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W.P. No. 2010-08-01
August 2010

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Acknowledgement

The authors wish to thank Sujoy Chakravarty, Devanath Tirupati and Tathagata Bandyopadhyay for providing helpful comments on this draft; and Subhash Tendle for helping develop treatment advertisements for their experiments. Furthermore, both authors have equal contribution in this research.

An Eye for an Eye: Impact of Sequelization and Comparison in Advertisements on Consumer's Perception of Brands

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Abstract

In this paper we demonstrate that the positive effects of comparative advertising are significantly diluted when a compared-to brand retaliates. Retaliation introduces sequencing in advertisements. We therefore evaluate sequelized advertisements (both comparative and noncomparative) alongside comparative advertisements and ordinary advertisements. We show that, given no threat of comparative advertising from competitors, sequelizing a popular advertisement may be as potent as comparative advertising, in terms of improving consumers' recall as well as preference for the sponsored brand. Furthermore, an advertisement message may be directed at core benefits (and/or attributes) that a brand promises, or at a stylized theme or storyline that use peripheral cues to indirectly convey the brand's deliverables. We incorporate this dimension of communication focus and conclude that while comparative advertisements are more effective with objective messages, noncomparative sequelized advertisements work better with thematic or story based messages.

1. Introduction

When Audi attempted to promote its A4 sedan with a billboard featuring a photo of the sedan alongside the tag line, “Your move, BMW”, BMW’s prompt response featured a photo of the BMW M3 saying, “Checkmate.” (Ensha 2009)

Competitive advertisements interplay under various formats in today’s markets. While some advertisements compare brands (Chevins 1975; Wilkie and Farris 1975), some others (refer opening example) are sequelized on earlier advertisements in an attempt to spoof a competitor’s claim or to retaliate to a preceding comparative claim made against it (livemint.com 2008). Wilson (1978) defines Comparative Advertising (CA) as an advertisement that makes specific or generic comparative claims about the sponsored brand and brand(s) competing with it. Sometimes CA are referenced or anchored on earlier-aired advertisements of competing brands. This essentially “sequelizes” the advertisements in the minds of consumers. The elements of sequelization (or referencing) and comparison form the crux of this advertising strategy that is referred to as Sequelized Comparative Advertising (SCA) henceforth. Some recent examples of SCA have been the aforesaid billboards war between Audi and BMW, and the CA and retaliating CA of the burger giants Burger King, Mc Donalds, etc. (Sterrett 2009).

Advertisements may also be sequelized in the noncomparative format. For example, when brand ‘Daewoo’ was launched in 1994 in Australia, the communication task was to reassert the Australian customers about the reliability of brand. The commercial featured a mnemonic called ‘Cane’, a cattle dog, losing in competition with a Daewoo car that outdid Cane in terms of being obedient to its master. An *ex post* qualitative research revealed that Cane had instantly appealed to Australians as reliable and adorable, and they associated him (and his core value of reliability) to brand Daewoo. Given the above

findings, the next set of Daewoo commercials (on models Espero, Cielo, and Nubiro, in Australia, Britain, and Italy) featured Cane and his acts of obedience, to reinforce the reliability feature of brand Daewoo (Aitchison 2002). The primary identifiable element of this category of advertisements is that it is a sequel, hence, has a forerunner advertisement. We refer to this format of advertising as Sequelized Advertising (SA) henceforth.

In this research, we conceptualize advertising format decision as a choice amongst four mutually exclusive and exhaustive alternatives that are broadly categorized as (i) comparative and non-comparative advertising strategies and further subcategorized as (ii) sequelized and non-sequelized advertisements. Note that the concept of format choice will be treated as a choice amongst these alternatives.

An important dimension in the assessment of CA as an effective strategy is that of retaliatory action from an attacked (or compared-to) brand. Sequelization, as discussed earlier, may result from a compared-to brand's attempt to retaliate a previous CA move made against it (Barry and Tremblay 1975). The phenomenon of CA-counter-CA warfare, wherein market players engage in an explicit and often prolonged repartee of claims and counter-claims about self as well as competing brands, is a critical focus of this research. Germane to our context, strategy literature suggests that competitive attacks that are directed to the central core of a brand and are visible to the consumer will elicit competitive reactions (Chen and Miller 1994). Empirical evidence, such as our illustrations above, supports the importance of retaliation as a strategy. Therefore, our formal inquiry in studying the effect of retaliation to comparative advertisements is purported to fill an important gap in the marketing literature. We assess the of impact of

retaliation to CA thus providing normative strategic insights from the perspective of attacked or compared-to brands; an aspect hitherto missing in the literature.

Aligned to the means-end theory of consumer psychology (Gutman 1982), competitive advertising attacks on a brand may be directed at the core benefits (and/or attributes) that the brand promises, or at a stylized theme or storyline that use peripheral cues to indirectly convey the target brand's deliverables. To illustrate this difference let us cite two examples: (i) an advertisement that features the fluoride content in a toothpaste brand that promises prevention of tooth decay, and (ii) an advertisement that may feature the user of a particular toothpaste brand being at the centre of attraction at social gatherings among friends. The effectiveness of CA is moderated by the focus of portrayed message (Chakravarti and Xie 2006; Pechmann and Ratneshwar 1991). Hence, in order to make a comprehensive evaluation of the sensitivity of alternative advertising formats on consumers' perception, we study how advertising format and focus choices interact in the context of comparative and sequelized advertisements to affect a brand's evaluation by consumers.

The rest of the paper is organized as follows: in §2 we provide an overview of the relevant literature and subsequently motivate our research context, concepts and hypotheses; in §3 we briefly describe the research methodology; followed by a discussion of our results and analyses in §4. Finally, we conclude in §5 and provide managerial implications of our findings and directions for future research.

2. Literature, Research Overview and Hypotheses

2.1 Literature

A considerable volume of marketing literature on advertising investigates the efficacy of CA vis-à-vis the more traditional non-CA formats. It is established that although CA

evokes more counter-argumentation, questioning of source credibility and lower claim acceptance among customers, it improves brand and message recall as well as purchase intention in favour of the challenger brand (Prasad 1976; Demirdjian 1983; Gorn and Wienberg 1984; Grewal, et al. 1997). Adding further support to the above are studies focusing on practitioners' perspectives of CA, which argue that marketers regard CA as a highly potent yet legally and competitively risky strategy (Hisrich 1983; Rogers and Williams 1989).

