

ARE TRUSTED BRANDS IMPORTANT?

SHARMILA C. CHATTERJEE, *Golden Gate University*

ARJUN CHAUDHURI, *Fairfield University*

This study examines whether trusted brands are important in determining brand outcomes in consumer markets. Specifically, we study whether trust facilitates obtaining superior brand outcomes in terms of market share and advertising efficiency. We propose that, in addition to a direct effect of trust on brand outcomes, trusted brands also attain superior brand outcomes by gaining differential benefits in terms of the effectiveness of certain key strategic advertising variables. Thus, we posit a moderating or interaction effect of trust on the effectiveness of the strategic advertising variables of share of voice and brand differentiation. Using brands as the unit of analysis, we find strong empirical support for the main effect of trust on both market share and advertising efficiency. Further, trust enhances the effect of share of voice on market share and the effect of brand differentiation on advertising efficiency. In fact, no effect of brand differentiation on ad efficiency was found, unless the moderating effect of brand trust was considered.

INTRODUCTION

Advertising appeals involving trust have begun to proliferate in recent years (e.g., “Chevrolet, the car more Americans trust”). The notion of brand trust has also increasingly been discussed in the marketing literature of late. It has been suggested that brand trust increases brand loyalty in consumer products (Chaudhuri and Holbrook 2001) and that trust leads to commitment in business to business situations as well (Morgan and Hunt 1994). In the context of the internet, trust has been proposed as a critical influence in obtaining desirable behaviors on the part of consumers (Reichheld and Scheffer 2000; Urban, Sultan and Qualls 2000). In the context of retail stores, trust has been found to be linked to satisfaction (Chaudhuri and Ray 2003) and value (Sirdeshmukh, Singh and Sabol 2002). Thus, it would seem that trust is an important consideration in many different marketing contexts. But, why exactly is trust important in advertising and branding and how does it work in terms of its effects on key marketing outcomes?

Although there has been some consideration in the advertising literature of the notion of trust in studies of celebrities in advertising (Atkins and Block 1983; Ohanian 1990, 1991) and in the literature on source credibility in communication (Hovland and Weiss 1951), there is no published evidence on the efficacy of brand trust on advertising strategy variables like share of voice and brand differentiation or on advertising outcomes such as advertising efficiency and market share. In fact, there may be some question about the effectiveness of brand trust in advertising situations, since Ohanian (1991) found that trustworthiness of a celebrity did not lead to purchase intent. However, the notion of brand trust is different from the notion of trust in a celebrity and, accordingly, the effects of brand trust could still be related to positive advertising outcomes. Moreover, Ohanian and other advertising researchers in the past have looked at relationships at the level of individual respondents and not at the level of brands. Examining the effects of trust at the level of brands may be more important to managers who, typically, take decisions on a brand and not at the level of individual consumers.

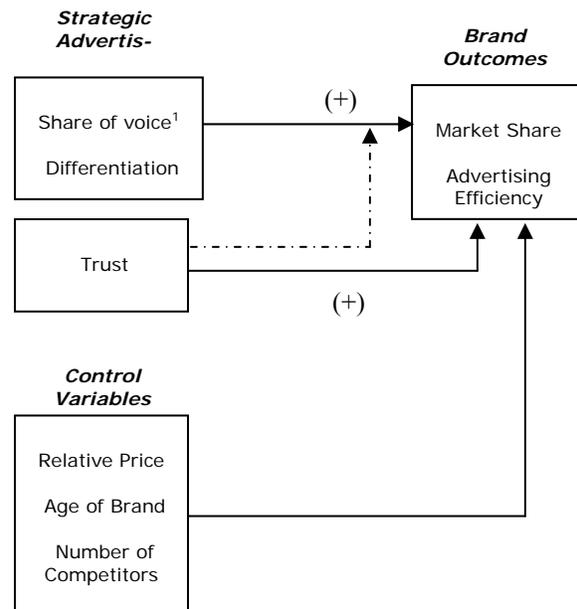
In this study, we investigate, at the level of brands, the relationship of brand trust and two key strategic advertising variables and their combined effects on two critical brand out-

comes. Specifically, we examine whether brands enjoying a higher level of trust attain superior brand outcomes in terms of market share and advertising efficiency. We also investigate whether trusted brands provide an advantage in the effectiveness of two key strategic advertising variables on the two brand outcomes. The strategic variables examined are share of voice and brand differentiation vis-à-vis competitors. We propose hypotheses pertaining to the effect of trust on the effectiveness of these two advertising variables on market share and advertising efficiency (the ratio of advertising sales to advertising expense) and also on the direct relationship between trust and market share.

