> Attitude towards the brand was measured using the three semantic differential scales developed by MacKenzie and Lutz (1989): good/bad, pleasant/unpleasant and favourable/ unfavourable. A single index Abrand (attitude towards the advertised brand) can be obtained by averaging responses to the three 7 point scales. The Mackenzie and Lutz scale is an established scale which has been extensively referenced and used in research studies relating to attitude towards the advertiser and advertised brand, with high reported reliabilities $-\alpha$ between 0.8 to 0.97 (Lohse and Rosen 2001, Mackenzie and Spreng 1992, Fang and Rosen 2000).

The closeness of association of the participant with the brand was measured using a 7 point semantic scale: very distant/ very close.

Findings

The data was analysed using univariate ANOVA and multiple comparison tests. Results indicated that the impact of each communication cue varied across the age groups studied.

H₀₁ = For mobile handset brands, there is no difference in the attitude towards brand across tweenagers, teenagers, youth, young adults and adults for an image dominant ad with little copy.

The null hypothesis H01 was rejected at 0.05 significance level [F (4, 12.975), $p \le 0.000$]. The attitude towards brand (Abr) resulting from an exposure to the image cue was not the same across all age groups. The most favourable Abr was recorded by the tweens (2.56) and the least

favourable by the teens (0.65). Though the variation across age groups was significant overall($p \le 0.000$), the size effect was moderate (partial $\eta^2 = 0.301$).

Significant variation in Abr was observed between the following age groups:

- Tweens and Teens ($p \le 0.000$)
- Tweens and Youth ($p \le 0.000$)
- Tweens and Young adults ($p \le 0.001$)
- Teens and Young adults ($p \le 0.022$)
- Teens and Adults ($p \le 0.000$)
- Youth and Adults ($p \le 0.000$)
- Young Adults and Adults ($p \le 0.010$)

Tweens seem to differ significantly from all other age groups except adults. No significant variation was found between teens and youth and between youth and young adults.

Chart 1: Abr across age groups for image ad



Estimated Marginal Means of xf Abr

Table 1: Abr: Multiple Comparison across Age groups for Image Ad

Multiple Comparisons

Dependent Variable: xf Abr

		Mean			95% Confide	ence Interval
		Difference		0:		
(I) AGE	(J) AGE	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	1.91132*	.325171	.000	1.26551	2.55714
	3	1.47768*	.318761	.000	.84460	2.11077
	4	1.18632*	.357808	.001	.47569	1.89696
	5	.32336	.343686	.349	35923	1.00595
2	1	-1.91132*	.325171	.000	-2.55714	-1.26551
	3	43364	.264903	.105	95976	.09248
	4	72500*	.310792	.022	-1.34226	10774
	5	-1.58796*	.294423	.000	-2.17271	-1.00321
3	1	-1.47768*	.318761	.000	-2.11077	84460
	2	.43364	.264903	.105	09248	.95976
	4	29136	.304079	.340	89528	.31257
	5	-1.15432*	.287327	.000	-1.72498	58366
4	1	-1.18632*	.357808	.001	-1.89696	47569
	2	.72500*	.310792	.022	.10774	1.34226
	3	.29136	.304079	.340	31257	.89528
	5	86296*	.330114	.010	-1.51860	20733
5	1	32336	.343686	.349	-1.00595	.35923
	2	1.58796*	.294423	.000	1.00321	2.17271
	3	1.15432*	.287327	.000	.58366	1.72498
	4	.86296*	.330114	.010	.20733	1.51860

Based on observed means.

* The mean difference is significant at the .05 level.

 $H_{02} =$ For mobile handset brands, there is no difference in the attitude towards brand across tweenagers, teenagers, youth, young adults and adults for a copy dominant ad with no model imagery.

The null hypothesis H_{02} was rejected at 0.05 significance level [F(4, 4.206),), p \leq 0.003]. Though variation in the attitude towards brand across age groups was significant, the size effect was

weak (partial $\eta^2 = 0.143$). The most favourable Abr (2.57) was displayed by the youth segment and the least favourable Abr (1.81) by young adults.