The effectiveness of CA is moderated by the intensity of the comparative claim(s) posed in an advertisement. While Chakravarti and Xie (2006) and Miniard et al. (2006) argue that the effectiveness of CA improves with explicitness and substantiability of a comparative claim, Donthu (1992) and Jain and Posavac (2004) infer that the increase is not monotonic: an extremely intense comparison may hurt the sponsored brand. Due to referencing and comparison of specific product attributes (or benefits) to a competing brand, CA, especially SCA, may demonstrate a high intensity of comparison. In the context of our research, it is important therefore, that we control for the intensity of comparison at a moderate level.

Discussing the aspect of firms' relative market positions in CA analyses, Droge and Darmon (1987), and Pechmann and Stewart (1990) argue that in cases where brands are asymmetric, (e.g., they are unequal in terms of market shares held, perceived quality of products, etc.) a CA war would affect them differently than in cases where the competition among brands are largely symmetric. In this research our attempt is to isolate the effect of sequelization and comparison in advertising strategies. Therefore, we design our experiment by maintaining the assumption of symmetry among competing brands.

Finally, although marketing literature in the context of sequelized advertising is relatively sparse, some inferences with respect to campaign advertisements and motion picture sequels are of relevance. Jin (2003) infers that consumer's recall of an advertisement campaign is better when the campaign is preceded by a publicity event dedicated to it. The rationale for this follows the encoding variability hypothesis (Melton 1970), which states that an event (or word) is encoded in an individual's memory based on the cognitive context which they relate it to. Unnava and Burnkrant (1991) argue that the context in which a piece of information is stored forms part of the memory trace for that information. Hence, various contexts when related to that information increases the retrieval tracks for the same, thus increasing its chance of recall. Few research studies on sequels with respect to films and motion pictures are also available. A finding reported with respect to *film-sequels* (films run as follow-ups to previously aired films) is that - with sequels, the risk of going unnoticed is significantly lower than those vis-à-vis non-sequel films (Sawhney and Eliashberg 1996; Ravid 1999; Basuroy, Desai, and Talukdar 2006). Further, empirical evidence suggest that only those films that have been received well by the target audience are followed up with sequels; it is like working with a successful formula: "once it is found it may work again" (Ravid 1999, 480).

2.2. Overview of Research Concepts: Advertisement Format and Message Focus

We now provide the basic operational definitions of advertising formats. Given our research interest in investigating competition amongst brands via advertisement formats, we categorize formats under the dimensions of comparative and sequelized advertising strategies. Hence, we have four advertisement formats, namely, Comparative Advertisements (CA), Sequelized Advertisements (SA), Sequelized Comparative Advertisements (SCA), and Other Advertisements (OA), under assessment in this

research. Having defined CA in section 1, we now provide formal definitions of SCA, SA, and OA, based on the observable characteristics of the concepts.

A Sequel Comparative Advertisement is an advertisement that makes a comparative claim with reference to a prominent claim, activity or an identifiable element from the theme of at least one of the earlier-aired advertisements of a competing brand.

A Sequelized Advertisement is one which refers to and/or extends the whole or an identifiable element of the theme or storyline featured in an earlier run advertisement.

Advertisements that are neither comparative nor sequelized are referred to as Other Advertisements (OA), in this research.

As discussed earlier, marketing literature suggests that assessing advertisement format options would be sensitive to the degree of specificity (or objectivity) in the message. CA and SCA may vary in this aspect. CA may either be objective or subjective as this format compares competing brands; SCA, on the other hand, not only compares the brands but also anchors itself with elements of the competing brand's advertisement. As a result, we may expect a lower level of objectivity in SCA (or SA). We therefore also examine the effectiveness of advertisement formats separately for messages that (i) directly portray brand attributes or benefits and (ii) use thematic, story-based, or peripheral cues to indirectly convey the brand's message. Interaction effects, if any, amongst the dimensions of format and focus in advertising, will have significant implications at the execution forefront of competitive advertising.

2.3. The Dependent Variable

In this research we assess the differential impact (if any) of different advertisement formats on consumer behaviour. Narayana and Markin (1975), Silk and Urban (1978), and Nedungadi (1990), recommend the assessment of brand recall and attitude towards the product category and brand, as critical in determining a brand's impact on consumers. They argue that choice is limited to a small number of brands. The measurement of perception and preference for brands can be distorted by including alternatives that are irrelevant to a consumer's choice algorithm. Therefore, an exercise of evaluating the potential of a brand can be addressed by assessing consumers' evaluations of that, and competing brands, in their choice sets (Howard and Sheth 1969). The set of alternatives relevant to a consumer's purchase process is reflected in the set of brands that they report in an unaided recall exercise (Silk and Urban 1978). This set, referred to as the relevant set in marketing literature, represents those brands that a consumer is familiar with, and hence has access to, when considering purchase. It consists of brands that are considered, brands that are not considered (Narayana and Markin 1975).

Let us denote the unaided recall for brand 'i' by consumer 'x' by $UR_x(i)$,
 $UR_x(i) = 1$ if consumer x recalls brand i
 $= 0$ otherwise;

Advertising influences brand accessibility during the retrieval process, thus affecting the probability that a brand is included in the relevant set of alternatives (Nedungadi 1990; Mitra and Lynch 1995). Furthermore, any intervention like advertising, word of mouth, purchase and consumption experiences, etc., with respect to each brand, primes consumers' preferences (attitude and purchase intentions) towards brands. The ensuing set of positively evaluated alternatives that a consumer considers when purchasing a unit of that product class, forms a consumer's *evoked set* (ES) (Howard and Sheth 1969;

Narayana and Markin 1975). Having defined the ES, consumers choose the most positively evaluated of all brands contained in that set. Clearly, any positive effect on preference for a brand that is already in a consumer's relevant set will heighten the probability of that brand being chosen (or purchased) by that consumer. We incorporate this by conceptualizing specific weights for brands contained in a consumer's ES. A brand with a higher preference would have higher incidence in consumers' ES.

Several scales have been recommended to measure the attitude and purchase intention towards a brand. However, Spears and Singh (2004) proposed a composite and unidimensional scale for simultaneous measurement of the two constructs (appendix 1). The resultant scores for the individual constructs can thus be summated (Anderson, Gerbing, and Hunter 1987). Let $Pref_x(i)$ denote a composite preference score of brand i for each consumer x . In order to be deemed as suitable for the current research, we tested this scale for reliability using 105 usable responses, from the population chosen for this research. An exploratory factor analysis using the principal components analysis revealed a single factor loading. We followed this up with a confirmatory factor analysis to test Spears and Singh's second order factor structure. Following recommendations of Hu and Bentler (1999), and Hoyle and Panter (1995), we inferred a good fit [$\chi^2(34, N = 105) = 49.75, p = 0.040, TLI = 0.978, CFI = 0.983$]. A high Cronbach's alpha score of 0.953 ensured the reliability of this scale (Gerbing and Anderson 1988).