Brand outcomes such as market share, and advertising efficiency, among others, have been widely examined in past research. The impact of several variables on market share and advertising efficiency has been investigated in previous studies (Robinson and Fornell 1985; Robinson 1988; Smith and Park 1992; Anderson, Fornell and Lehmann 1994; Bowman and Gatignon 1996; Chaudhuri 2002). Accordingly, we control for certain marketing variables such as relative price, number of competitors and the age of the brand in this study. In other words, we consider the effects of these variables on market share and advertising efficiency over and above the effects of the variables of substantive interest in this study—brand trust, advertising share of voice and brand differentiation.

The paper is divided into five sections. The conceptual framework and hypotheses are presented in section 1. Section 2 outlines the methodology. Section 3 presents the results and section 4 provides a discussion of the findings. Finally, we conclude in section 5. Figure 1 gives a synopsis of the proposed conceptual model.

FIGURE 1



¹ As per reasons outlined in the conceptual framework, no hypothesis was advanced for an interaction effect of share of voice with trust and advertising efficiency.

Note: Dashed line represents the moderating effect of trust.

CONCEPTUAL FRAMEWORK

Role of Trust

We define brand trust as “the *confidence* a consumer *develops* in the brand’s *reliability* and *integrity*.” This definition directly borrows from the definition of trust adapted in the business marketing domain (e.g., Moorman, Deshpande, and Zaltman 1993; Morgan and Hunt 1994). These in turn draw on the classic definition of interpersonal trust developed by Rotter (1967) with reliability as its cornerstone. The term *develops* in our definition connotes the evolving nature of trust (e.g., Fournier 1998). The notion of trust being a function of experience is well accepted by researchers (e.g., McAllister 1995; Nevin 1995; Weitz and Jap 1995). McAllister (1995, p. 26) states that “The amount of knowledge necessary for trust is somewhere between total knowledge and total ignorance. Given total knowledge there is no need for trust and given total ignorance there

is no basis upon which to rationally trust. Available knowledge, and “good reasons” serve as foundations for trust decisions, the platform from which people make leaps of faith, like those involved in trusting.” Thus, brand-consumer interactions contribute to the development of brand trust by setting the stage for more extensive development of brand knowledge structures for brands that enjoy higher levels of trust.

Our fundamental notion of the advantage obtained by brands enjoying greater levels of trust rests on two premises: (a) that brands with higher levels of trust are easier for consumers to retrieve from memory and (b) that trusted brands create, for consumers, a learning impediment for other competitive brands.

Increase in Brand Recall

Earlier research has found a strong correlation between brand recall and brand choice (Alba, Hutchinson and Lynch 1990). Thus, brand recall is a necessary (though not sufficient) condition for brand choice in many purchase situations. Accordingly, any construct that facilitates brand recall will have a positive impact on brand choice. This is where trust comes into play. The more extensive development of brand knowledge structures for trusted brands, discussed above, enables an increased number of cues to trigger the brand in memory (Collins and Loftus 1975; Anderson 1983). In other words, trust enhances brand accessibility, and thus brand recall. Since trust facilitates brand recall such trusted brands will have an advantage with regard to their likelihood of being recalled and chosen.

Further, for positively evaluated brands, brand recall is positively related to brand choice (e.g., Nedungadi and Hutchinson 1985; Nedungadi 1990; Lee 2002). The above will also apply to trusted brands since trust has a positive evaluative connotation. Overall, brands enjoying higher levels of trust are more accessible to consumers and, thus, will be recalled early. Since brand recall has been found to be posi-

tively related to brand choice (Alba, Hutchinson, and Lynch 1990), the likelihood of brands enjoying higher levels of trust, and high levels of recall, being chosen by consumers should be higher than that of less trusted competitive brands.