Significant variation in Abr was observed between the following age groups:

- Tweens and Youth ($p \le 0.027$)
- Teens and Youth ($p \le 0.003$)
- Teens and Adults ($p \le 0.029$)
- Youth and Adults ($p \le 0.001$)
- Young Adults and Adults ($p \le 0.016$)

There was no significant difference in Abr between teens and tweens. The youth with the most favourable Abr were significantly different from all other age groups except adults.







Table 2: Multiple Comparisons for Abr across age groups for the copy ad

Multiple Comparisons

Dependent Variable: xf Abr LSD

		Mean				
		Difference			95% Confidence Interval	
(I) AGE	(J) AGE	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	.16961	.255455	.508	33715	.67636
	3	54984*	.245479	.027	-1.03680	06287
	4	.20801	.247682	.403	28332	.69935
	5	35918	.250063	.154	85524	.13688
2	1	16961	.255455	.508	67636	.33715
	3	71944*	.234455	.003	-1.18454	25435
	4	.03841	.236760	.871	43126	.50807
	5	52879*	.239250	.029	-1.00340	05418
3	1	.54984*	.245479	.027	.06287	1.03680
	2	.71944*	.234455	.003	.25435	1.18454
	4	.75785*	.225961	.001	.30961	1.20610
	5	.19066	.228568	.406	26276	.64407
4	1	20801	.247682	.403	69935	.28332
	2	03841	.236760	.871	50807	.43126
	3	75785*	.225961	.001	-1.20610	30961
	5	56719*	.230932	.016	-1.02530	10909
5	1	.35918	.250063	.154	13688	.85524
	2	.52879*	.239250	.029	.05418	1.00340
	3	19066	.228568	.406	64407	.26276
	4	.56719*	.230932	.016	.10909	1.02530

Based on observed means.

*. The mean difference is significant at the .05 level.

H_{03} = For mobile handset brands, there is no difference in the closeness of association with the brand across tweenagers, teenagers, youth, young adults and adults for an image dominant ad with little copy.

The null hypothesis H₀₃ is rejected as the association of the participants with the brand varied significantly across the age groups [F(4, 5.521), p \leq 0.000]. However the size effect of this variation is weak ((partial $\eta^2 = 0.194$). Tweens associate themselves most closely with the brand while the young adults' association with the brand is the least amongst all 5 age groups studied.

Significant variation was observed between the following age groups:

- Tweens and Teens ($p \le 0.002$)
- Tweens and Young adults ($p \le 0.001$)
- Tweens and Youth ($p \le 0.000$)
- Teens and Adults ($p \le 0.013$)
- Youth and Adults ($p \le 0.012$)
- Young Adults and Adults ($p \le 0.003$)

Tweens differ significantly from all other age groups except adults in their association with the brand, which is consistent with the variance observed in Abr for the image ad. There is no significant difference between teens and adults in the extent to which they associate themselves with the brand, unlike the significance in the variation observed in Abr.

Chart 3 : Closeness of Association with the brand xfone for image ad



Estimated Marginal Means of xf close22

Table 3 : Multiple comparisons of association with brand across age groups for image

Multiple Comparisons

Dependent Variable: xf close22

LSD

		Mean				
		Difference			95% Confidence Interval	
(I) AGE	(J) AGE	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1	2	1.06*	.326	.002	.41	1.71
	3	1.05*	.320	.001	.41	1.68
	4	1.31*	.359	.000	.60	2.02
	5	.31	.345	.374	38	.99
2	1	-1.06*	.326	.002	-1.71	41
	3	01	.266	.972	54	.52
	4	.25	.312	.424	37	.87
	5	75*	.295	.013	-1.34	16
3	1	-1.05*	.320	.001	-1.68	41
	2	.01	.266	.972	52	.54
	4	.26	.305	.397	35	.86
	5	74*	.288	.012	-1.31	17
4	1	-1.31*	.359	.000	-2.02	60
	2	25	.312	.424	87	.37
	3	26	.305	.397	86	.35
	5	-1.00*	.331	.003	-1.66	34
5	1	31	.345	.374	99	.38
	2	.75*	.295	.013	.16	1.34
	3	.74*	.288	.012	.17	1.31
	4	1.00*	.331	.003	.34	1.66

Based on observed means.