Finally, an assessment of the incidence of a brand in consumers' ES can be made from consumers' reported recall and preference scores (Silk and Urban 1978). Let $P_x(i)$ denote the incidence of a brand (i) in ES for consumer x , given k brands that consumer was

exposed to. Hence, using Silk and Urban's (1978) specification of the performance model, we have:

$$P_x(i) = \frac{[UR_x(i) * Pref_x(i)]}{\sum_{k=1}^m [UR_x(k) * Pref_x(k)]}$$

2.4. Research Hypotheses

Existing research suggests that although CA is associated with less source believability (Prasad 1976, Jain 1993), it generates more attention than noncomparative advertisements. Further, such advertisements are more effective in increasing awareness for the advertised message as well as the sponsored and compared-to brand names. This in turn improves attitude and purchase intention for the sponsored brand (Grewal et al. 1997). Research on sequels with respect to the motion picture industry, highlight a few interesting findings with respect to film sequels. The risk of going unnoticed is significantly lower with sequels (Sawhney and Eliashberg 1996; Ravid 1999; Basuroy, et al. 2006). This is especially true for a case with a prequel that consumers have a high recall of; a proposition agreed upon by advertising practitioners (Shah 2008).

Unnava and Brunkrant (1991) argue on grounds of the encoding variability hypothesis (Melton 1970) that varied executions of an advertisement result in higher recall for a brand, as compared to repeated execution of the same ad message. The authors argue that this outcome results due to the creation of additional routes, for that brand, to consumer's memory, thus resulting in improved recall in the former case. Jin (2003) argues that the effectiveness of an advertisement campaign improves significantly if it is announced before launch to target consumers. Sequelization (comparative or noncomparative) portrays a varied execution of an ad message even though there is a thematic connection between the ads.

What is the difference between an ad with a new concept and a sequelized ad, when viewed from the consumer's end? The difference is that there is an the additional thematic connection (by this we do not mean the brand name(s)) that exists between a sequel and its original ad. At the consumer's end that is flooded with innumerable ads from innumerable brands, figuring out a sequence demands additional personal involvement - "the number of conscious "bridging experiences," connections, or personal references per minute that the viewer makes between his own life and the stimulus" (Krugman 1965, 355). Greenwald and Leavitt (1984) and Celsi and Olson (1988) investigate the effect of high versus low involvement of consumers on their attention towards the subject of concern. They argue that consumers who experience greater involvement in an information processing situation dedicate greater cognitive resources and attention than do consumers who experience less involvement. Furthermore, Cialdini, Petty, and Cacioppo (1981) argue that consumers, when highly involved in an information assimilation process, are more likely to exhibit sustained positive attitude and behaviour towards the concerned brand (Krugman 1965), especially when the message does not trigger counterargumentative behaviour from the consumers. Hence, consolidating the logic in the arguments listed above and assuming that the prequel is a popular advertisement or activity (one that consumers are already familiar with) we construct the following hypotheses.

H1a: As compared to non-sequelized advertisements, sequelized advertisements, when referenced on a popular advertisement, would generate easier recall for the sponsored brand.

H1b: As compared to non-sequelized advertisements, sequelized advertisements (comparative or noncomparative), when referenced on a popular advertisement, would result in a higher incidence of the sponsored brand in consumers' evoked set.

H1c: A brand's incidence in consumers' ES would increase under sequelized comparative advertisements, than under non-sequelized and noncomparative advertising.

Incorporating the aspect of advertisement focus, Hisrich (1983) argues that comparative advertisement messages that highlight specific attributes or benefits of compared-to brands are more informative to consumers. Such claims, by virtue of their being more substantiable, are more credible and hence more persuasive on consumers (Chakravarti and Xie 2006; Pechmann and Ratneshwar 1991). A sequel on the other hand, is a similar extension of a successful prequel (Basuroy, et al. 2006), or more generally of an existing theme or concept. Thus, it may be expected that sequelized advertisements would perform better in a thematic or story-based advertisement message. We therefore propose the following set of hypotheses:

H2a: A brand's incidence in consumers' ES would be higher with a comparative advertisement featuring the core attributes or benefits of the sponsored brand, as opposed to when the advertisement is based on a storyline or theme.

H2b: A brand's incidence in consumers' ES would be higher when it chooses a sequelized advertisement that is based on a popular storyline or theme, as opposed to when it features the core attributes or benefits of the sponsored brand.

H2c: A brand's incidence in consumers' ES would be higher when it chooses a sequelized comparative advertisement that is based on a popular storyline or theme, as opposed to when it features the core attributes or benefits of the challenger brand.

SCA is a variant of CA. It is also, by definition, based on a pre-existing theme or storyline that is focused on the core element of the corresponding prequel. However, as argued in Grewal et al. (1997), due its inherent attribute of comparing brands it generates counterargumentative attitude amongst consumers. This in turn may generate negative attitude amongst consumers and supercede the positive effects of high involvement caused due to sequelization (Cialdini, Petty, and Cacioppo 1981; Krugman 1965). We therefore propose the following hypothesis.

H3: A brand's incidence in consumers' ES would be higher when it chooses an attribute or benefit featuring comparative advertisement, as opposed to when it chooses a sequelized comparative advertisement, assuming that the challenger brand does not retaliate in both cases.

Chen and Miller (1994) argue that a competitive attack would be retaliated by a competing brand, based on the centrality and visibility of the move made by the first brand. Hence, a CA (or SCA) message when directed at a competing brand and focused on core features of that brand, will generate retaliation from the compared-to brand (Barry and Tremblay 1975). Anderson (1971) provides empirical evidence that people assess information from various sources based on their respective source credibility. Birnbaum and Stegner (1979) further argue that source credibility is decomposable into perceived expertise and biases (if any) attributable to the source of information, and the assessor's own point of view. Hence, if the competing brands in question are assumed similar to

each other in terms of market shares held and product quality as perceived by consumers, it may be expected that any retaliation to CA from the compared-to brand will dilute the positive effects of the prior CA (Levine 1976, and Sonner 1998). Finally, Pettit-O'Malley and Johnson (1992) demonstrate an attitudinal decline for the comparison brand (in case of no retaliation to a comparative ad move) and argue that it is as good as a favorable attitudinal shift for the sponsor brand. Therefore, we propose our next set of hypotheses about the impact of comparative advertising on the sponsor and compared-to brands.

H4a: If we compare two situations: 1) brand i chooses comparative advertisement and the compared-to brand j does not retaliate, and 2) brand i chooses comparative advertisement and the compared-to brand j does retaliate, brand i 's incidence in consumers' ES would be higher in a situation 1 than in situation 2.