Learning Impediment for Competitive Brands

Brands enjoying higher levels of trust can pose a learning impediment to other brands in the product category as well. Alba and Chattopadhyay (1985) state that initially recalled items might inhibit recall of additional items and that the probability of recalling a particular item decreases as the number of items recalled prior to it increases. Consistent with this effect, “brands that are recalled first tend to inhibit recall of other brands (Alba, Hutchinson and Lynch 1990, p. 10).” This can place brands enjoying a high level of trust at a major advantage. We have argued that trust enhances brand recall and the likelihood of the brand being chosen. This early recall of the trusted brand(s) is likely to inhibit the recall of other brands in the category and create a learning impediment for the other brands. Since memory (or recall) plays a very important role in many consumer purchase decisions with consumers often engaging in very limited external information search (e.g., Newman 1977; Alba, Hutchinson and Lynch 1990), the likelihood of trial for the less trusted brands is, thus, reduced. Alternatively, the chances of purchase for brands with greater levels of trust increases. This, in turn, inhibits customers’ learning about other brands and a disinclination on the part of these consumers to sample untried brands.

Further, direct experience with an object (such as sampling) leads to strongly held beliefs on the part of consumers (e.g., Fazio and Zanna 1981; Hoch and Deighton 1989). Moreover, these beliefs predict behavior relatively well (Fazio and Zanna 1981; Sheth and Parvatiyar 1995). Thus, positive product experience and, consequently, a positive descriptive attitude, are likely to promote customer satisfaction and fa-

avorable market behavior (Westbrook and Oliver 1991). Since brand-trust is also a function of brand-experience, brands enjoying higher levels of trust can lead to customer inertia in terms of sampling competitive brands. Cognitive dissonance theory (Festinger 1957) supports this proposition. According to this theory, consumers give a rational justification for their choice by augmenting the positive aspects and discounting the negative aspects of the chosen brand. They do the opposite with the rejected brand-alternatives. Thus, by restructuring their cognitions to be consistent with behavior, consumers of brands enjoying higher levels of trust can get into a cycle of non-trial and consequently lack of learning about the competitive brands in the category.

In summary, we observe that brand-trust through its facilitation of brand recall, and its role in impeding consumers' learning of competitive brands can make consumers repeatedly purchase those brands in which they have a high level of trust. Further, since the theory of double-jeopardy (Ehrenberg, Barnard and Scriven 1997) suggests that brands with high repurchase rates also have high market shares, we propose that

H₁: The higher the level of brand trust, the higher the market share.

The positive relationship between levels of advertising exposure and brand recall is well established, as is the relationship between brand-recall and brand-choice (e.g., Nedungadi and Hutchinson 1985). Since, as discussed above, trust is expected to enhance brand recall, brands enjoying a higher level of trust should require lower levels of advertising exposure relative to less trusted brands in order to attain the same level of brand recall. This, in turn, should make advertising more efficient in terms of costs relative to sales. Thus,

H₂: The higher the level of brand trust, the higher the advertising efficiency.

The Effect of Trust and Strategic Advertising Variables

This section develops hypotheses pertaining to the relationship between strategic advertising variables and brand outcomes contingent on the level of trust enjoyed by a brand. We propose that there is an asymmetric impact of the effectiveness of the strategic advertising variables on brand outcomes for trusted brands. This is predicated on our understanding that brand-trust is evolutionary in nature and develops over time. Thus, consumers are likely to be more familiar with trusted brands. Familiar brands are likely to be perceptually enhanced, giving them an edge in the "race" for consumer attention (Alba, Hutchinson and Lynch 1990). This is particularly important as consumers often operate under time pressure. Perceptual enhancement makes a brand easily recognizable among the whole host of competitive brands.

Trust and Advertising

The positive relationship between advertising expenditure and sales/profits is well established (Butters 1976; Batra, Myers and Aaker 1996). This is also evident from the enormous amounts that companies spend each year on advertising through different vehicles. However, from a strategic point of view it is more discerning to look at a brand's advertising expenditures relative to that of its competitors since industries vary with regard to their need for advertising intensity. This can be done using a brand's "share of voice", which is defined as a brand's advertising dollars as a percent of the total industry's advertising dollars over a certain period of time.

The relationship of a brand's share of voice to its share of market is unclear. While there is evidence of a positive relationship (Batra, Myers and Aaker 1996; Pollay, Siddharth, Siegel and Haddix 1996; Miller and Berry 1998) there is also some evidence that the relationship may, in fact, be an inverse one (Jones 1990; Lehman and Winer 1994). We argue here that brand trust moderates the relationship

of share of voice to share of market so that trusted brands have a positive effect in enhancing the relationship between share of voice and share of market. Advertising plays an important role in enhancing brand salience, thus facilitating brand recall (Alba and Chattopadhyay 1986). Trust augments the effectiveness of brand advertising by perceptually enhancing a brand in its category. An advertisement for a high-trust-brand by virtue of perceptual enhancement is likely to stand out and be noticed. This will increase the likelihood of an advertising message, for the high-trust-brand, being heard and processed, from among the clutter of advertising messages that a customer is bombarded with everyday. This makes the advertising expenditures of the trusted brand more effective vis-à-vis the less trusted members in its category. Thus,

H₃: Brand trust will increase the positive effect of share of voice on market share.