*. The mean difference is significant at the .05 level.

 $H_{04} =$ For mobile handset brands, there is no difference in the closeness of association with the brand across tweenagers, teenagers, youth, young adults and adults for a copy dominated ad with no model imagery.

The null hypothesis H₀₄ is rejected as the association of the participants with the brand varied significantly across the age groups [F(4, 10.374), p \leq 0.000] with somewhat moderate effect size ((partial $\eta^2 = 0.293$). Consistent with the variance in Abr the association with the brand was highest for youth. However while Abr was lowest for young adults, the association with brand

was least for tweens. This clearly demonstrates the power of image over copy at least for children in the 10-12 age group.

Significant variation was observed between the following age groups:

- Tweens and Teens ($p \le 0.000$)
- Tweens and Young adults ($p \le 0.001$)
- Teens and Youth ($p \le 0.000$)
- Teens and Adults ($p \le 0.000$)
- Youth and Young Adults ($p \le 0.000$)
- Young Adults and Adults ($p \le 0.000$)

For youth the detailed information appears to have helped identify with the brand, more than the imagery. Even though the image was that of a young girl, it is the information on the phone features and styling that seems to have had a grater identification impact on the youth.

Chart 4 : Attitude towards the xfone brand for the copy ad



Estimated Marginal Means of xf close22

Discussion

The experiment clearly demonstrates that the copy ad led to more favourable Abr overall (2.14) and for youth in particular (2.57). Abr for the image ad for all age groups put together (1.43) and for each group separately was lower vs the copy ad except in the case of tweens . The size of variation was much less in the informative copy ad (partial $\eta^2 = 0.143$) vs the image ad (partial $\eta^2 = 0.301$). Since mobile handsets are a high involvement category, clearly the detailed information about features and benefits is important in shaping Abr. It is important to note that in both cases the size of variation is weak to moderate.

Abr remains positive for all age groups with a value > 1 for almost all. Neither of the communication cues leads to unfavourable Abr for any age group. The most favourable Abr was almost same in both cases (2.56) but for different age groups. The image ad not surprisingly had the most positive impact on tweens. This is consistent with previous research where pictures and caricatures etc have been shown to have high attraction for children.

Another factor to be kept in mind here is that the brand xfone is a new brand for which no prior knowledge or associations exist. For this reason also copy may play a more important role. It would be interesting to see if the difference between Abr for image vs copy ads remains the same for a known brand.

In both cases significant differences were observed between tweens and youth, teens and adults and between young adults and adults. Of course the differences in Abr will also depend on the type of image used and the exact content and wording of the copy used in the ad.

Limitations and Further research

Attitude towards brand is a result of multiple factors. Even if prior knowledge is eliminated the message structure and language, the font, the kind of model used, the ad treatment, attitude towards mobile handsets in general, are among the various influences at play. Every attempt was made to hold variables, other than those being tested, constant across the stimuli. The study had the advantage of experimental control but the limitation that the mindset of the respondent at the time of evaluation can only be approximated.

The study is limited to only two communication cues and is specific to one product categorymobile handsets. Further research needs to look at other cues- and variants of the same cue as well. It also needs to be researched whether the variations observed would be different for known brands vs unknown brands and if they would vary across product categories.

Managerial Implications

Image plays an important role in establishing the favourability of brand associations and can be leveraged as a communication cue in the mobile handset category. However marketers should be careful about the kind of imagery selected because the appeal of specific images may vary across the age groups. Even if the imagery used maximizes Abr only for one particular age group the response of other age groups to image dominant ads are also likely to be positive.

Marketers must also be careful not to make the mistake of assuming that age groups closer to each other will be similar in responses to the same communication cues. For instance young adults and adults vary significantly in Abr in both the cases as observed above.

For youth the detailed information appears to have helped identify with the brand, more than the imagery. Even though the image was that of a young girl, it is the information on the phone features and styling that seems to have had a grater identification impact on the youth.

The use of informative copy seems to result in less variation across the age groups perhaps because the differences in interpretation are less when the information about the brand is clearly spelled out. Marketers must ensure that for a high involvement category like mobile handsets there is sufficient information provided even if it is not the most dominant cue used in the ad creative.

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