H4b: If we compare two situations: 1) brand i chooses sequelized comparative advertisement and the compared-to brand j does not retaliate, and 2) brand i chooses sequelized comparative advertisement and the compared-to brand j does retaliate, brand i 's incidence in consumers' ES would be higher in a situation 1 than in situation 2.

H5: A brand's incidence in consumers' ES would be lower if it does not retaliate to a comparative advertisement from a competing brand that has claimed its superiority over it.

3. Method

3.1. Design of Experiment

Experiments, as opposed to field experiments and company data, provide for higher precision in terms of "control" and "measurement" in the variables of interest (Smith

1982). Bartels (1993) further argues that self-reports with respect to reactions to media exposure may yield biased responses from participants, in their sub-conscious attempts toward providing socially desirable responses. We ran two experiments, with tournament based incentive structure (where respondents compete amongst themselves for rewards), to collect data for this research. As per arguments made in Falk and Fehr (2003) and Van Dijk, Sonnemans, and Winden (2001), a tournament based incentive structure is best suited to ensure appropriate administration of treatment on participants. In addition to encouraging participation in the experiment, this method disguises the real purpose of the exercise from participants, thus helping evasion of unwanted psychological effects of respondents (Aronson, et al. 1990). Furthermore, performance based rewards demand real efforts from respondents, thus reducing the incidence of random responses. The tournament also incorporated a high scoring manipulation check exercise, thus abiding by Smith's condition of saliency that requires rewards to be "*associated indirectly with the message action of subjects*" (Smith 1982, 931).

Announcements for the tournament - its expected duration and the associated prize money, were made before the actual experiment dates. Participation was kept voluntary. Furthermore, participants reported the tournament as interesting at the end of the process. This set of features ensured that the process satisfied the condition that incentives provided for participation were not more than respondents' perceived costs of the same (Smith 1982).

Finally, in order to control for external validity of the inferences, we ran rounds of experiments amongst different populations of students. We identified student populations across two different cities, and there was representation from both genders. Considering a possibility of differential effect of treatments due to social-economic variables, (e.g.,

gender or location), we tested the data-set for such effects. There is no significant difference in effect due to such variables (details of analyses are available with the authors).

We designed two experiments to cater to the two-pronged focus of this research. The first experiment, with the purpose of studying the impact of advertising format and focus on consumer's recall and preference for brands, has a 4×2 factorial design. While the first factor, advertisement format (F), was administered at four levels: OA, SA, CA, and SCA, the second factor, Advertisement Focus (AF), was administered at two levels: advertisements where the message is focused on product attribute or benefit (ABF) and storyline or imagery focused advertisements (STF). In the second experiment we employed a 2×2×2 factorial design with the primary objective of studying the impact of retaliation to comparative advertisements on the effectiveness of CA, operationalized as before. The factor retaliation was administered at two levels: the compared-to brand either did or did not retaliate to the first brand's CA or SCA, which is the second factor (type of CA). The third factor in this advertisement was advertisement focus (ABF and STF).

There being 8 treatment cells in each experiment, we employed a between subjects design in order to minimize participants' fatigue to repetitive exposure to treatments. Multiple rounds were administered and respondents were randomly assigned to one of the 16 aforesaid treatment cells.

3.2. Respondents and Test product

A total of 615 graduate and undergraduate students of non-business streams, from universities in two cities, participated in the experiments. We assigned fictitious brands as

test brands in order to overrule effects of brand loyalty and “any possible confounding effects due to prior familiarity or affect of subjects” towards the brands (Belch 1981).

Gresham, Bush, and Davis (1984) and Vakratsas and Ambler (1999) argue that moderate to low involvement products are relatively more homogeneous (hence, more suitable for experiments of this kind). Furthermore, impact of exposure to advertisements for such goods is more on consumers, especially when a new brand is being evaluated. Hence, in order to choose a test product relevant to the selected respondent population, we administered a questionnaire (appendix 2a) on 72 respondents from a similar population as that of the experimental sample. The basic purpose of this questionnaire was to extract information on i) frequently purchased products toward which respondents exhibited medium to low purchase decision involvement and ii) respondents’ most preferred attributes and benefits for products mentioned in (i). We used Mittal’s Purchase Decision Involvement (PDI) scale to measure “the extent of interest and concern that a consumer brings to bear upon a purchase decision task” (Mittal 1989, 150). Toilet soap emerged as the product reported as most frequently purchased, followed by shampoo and toothpaste, in the set of 52 frequently purchased products revealed by the respondents. We chose toothpaste as the test product due to commonality of most preferred attributes and less heterogeneity across current brands, vis-à-vis the other two categories. A second set of students from the same population was used for choosing names for the test brands. The choice of brand names was based on how well the names were liked and considered suitable as toothpaste brand names, from amongst a set of ten names and brand attributes simulated from the preceding exercise (appendix 2b).

3.3. Stimulus Advertisements and Procedure

Treatment advertisements designed for this research were designed as full-page coloured print advertisements, with similar layouts. The designs were created as similar in terms of i) voice or tone of comparative claims made, and ii) how competition is addressed, if it is a comparative advertisement. The intensity of CA (Donthu 1992) was maintained at a score of 3 in attribute or benefit based CA (SCA) and 2 in non-attribute based thematic CA (SCA); the ads were direct in addressing competition and negative in comparing brands.

While the factor F is clearly orthogonal, orthogonality amongst levels of factor AF was controlled for in the advertisement designs. An ABF advertisement was designed such that there was no story or unrelated imagery backing direct claims on attributes and benefits of the product. STF advertisements were designed with a story or theme concluding with a benefit based claim. These advertisements were then tested amongst members from the population chosen for the experiment.

Treatments were embedded in a tournament to be played by respondents. The primary challenge that was faced in this was that it was necessary to ensure that interaction effect of these two sets, on respondents' conditioning levels (reflected in their responses), was factored in while analyzing the data. A comprehension skill test was designed as the aforesaid tournament. It was designed as a two-phase test of participants' ability to comprehend print advertisements that were shown to them during the test. In order to ensure that manipulations were unobtrusive and to avoid any recency effect of exposure to advertisements, when measuring recall, the test advertisements were embedded alongside other contemporary advertisements, used as distracting fillers. Treatment

advertisements were professionally guided in design, such that they were not distinguishable from contemporary advertisements.