No hypothesis is advanced for the moderating role of trust in enhancing the effectiveness of share of voice with respect to advertising efficiency. This is because there is no compelling rationale to propose any relationship between share of voice and advertising efficiency. This may explain why other researchers have not examined the relationship between share of voice and advertising efficiency. Hence, theoretically, there is no reason to expect that the coupling of trust and share of voice will have any effect with regard to enhancing advertising efficiency. Moreover, operationally, there is an artifact in that both share of voice and advertising efficiency share a common term—advertising dollars. Thus, the interpretation of any results would prove to be murky.

Trust and Brand Differentiation

Differentiation places a brand in a product perceptual space with one or more attributes being discrepant from that of other brands in the product category. Specifically, a differentiated brand is positioned as sharing important attributes with other brands in the product category

and as being superior on one or more of the distinguishing attributes (Dickson and Ginter 1987). Such differentiated positioning has the potential for a wide market since the brand is seen as being part of the product category and, thus, substitutable with other brands in the category (Sujan and Bettman 1989).

However, it may not be possible to observe a consistent positive directional relationship between brand differentiation and market share per se, despite the superior positioning of the brand on one or more attributes and the wide potential market. This may be due to memory erosion (forgetting) over time of the unique attributes of the differentiated brand. In fact, researchers have proposed that a positioning advantage may not translate automatically into superior performance outcomes but is often moderated by other factors (Day and Wensley 1988). Song and Parry (1997) find two sets of moderating variables that strengthen the relationship between brand differentiation and market share in the context of new products. Smith and Park (1992) find a positive main effect relationship between differentiation and market share. Hence, there is a lack of clarity with regard to the exact relationship between brand differentiation and market share.

At the same time, a brand enjoying higher levels of trust is likely to be perceptually enhanced. Such a brand would be able to counter any memory erosion of the differentiated superior attributes. Thus, a differentiated brand enjoying high levels of trust is likely to witness a positive relationship with market share. By the same token, we are also likely to see increased efficiency for the advertising expenditures of the trusted brand. Thus, trust in a differentiated brand is going to lead to greater positive outcomes in terms of market share and advertising efficiency.

H₄: Brand trust will increase the positive effect of brand differentiation on market share.

H₅: Brand trust will increase the positive effect of brand differentiation on advertising efficiency.

Control Variables

Price. The positive relationship between price reductions and product sales is an undisputed truism in marketing (e.g., Wilkinson, Mason and Paksoy 1982). However, the relationship becomes unclear when we move from “temporary price cuts” to “relative price” and sales. On one hand one can postulate that lower relative price (relative to the price of the leading brand) will lead to increased sales volume because consumers, usually, prefer lower as opposed to higher prices. However, on the flip side, price may function as a signal of quality. Thus, lower prices may have a negative connotation with regard to quality for the brand. In other words, a consumer can lack conviction with regard to reliable performance on the part of the brand characterized by lower relative price. Consequently, it is not possible to posit a consistent directional relationship between relative price and sales volume. Thus, no hypothesis is made with regard to relative price and brand outcomes. However, relative price is included in the study as a control variable for model comprehensiveness.

Age of the Brand. Given the high rate of product failures, brands that exist in the market for a longer period of time are likely to be more successful. This, in turn, would suggest a positive relationship with sales volume. Thus, it is important to include age of the brand in the model of brand outcomes to avoid mis-attributing the effect of age of the brand to other variables in the model.

Number of Competitors. Number of competitors is a factor, which relates to industry competitive intensity. This, in turn, is likely to influence individual brand sales as well as their advertising effectiveness (e.g., Smith and Park 1992). Thus, this variable is included as a control variable to ensure proper model specification.