The game rounds were run in batches, such that each respondent was randomly assigned to one of the treatment conditions. This step ensured reduction of experimenter bias, if any (Aronson et al. 1990). The game apparatus consisted of a 15 page display folio, and a set of questionnaires to be distributed in phases. Each folio was divided into two sections, to be viewed by respondents in two separate rounds of the game. It was ensured that respondents scanned the first section only in the first round; however, no such barrier was maintained in the second round of the test. While the purpose of the first round was to introduce respondents to the test brands and acquaint them with the respective brand offers and promises, the second round was the treatment administration round. However, participants were kept unaware of the purpose of both rounds. All advertisements shown in the first round were of the OA format. At the end of this round, participants were asked to answer five dummy questions. Treatment advertisements, one for each test brand, were embedded amongst 8 dummy advertisements in the second round. After participants had scanned the advertisements, two sets of questionnaires were distributed sequentially to them. While the question to assess brand recall was contained alongside dummy questions in the first part of the second round questionnaires, the second part was designed as a manipulation check (i.e., whether or not a respondent had perceived a CA as CA, recognized a retaliation, if any, and so on). Finally, after the game was announced as completed respondents were requested to record their preference scores for the two test brands, which we mentioned were under consideration for being introduced in the market. This task was announced as voluntary and that any respondent's performance in the game was not contingent on it. Finally, respondents were debriefed, thanked, and dismissed.

One complete experimental round lasted 25 minutes. Rewards were distributed on a later date.

In order to avoid respondents' fatigue from recording preference scores for each of the 12 brands shown to them, they were requested to record their preferences only for the two test brands. Clearly, if a participant recalled few other brands it implied a small relevant set, and as a result, a strong consideration for purchasing any recalled brand. Hence, the recall score for any test brand should incorporate information on how many of the other brands were recalled by a respondent. Given the tournament based nature of our experiment, it is possible that this score is contingent on a respondent's ability to memorize. As was mentioned earlier, we are required to discount for the interaction between tournament effect and treatment effect, while analyzing the data. Therefore, we modified recall score for other brands (RO) is modified to account for the tournament effect and minimize the aforesaid bias. A participant's performance in the tournament is included as the denominator so as to incorporate a proxy to their capacity to memorize. Hence, respondent x 's recall score for other brands is denoted by:

$$RO_x = \frac{\text{Number of other brands recalled by subject}}{\frac{\text{(Score obtained by subject in tournament)}}{\text{(Total score attainable in tournament)}}}$$

Hence, the recall score used for analysis was: $R_x(i) = \frac{UR_x(i)}{RO_x}$

The final structure of the construct, representing the incidence of brand i in the ES of consumer x (also referred to as the weighted preference score), is therefore given by:

$$ES_x(i) = P_x(i) * R_x(i) \quad \text{-----}$$

--- (A)

4. Results and Discussion

4.1. Method of Analysis

The exercise of embedding the manipulation check task in the main design ensures that we know whether or not a respondent is treated with an intended condition. However, the disadvantage of this is that at the end of the exercise we are left with an unbalanced design. 278 and 308 respondents passed the manipulation check exercise for experiments 1 and 2, respectively. We used the SAS software, version 9.1, for analyzing the data. We employed a General Linear Model procedure (PROC GLM) and referred to the Type III Sum of Squares (SS) for analysis and interpretation (Iacobucci 2001). This is because the Type III SS is an SS for a balanced test of each effect, adjusted for every other effect, that is, the relevant function that it tests is independent of the number of observations per treatment cell. We employed one-way ANOVA to test the impact of advertisement format on a brand's recall and preference and two-way ANOVA to test respondents' reactions to advertisement focus and format. For analyzing data from experiment 2, we used a three-way ANOVA: Format \times Retaliation \times Focus. Table 1 represents treatment-wise cell sizes and means.

We followed up the analyses with the hypothesized pairwise comparisons using Bonferroni's test. This is an extension of t-test, such that it makes one-sided comparisons, calculating the *per comparison error rate* at $\alpha / {}^k C_2 = \alpha / \left(\frac{1}{2} k(k-1) \right)$, where α is the confidence level for the test and k is the number of treatment effects to be compared. Hsu (1996) and Rafter, Abell, and Braselton (2002) recommend Bonferroni's test for multiple comparisons with smaller number of preplanned pairwise comparisons. It is a conservative procedure, as it maintains the per-family error rate at a level of significance less than or equal to the chosen level.

Table 1. Summary statistics for Treatment Groups in Experiments 1 and 2

Experiment 1		ABF			STF		
Brand 1	Brand 2	Mean	Std. Dev.	No. of obs.	Mean	Std. Dev.	No. of obs.
OA	OA	49.02	40.15	29	50.14	35.51	24
SA	OA	79.25	23.85	25	203.27	66.15	25
CA	OA	342.18	102.38	41	128.72	75.49	39
SCA	OA	154.42	71.25	47	164.09	75.3	48

Experiment 2		ABF			STF		
Brand 1	Brand 2	Mean	Std. Dev.	No. of obs.	Mean	Std. Dev.	No. of obs.
CA	Retaliates	70.73	16.89	30	70.27	21.98	34
	Does not Retaliate	342.18	102.38	41	128.72	75.49	39
SCA	Retaliates	73.14	36.185	33	74.41	38.32	35
	Does not Retaliate	154.42	71.25	47	164.09	75.3	48

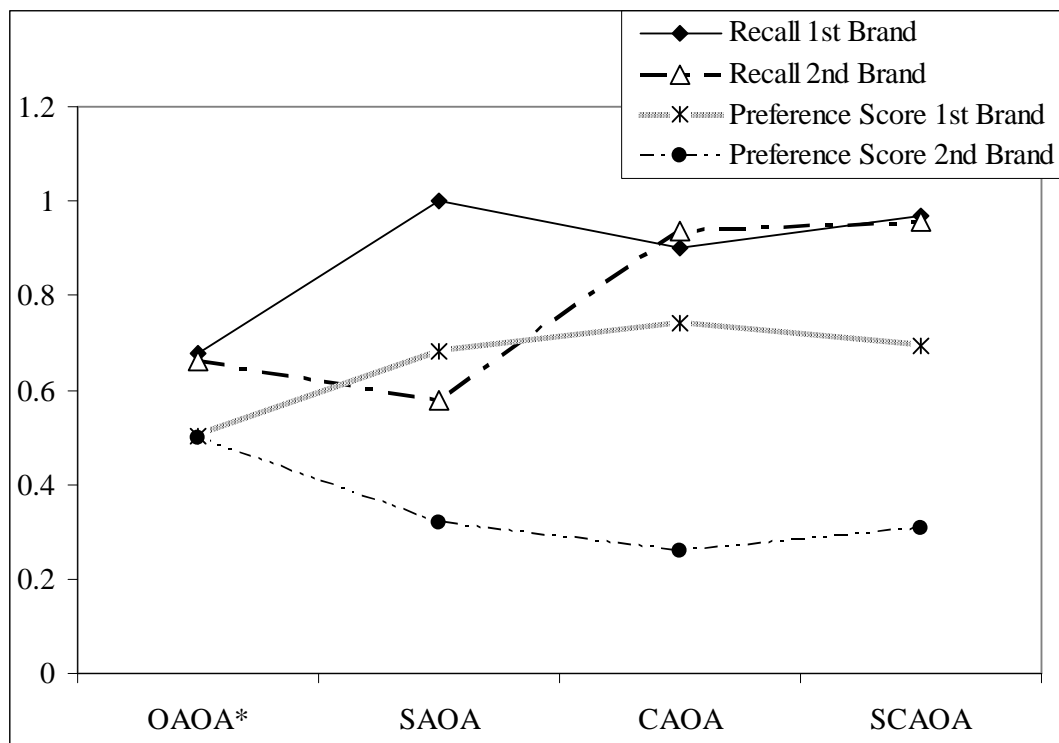
4.2. Analysis and Interpretation

1) One-way ANOVA of advertisement format on preference scores showed that advertisement format has a significant impact on the scores [$F(3,278)=21.82$; $p<.01$]. The effect on weighted preference score for Brand 2 and recall scores for both brands were also significant [$P_x(2)$: $F(3,278)=33.95$, $p<.01$; $R_x(1)$: $F(3,278)=14.88$, $p<.01$; $R_x(2)$: $F(3,278)=19.97$, $p<.01$]. Follow-up contrasts employing Bonferroni's multiple comparisons (figure 1 and table 2) showed a positive and significant impact of sequelization ($p<.05$), on an advertisement's ability to influence recall for the sponsor brand. Hence, hypothesis 1a was supported. However, considering hypothesis 1b, impact of sequelization was found as marginally significant ($p<.10$) in positively influencing preference for a brand.

The impact of SCA, though significant on the recall scores of both test brands, was not significant on the weighted preference score of the sponsor brand. However, the impact was significant ($p<.05$) and negative on the weighted preference score of the non-

retaliating compared-to brand. However, repeating this test with the measure $P_x(i)$ provides support ($p < .01$) for hypothesis 1c. Further, conforming to inferences found in existing literature on CA, we find evidence that CA (sequelized or otherwise), when left unretaliated, has a positive impact on the weighted preference score of the sponsor brand ($p < .05$) and recall scores of both challenger and compared-to brands ($p < .10$).

Figure 1: Profile Plots showing Impact of Ad Formats on Recall and weighted Preference Scores



*1st brand plays OA and 2nd brand plays OA; other notations have similar interpretation

Finally, pairwise comparisons involving different advertising formats revealed that sequelized advertisements perform as well as comparative advertisements in terms of effect on recall and preference scores of competing brands. However, unlike in SA, with CA the sponsor brand shares media-space with the compared-to brand, resulting in a significant increase in the latter's recall score. This, to the best of the authors' knowledge,

is a field left unventured in literature thus far. Subsequent exercises in this direction (discussed below), with advertising focus brought into perspective, revealed some more practical implications of this finding.

Table 2: Impact of Format: Bonferroni's Multiple Comparisons Procedure

<i>Comparisons</i>		Brand 1	Brand 2
Recall Scores (Rx(i))	SAOA-OAOA*	5.98 (H1a)	-1.21
	CAOA-OAOA	4.58	4.63
	SCAOA-OAOA	6.2 (H1c)	5.13
	SAOA-CAOA	2.04	-5.86
Weighted Preferences (ESx(i))	SAOA-OAOA	4.24 (H1a)	-5.86
	CAOA-OAOA	7.2	-7.72
	SCAOA-OAOA	3.73 (H1c)	-7.82
	CAOA-SAOA	2.44	-1.17
	SCAOA-CAOA	4.2	-0.17
Probability of Purchase (amongst 2 test brands)	SAOA-OAOA	7.73 (H1a)	-7.7
	CAOA-OAOA	11.39	-11.4
	SCAOA-OAOA	9.5 (H1c)	-9.5

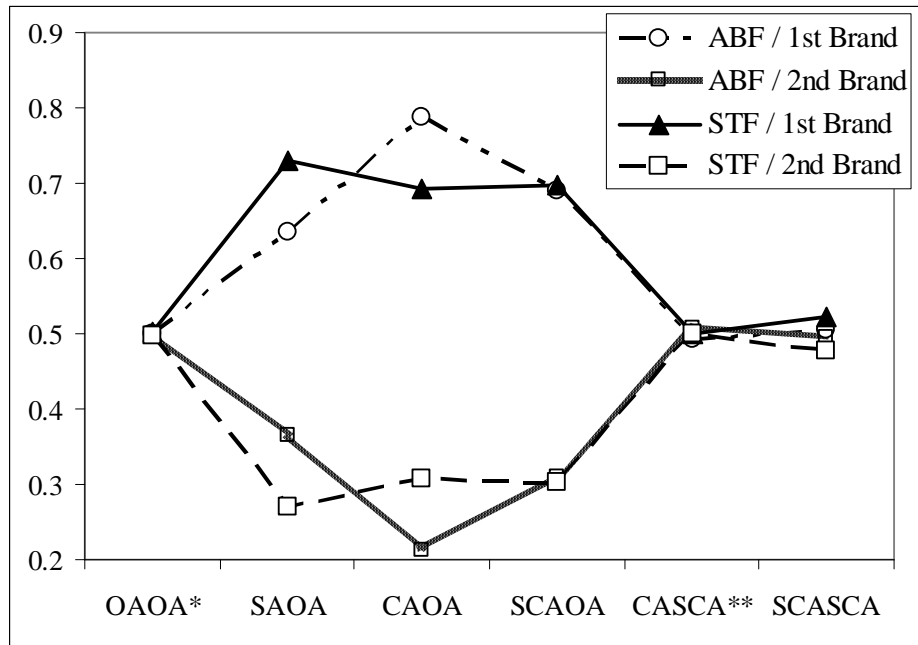
t (critical value with Bonferroni adjustments): 1% = 8.58; 5% = 4.857; 10% = 3.74

*A comparison 'SAOA-OAOA' is to be read as comparison between two situations, namely – (i) 1st brand plays SA and 2nd brand plays OA and (ii) both brands play OA. Other notations have similar interpretation.

2) In our next exercise with the set of hypotheses 2a to 2c and 3, we examine the interaction effects of advertising format and focus on the aforesaid dependent variables of interest. We employ two-way ANOVA to interpret the impact, assuming that the second test brand employs OA. The overall model is significant [$F(7,278) = 45.53, p < .01$]. In addition to advertising format, the interaction effect of advertisement format and focus is significant [$F(3,278) = 66.42; p < .01$]. However, the impact of focus alone is not

significant. Figure 6 represents the effects of advertising focus and format on the weighted preference scores of test brands.