METHODOLOGY

The data for the study was collected from two surveys. The brand level data on the marketing variables and on brand outcomes (market share, advertising efficiency) was obtained from a survey of product managers. The data on brand trust was obtained from a survey of consumers who were users of the brands in the study. Both surveys were completed during a three-month period. The product managers’ surveys were obtained during the first two months and the consumer surveys were conducted in the third month. The consumer and managerial data were then merged into a single data set. The procedures and measures used in the two surveys are described in this section.

Consumer Survey

Data Collection: A sample of 150 products was randomly selected from the Standard Industrial Classification (SIC) manual. First, a table of random numbers was used to randomly select four-digit SIC codes from the index of manufacturing and non-manufacturing industries in the manual. Next, a specific subdivision from within the industry was also randomly selected, and the product or service offered by the subdivision was accepted as a unit. Of these 150 products, forty-eight products with easily identifiable brands were chosen for inclusion in the study.

Data collection was conducted by fifty interviewers who were students enrolled in a senior level market research course at a private university in the northeastern U.S. Interviewers volunteered for the task and received course credit on successful completion of thirty consumer interviews for each of three brands in a single product category. Interviewers were trained on data collection using a mall intercept technique and their work was supervised and checked by way of callbacks to verify the authenticity of the interviews. One interviewer was assigned to each of the forty-eight product categories chosen from the SIC manual. The two remaining interviewers volunteered to collect data on the

categories of “microbrews” and “men’s underwear” and this was permitted since these products also have easily identifiable brands.

Thus, since each of the fifty interviewers collected data on three brands in a single product category a data set of 150 brands (in fifty different product categories) was initially generated. Three of these brands (in the “airlines” product category) had to be dropped due to poorly conducted surveys by one interviewer. However, two other interviewers collected data on four instead of three brands in their product categories and this resulted in a data set of 149 brands in the forty-nine product categories where each product category was represented by at least three brands.

In order to obtain thirty users for each of the 149 brands, a total of 13,386 approaches were made in the North-Eastern United States in the states of Connecticut, Massachusetts, New Jersey and New York. Reasons for nonparticipation were mostly either due to non-usage of the product category or a lack of time to complete the survey. Surveys were conducted mostly in shopping centers and malls. In some cases (e.g., barbecue grills) this approach was not viable in terms of producing actual users of the product. In these instances, users were located in places where the product was purchased or consumed. Thus, for instance, the interviewer in question went to a hardware store in order to obtain the requisite number of users per brand for the product, barbecue grills

None of the users were used for more than one brand. Thus a total of 4,470 respondents (149 brands*30 users) were surveyed. The mean age of the respondents was 35.79. Respondents were screened for participation based on their usage of the product. When respondents replied in the affirmative to a question pertaining to their usage of the product they were requested to participate in a non-profit study on the product. If they agreed, they were asked which brands of the product they used. They were then asked the questions in the survey with reference to one of the brands they mentioned.

Interviewers were equipped with a list of “target” brands, which had already been obtained through the product managers’ survey and, wherever possible, they used this list to generate a match with the brands mentioned by the respondent. If the interviewer had completed his/her “quota” (thirty interviews) on the first brand mentioned or if it was not on the list of target brands, then the interview was conducted with reference to the second brand mentioned (provided it was also on the list of target brands) and so on. In this manner, a field survey of thirty actual users was conducted for each of 149 brands in forty-nine product categories. The means based on thirty responses per brand were calculated for each item on the survey and the consumer survey data set was constructed with 149 brands as the data points.

Measures: Brand Trust was measured in the consumer survey as the sum of four items—“I trust this brand; “I rely on this brand”; “This is an honest brand” and “This brand is safe.” These items were constructed by following the conceptualizations of “trust” discussed in the theory section. Responses to these items were measured on a seven-point scale with “very strongly agree” and “very strongly disagree” as the endpoints. Cronbach’s alpha for the items was .81. Principal components analysis of the four items revealed a single factor structure, which explained 66.2 percent of the variance and had an eigen value of 2.64. The items loaded .92 (trust), .77 (rely), .68 (honest) and .84 (safe) on the single factor. Evidence of unidimensionality was also obtained through confirmatory factor analysis (using Lisrel8). All factor loadings were significant (t value > 2.00) and the fit indices were satisfactory: chi-square [2 d.f.] = 4.12, p = .13, GFI = .98, AGFI = .91, CFI = .99.