Figure 2: Profile Plot showing impact of Focus, Format, and Retaliation on Preferences



*1st brand plays OA and 2nd brand plays OA; **1st brand plays CA and 2nd brand retaliates; other notations have similar interpretation

Follow-up contrasts, using Bonferroni comparisons (table 3) confirm hypotheses 2a and 2b. Thus, as opposed to sequelized comparisons, nonsequelized comparisons have a stronger impact ($p < .01$) on the sponsored brand's weighted preference scores, when an advertisement highlights the compared features of the product. Further, as opposed to OA, SA has a stronger impact ($p < .01$) on the sponsored brand's incidence in consumers' ES, if the advertisement is designed with a thematic focus.

However, contrary to expectations in hypothesis 2c, the impact of SCA demonstrates independence from the focus of the advertisement (table 3). An explanation for this

behavior of SCA is that such advertisements contain features of both CA and SA. The element of sequelization with respect to one of the past advertisements of the compared-to brand increases the intensity of comparison evident in such advertisements. As is evident in CA literature, Donthu (1992), Grewal et al. (1997), high intensity comparisons amongst brands, captures more attention of respondents, which can in turn lead to low impact of other aspects (e.g., focus) of the concerned advertisement; hence, this finding. Finally, hypothesis 3 is supported at the 1% level: CA has a higher impact than SCA on sponsor brand's weighted preference score.

Table 3: Focus × Format: Bonferroni's Multiple Comparisons Procedure

<i>Comparisons</i>	Weighted Preference Score of Brand 1
CAOA ABF - CAOAs STF*	7.87 (H2a)
SAOAs STF - SAOAs ABF	5.88 (H2b)
SCAOAs ABF - SCAOAs STF	0.03 (H2c)
SAOAs STF - CAOAs STF	5.05
CAOAs ABF - SAOAs ABF	8.39
CAOAs ABF - SCAOAs ABF	6.98 (H3)
SCAOAs STF - CAOAs STF	1.22 (H3)

t (critical value with Bonferroni adjustments): 1% = 5.73; 5% = 4.299; 10% = 3.75

*Comparison 'CAOA|ABF-CAOAs|STF' implies a comparison between two situations, namely – (i) 1st brand plays CA and 2nd brand plays OA, such that in the 1st case both advertisements are attribute and benefit focused (ABF), while in the 2nd case both advertisements are thematic (STF). Other notations have similar interpretation.

3) In our final exercise with hypotheses 4a, 4b, and 5, we employ a three-way ANOVA (2×2×2) to test respondent's reactions to type of CA (sequelized or nonsequelized), given different reactionary states of the compared-to brand (retaliation versus non-retaliation),

and two levels of advertisement focus. The model is significant [$F(3,308)=52.84, p<.01$]. All three factors as well as their interaction effect emerge as statistically significant (table 5), and subsequent Bonferroni tests (figure 2 and table 5) showed support for hypotheses 4a, 4b, and 5. However, as is evident in table 5, the impact of retaliation to SCA for an attribute or benefit focused advertisement is marginally significant ($p<.10$). However, the impact of retaliation is significant and negative ($p<.01$) on the compared-to brand (H5 supported).

Extending Bonferroni's pairwise comparisons to involve the interaction effects of retaliation and advertisement focus reveal that although the impact of CA without retaliation is significantly different for different foci of advertisements, the effect of focus is lost with retaliation (figure 2). This observation strengthens the argument made earlier about the failure to validate hypothesis 2c. A retaliatory advertisement to a CA, in any form, results in the former being a sequelized CA, hence strengthening our argument that the effectiveness of SCA is not moderated by the focus of the concerned advertisement.

Table 4: 3-way ANOVA on effects of CA, Retaliation, and Advertisement Focus

<i>Retaliation versus No Retaliation</i>	DF	F Value	Pr > F
CA (CA=1 if nonsequelized, CA=2 if sequelized)	1	17.6	<.01
Retaliation (R = 0 if no retaliation, R=1 if retaliation)	1	155.36	<.01
Advertisement Focus	1	40.2	<.01
CA X R	1	21.5	<.01
R X AF	1	40.37	<.01
CA X AF	1	36.17	<.01
CA X R X AF	1	43.55	<.01

Table 5: Bonferroni's test for Pairwise Comparison of Means: CA × Retaliation × AF

<i>Comparisons</i>		Brand 1	Brand 2
Impact of Retaliation X Ad Focus	(CAOA - CASCA) ABF	16.11 (H 4a)	-9.81 (H5)
	(SCAOA - SCASCA) ABF	4.07 (H 4b)	-9.89 (H5)
	(CAOA - CASCA) STF	2.22 (H 4a)	12.37 (H5)
	(SCAOA - SCASCA) STF	4.33 (H 4b)	-8.68 (H5)
Ad Focus	CASCA ABF - CASCA STF	-0.32	-0.13
	SCASCA ABF - SCASCA STF	0.31	1.83

t (critical value with Bonferroni adjustments): at 1% = 5.73; at 5% = 4.299; at 10% = 3.75

5. Conclusion

In this research we address a critical aspect of retaliation to comparative advertisements. Furthermore, we draw motivation from contemporary advertisements to introduce the dimension of sequelization. Though CA literature identifies CA as a winning strategy, at least at the consumer's end, the missing link of retaliation and sequencing remained. We make a comprehensive evaluation of sequelization in advertisements and expand the set of options in format choice decision to the following four options: sequelized, comparative, sequelized and comparative, and neither sequelized nor comparative advertisements. We observe that the choice of advertisement format by firms is actually the choice of what tone of voice a brand chooses to use in conveying a message to consumers. However, embedded in this are conscious decisions on whether to attempt regulating consumer's recall and preference for the sponsored brand, or affect their attitude towards competing alternatives. Finally, consistent with few observations and hints in literature, we find evidence of a strong interplay between advertisement focus (attribute or benefit based versus thematic or story based) and format.

The primary conclusions and ensuing implications of this research are summarized below.