Product Managers’ Survey

Data collection: Questionnaires were mailed to product managers of 372 brands in the fifty product categories. Three weeks later a second mailing was sent out. A personalized cover letter stating the academic sponsorship and pur-

pose of the study along with an assurance of absolute confidentiality was enclosed. Further, personal telephone calls were made to encourage participants to complete the survey. A total of 160 completed surveys were obtained - a response rate of 43 percent.

Despite the healthy response rate, it was important to examine non-response bias, if any. Forty-two of the original fifty product categories were represented in the returned surveys. The eight products that were not represented (due to non-response from the managers) were cigarettes, canned soft drinks, shampoos, synthetic sweeteners, ball point pens, women's underwear, flashlights and razor blades. Our best efforts to contact these managers and to persuade them to complete the surveys were not successful. In general, we were informed that the information was confidential and not publicly available. Although the eight product categories appear to group together as frequently purchased and widely distributed consumer products their absence was likely to be compensated for by the number of similar products which still remained in the data set (bottled iced tea, hair tonics, candy, hosiery, laundry soap, light bulbs, etc.). Table 1 provides the list of products in the final data set. In general, Table 1 reveals a wide representation of brands drawn from a variety of consumer products and industries.

Care was also taken to see that the sample was not biased towards any one viewpoint or opinion. For instance, bias could result from managers with poor outcome measures for their brands not responding to the survey. However, examination of sample statistics on brand outcomes shows that the sample contains a substantial representation of brands with both low and high brand outcomes.

Further, the sample was split into early and late respondents (Armstrong and Overton 1977). Responses obtained after three weeks were categorized as late respondents. Late respondents were compared with early respondents in terms of brand outcomes such as market share

and advertising efficiency. Comparison of the means and variances support the null hypotheses of equality of means and variances of the above variables for the early and late respondents (Table 2). This suggests that non-response bias, though always a possibility, is unlikely to be of consequence in this study.

Personal computers (3)	Barbecue grills (3)
Women's handbags (3)	Boys'/men's slacks (1)
Chewing gum (3)	Gasoline (3)
Mattresses (3)	Bottled iced tea (3)
Analgesics (3)	Canned fruits (3)
Cameras (3)	Cooking ranges (3)
Ice-cream (3)	Beer (3)
Cottage cheese (1)	Candy (3)
Suntan lotion (3)	Trucks (3)
Micro brews (3)	Coffee (3)
Children's wear (3)	Hosiery (3)
Laundry soap (3)	Macaroni (3)
Cereals (3)	Hotels (3)
Room air conditioners (2)	Men's underwear (1)
Vegetable cooking oil (2)	Potato chips (1)
Microwave ovens (3)	Hair tonics (1)
Perfumes (3)	Margarines (2)
Golf clubs (3)	Electric fans (3)
Bacon (3)	Salad dressing (1)
Kitchen utensils (3)	Automotive tires (2)
Light bulbs (3)	

In order to construct the final data set, with brands as the unit of analysis, the consumer—survey data set based on the means of thirty responses for each brand was merged with the managerial-survey data set for the corresponding brands. The merging operation of 160 managerial brand-level data points and 149 consumer brand-level data points produced 107 matched brands in the final data set. This was necessary because, in certain cases, it was not possible to find thirty users for the targeted brands and interviewers were forced to complete their quotas on other brands, which were later dropped from the final data set of 107 brands used in the study. Also, in some cases, no target brands were provided since no surveys in that product category had been obtained from the product managers. As noted, Table 1 provides a list of the forty-one product categories in the final data set of 107 brands (recall

TABLE 2 Test of Non-response Bias Means and Variance Tests of Brand Outcomes				
	Market Share		Advertising Efficiency	
	Early Respondent N=92	Late Respondent N=52	Early Respondent N=75	Late Respondent N=37
Standard Error	1.61	1.72	.009	.012
F statistic	F(91,51)=1.55, p>.05		F(74,36)=1.13, p>.05	
Mean	14.96	12.19	.057	.045
T statistic for equal variances	T=1.10, p>.05		T=.79 p>.05	

that one product category in the consumer survey and eight in the managerial survey were dropped or missing). The number of brands in each category is also provided in Table 1.

Measures: The measurement of the independent, dependent and control variables, as described below, were all based on information provided in the product managers' survey.

The level of *Brand Differentiation* was measured as the sum of two items asking respondents to indicate the extent to which the brand was differentiated from other brands in the same product category in terms of: (a) actual product attributes (defined as “those features of the brand which can actually be physically identified like touch, smell, sight, taste, etc.”) and (b) overall perceived quality (defined as including “the non-tangible, psychological perceptions that consumers have about the brand”). Both items were measured on a five-point scale (1=not different; 5=very different). Cronbach’s alpha for the two items was .75.

Share of Voice was constructed as the ratio of the total annual advertising expenditure in dollars of the brand in its served area and the total annual industry advertising expenditure in dollars of all brands in the product category in the same served area.

The control variables *Age of the Brand* and *Number of Competitors* were measured by asking the questions “How old is this brand?” and “How many brand competitors does the brand

have in its served market?”, respectively. Note that in the beginning of the survey managers had to define the served market for their brand in terms of the geographic area in which the brand was distributed and then continue to use the same definition of the served market in later questions.

Relative Retail Price was constructed as the ratio of the average retail price per unit of the brand and the average retail price per unit of the brand’s leading competitor. The leading competitor was defined as the market leader. If the brand was itself the market leader, then respondents had to provide data for the next strongest brand.

The dependent variable *Market Share* was measured by asking respondents directly for the brand’s market share. The other dependent variable *Advertising Efficiency* was constructed by taking the ratio of total annual advertising expenditures in dollars of the brand in its served area, and the current annual retail sales of the brand.

RESULTS

Table 3 presents the descriptive statistics and correlation measures for the variables of interest in our study. An examination of the correlation matrix supports the construct validity of our measures. We observe a positive relationship between trust and market share (.195, p=.05) as hypothesized. Consistent with past research, we find a positive relationship between share of voice and market share (.410, p=.00). Further, we see a negative correlation between number of competitors and market share (-.197, p=.02).

A negative correlation between trust and advertising efficiency is observed (-.349, p=.00) suggesting that greater trust, and increased advertising efficiency go together. Note that a negative coefficient implies greater efficiency of advertising dollars since advertising efficiency is defined as \$Advertising/\$Sales. We also find a negative correlation between brand-age and

TABLE 3 Descriptive Statistics and Correlation Matrix										
	Mean (SD)	Adeff	Trust	Differt	Prdtrst	SOV	Adtrst	Relpr	Brage	#comp
Mktsh	13.40 (13.47)	-.124 p=.203	.195 p=.052	.013 p=.876	.004 p=.965	.410 p=.000	.107 p=.337	-.022 p=.801	.092 p=.294	-.197 p=.019
Adeff	.048 (.064)	1	-.349 p=.002	.092 p=.342	-.175 p=.125	-.012 p=.905	.038 p=.746	.051 p=.603	-.228 p=.020	.226 p=.018
Trust	19.313 (2.449)		1	.037 p=.710	-.105 p=.291	.048 p=.664	-.100 p=.364	.166 p=.108	.052 p=.605	-.206 p=.036
Differt	6.820 (2.033)			1	-.230 p=.019	.058 p=.546	.097 p=.381	.309 p=.000	-.183 p=.027	.080 p=.322
Prdtrst*	.187 (5.437)				1	.066 p=.548	.047 p=.670	.032 p=.756	.105 p=.301	-.069 p=.492
SOV	.166 (.246)					1	-.314 p=.004	.347 p=.000	.101 p=.304	-.206 p=.030
Adtrst*	.032 (.526)						1	.047 p=.682	-.087 p=.443	.243 p=.027
Relpr	1.020 (.239)							1	-.159 p=.066	-.005 p=.952
Brage	46.082 (38.82)								1	.062 p=.460
#comp	22.34 (29.64)									1

*In accordance with Cronbach (187), the component variables were mean center and then the interaction term was computed to avoid multicollinearity issues in the regression model. Smallest pairwise N=75; Largest pairwise N=153.

Mktsh = Market share
 Adeff = Advertising efficiency (\$Advertising/\$Sales)
 Trust = Trust
 Differt = Product differentiation
 Prdtrst = Interaction of product differentiation with trust
 SOV = Share of voice
 Adtrst = Interaction of share of voice with trust
 Relpr = Relative price
 Brage = Age of brand
 #comp = Number of competitors

advertising efficiency (-.228, p=.02). This is also intuitive, since consumers are more familiar with older brands, making their advertising dollars stretch farther. The positive correlation between number of competitors and advertising efficiency (.226, p=.02) shows that the more competitively crowded the brand, the lower its

advertising efficiency, another intuitively plausible relationship.