- 1) As is expected in any competitive market, we demonstrate that CA is not always a winning advertisement format, even when kept within the recommended range in terms of intensity of comparative claim. On retaliating to a comparative claim, the compared-to brand may nullify the gains that the challenger brand can reap by employing CA. We test this for brands that are perceived as at least equal (in terms of product quality) to each other. Hence this inference can be generalized to cases where the compared-to brand is higher or equal to the challenger brand, in terms of perceived quality of product. This result is especially useful to compared-to brands when the market sharing mechanism is in the form of a zero-sum game between brands involved in CA.
- 2) Significant interaction effects exist between advertisement format and focus. Aligned to the established line of thought, we find evidence that a CA performs better, in affecting a brand's weight in consumers' evoked sets, when it has highlighted the featured attributes and/or benefits that the brand promises. However, with SCA, the catalytic effect of an appropriate message focus does not exist. This is due to its basic design of being comparative as well as thematic, due to the sequence. Hence, from a manager's point of view, products whose deliverables are mostly emotional in nature may benefit by implementing SCA.
- 3) We find evidence that noncomparative sequelized advertisement (SA) succeeds in creating a significant impact, when all of the following hold: 1) the prequel is popular, 2) the advertisement is designed with a thematic focus, 3) and all competing brands play nonsequelized and noncomparative advertisements (OA).

A limitation of our research is that, in implementing the experiments, we have manipulated treatments only on two test brands. As a future research direction, including more than two test brands, while involving only a subset in CA wars, could reveal interesting results about how other competing brands are affected. In addition to externalities of CA wars on other existing brands, new research could be directed towards studying effects of CA wars in a market on potential entrants. Furthermore, the present study focuses on competitive dynamics of symmetric brands only. Bringing brand asymmetry into perspective could reveal interesting dimensions of comparison and sequelization. Finally, this being a cross-sectional study, it does not capture the impact of repetitive sequelization of an advertisement. Given an inherent temporal element in sequelized advertisements, developing a perspective on the temporal effect of sequelized advertisements (comparative or otherwise) is important and relevant.

Appendix 1: Preference Rating Questionnaire with Spears and Singh's (2004) scale

Please describe your overall feelings about the brands 'Dentyz' and 'Spark', in terms of the ads that you just experienced, and answer the following.

"You are requested to mark each of the above items on a scale of 1 to 5; such that a score of '1' implies that you are closest to the 1st option in each item. Please place a 'D' for Dentyz and 'S' for Sparkz on each of the following scales.
For example, if you find Dentyz as extremely 'Appealing' mark your response to the 1st item with a 'D' on '5', extremely 'Unappealing => a 'D' marked at '1'. You can also mark a score between 1 and 5 (e.g., 4) depending on which side of the continuum you feel you stand. Similarly, place 'S' on the same scale and proceed to the next item."

1. Attitude toward the brands -

Unappealing/ Appealing: 1 2 3 4 5

Bad/ Good: 1 2 3 4 5

Unpleasant/ Pleasant: 1 2 3 4 5

Unfavourable/ Favourable: 1 2 3 4 5

Unlikable/ Likable: 1 2 3 4 5

Purchase Intentions -

Never/ Definitely: 1 2 3 4 5

Definitely don't intend to buy/ Definitely Intend: 1 2 3 4 5

Very low/ High Purchase **Interest**: 1 2 3 4 5

Definitely not buy it/ Definitely buy it: 1 2 3 4 5

Probably not/ Probably Buy it: 1 2 3 4 5

Appendix 2a: Test Product and Preferred Attribute Questionnaire

A. Please name three products that you frequently buy (i.e., at least once in every 1-2 months).

[Please name products that you give a thought to before buying. For example, i) You make an assessment of at least two or more brands before making the final purchase, or ii) you take a look at the enlisted features, etc. In other words, please do not enlist products that you randomly pick for purchase.]

1. _____ 2. _____ 3. _____

B. Please assign a score between 1-7 to each of these products, as per the items shown below. Please score all 3 products for all 5 items.

a. In selecting from the many types and brands of this product available in the market, would you say that:

I would not care at all as to which one I buy	1	2	3	4	5	6	7	I would care a great deal as to which one I buy
-----------------------------------------------	---	---	---	---	---	---	---	-------------------------------------------------

b. Do you think that the various types and brands of this product available in the market are all very alike or all very different?

They are alike	1	2	3	4	5	6	7	They are all very different
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c. How important would it be to you to make a right choice of this product?

Not at all Important	1	2	3	4	5	6	7	Extremely Important
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d. In making your selection of this product, how concerned would you be about the outcome of your choice?

Not at all concerned	1	2	3	4	5	6	7	Very much concerned
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C. Which brands of these products did you purchase most recently? Enlist as per order of A.

[In case of multiple brands purchased, please name the one that you buy most often]

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

D. Please enlist 3 features/ attributes of the brand (of A) that you like most. Please enlist in order of importance (1 being most important) to you.

1. _____ 2. _____
3. _____

E. Please assume that you are considering buying the product mentioned in 'A' from a new brand. What **product attributes** (except *price*) would you be looking for?

1. _____ 2. _____
3. _____

Appendix 2b: Selection of Names for Test Brands

Based on the most preferred attributes reported by respondents (represented in figure above) in the chosen product category, 10 test brand names were simulated. These brand names were then given to a new set of respondents. They were told that a would-be entrant in the toothpaste market was looking for a winning brand name, and that there were 10 names under consideration. Hence, they were requested to evaluate each of the brand names, on a scale of 1 to 10, 10 being the highest score, for each of the following parameters.

1. Suitable as a toothpaste brand name
2. Easy to remember
3. Likable
4. Catchy/attractive name
5. Does not sound like a ‘me-too’ brand
6. Suitable in reflecting the promised deliverables of the brand, viz. “shiny white teeth” and “fresh breath”

The scores obtained by the brands are summarized in the following table.

Selection of Test Brand Names

	Spark	Splash	Glitz	Dentyz	Flash	Glint	Sparkz	Brite	Glist
Q1	6.57	3.93	4.00	5.43	3.29	3.79	5.79	5.14	4.29
Q2	7.50	6.64	5.36	6.00	6.36	4.72	6.43	6.57	4.86
Q3	5.57	4.35	4.65	4.29	4.78	3.36	4.71	4.22	4.29
Q4	5.79	4.86	6.64	4.78	4.86	4.72	5.71	4.36	3.79
Q5	4.78	4.65	4.57	6.21	4.28	3.79	4.57	5.21	5.29
Q6	3.38	3.00	3.46	4.06	2.92	2.92	3.15	2.92	2.77
Sum	33.59	27.43	28.68	30.77	26.49	23.30	30.36	28.42	25.29
avg	5.60	4.57	4.78	5.13	4.42	3.88	5.06	4.74	4.22
SD	1.70	1.22	1.03	0.66	1.27	0.44	1.14	1.24	0.64

The names ‘Dentyz’ and ‘Sparks’ were chosen as the test brand names due to their high rating by respondents. Moreover, they were comparable amongst each other. The name ‘Spark’, which had obtained the highest rating by respondents, was dropped as it was not comparable (in terms of ratings given) to any other simulated brand name.

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