We see a positive correlation of .309 (p=.00) between differentiation and relative price. This supports the notion that differentiated brands can command a price premium. Interestingly,

we observe a negative relationship between the age of the brand and differentiation (-.183, $p=.03$). This probably reflects the fact that the older brands, due to their long market presence, have been imitated by competitors, in turn making them less differentiated. Consistent with this observation, we obtain a negative relationship between the age of the brand and relative price (-.159, $p=.07$). Thus, the older the brand, the less differentiated it is, and the lesser the price premium it charges. These correlations lend credence to the construct validity of our measures.

Subsequent to assuring the reliability and validity of our measures, regression analysis was used to test the hypotheses pertaining to brand outcomes. In accordance with Cronbach (1987), the component variables used in testing the interaction hypotheses were mean centered and then the interaction term was computed to avoid multicollinearity issues in the regression model. The results for the brand outcomes of market share and advertising efficiency are summarized in Tables 4 and 5 respectively. The results for market share as the dependent variable (adjusted $R^2 = .45$) are presented in Table 4. We see a positive relationship between trust and market share ($\beta=.261$, $p=.01$)

supporting H_1 pertaining to our main effect hypothesis of trust and market share. With regard to the moderating role of trust in enhancing the effectiveness of the strategic advertising variables of share of voice and brand differentiation, we find support for share of voice only ($\beta=.421$, $p=.00$) supporting H_3 , but fail to support H_4 . We also find a positive relationship between differentiation and market share ($\beta=.177$, $p=.06$) and between share of voice and market share ($\beta=.627$, $p=.00$). The main effects of differentiation and share of voice were included in the model since we were testing the interaction effects of trust with these variables and so it was important to incorporate the main effects as well, in order to avoid any misattribution of effects. The positive relationship between share of voice and market share is consistent with past research (e.g., Pollay, Siddharth, Siegel and Haddix 1996) as is the positive relationship between brand differentiation and market share (Smith and Park 1992). Finally, we see a negative relationship between number of competitors and market share ($\beta= -.173$, $p=.08$) reflecting that it is more difficult to obtain market share when there are many competitors in the industry.

Table 5 presents the results for advertising efficiency as the dependent variable (adjusted $R^2 = .23$). We see a positive relationship between

Variables	Standardized Estimate	Significance
Trust	.261	.007
Differentiation	.177	.065
Differentiation*Trust	-.062	.500
SOV	.627	.000
SOV*Trust	.421	.000
Relative Price	-.109	.250
Age of brand	.142	.114
Number of Competitors	-.173	.083
$F_{8,68}=8.686$ $p<.01$		
R-SQUARE=.505		
ADJ. R-SQUARE=.447		

Variables	Standardized Estimate	Significance
Trust	-.336	.003
Differentiation	-.008	.941
Differentiation*Trust	-.266	.018
Relative Price	.105	.338
Age of brand	-.119	.264
Number of Competitors	.264	.020
$F_{6,65}=4.560$ $p<.01$		
R-SQUARE=.296		
ADJ. R-SQUARE=.231		
Please note that in Table 5, a negative parameter estimate implies greater efficiency of advertising dollars since advertising efficiency is defined as \$Advertising/\$Sales.		

trust and advertising efficiency ($\beta = -.336$, $p = .00$) supporting the main effect hypothesis of trust and advertising efficiency (H_2). Again, note that a negative coefficient shows greater advertising efficiency since advertising efficiency is defined as $\$Advertising/\$Sales$. We also find evidence for the moderating role of trust with regard to brand differentiation, supporting H_5 ($\beta = -.266$, $p = .02$). We further observe a positive coefficient for the relationship between number of competitors and advertising efficiency ($\beta = .264$, $p = .02$), showing that a competitively crowded market is associated with lower advertising efficiency.

DISCUSSION

Four of the five hypotheses in our study are supported. Consistent with our hypotheses, we find that trust has a direct positive relationship with brand outcomes. Brands enjoying higher levels of trust are associated with higher market share as well as with greater advertising efficiency. The evidence in this study also supports our contention that trust plays a significant role in enhancing brand outcomes in consumer goods markets just as it does in enhancing relationship outcomes in business markets. We find, for instance, that trust moderates the effect of share of voice on market share. This result shows that trusted brands enhance the positive relationship between share of voice and market share. In other words, for trusted brands there is an additional effect of share of voice on market share. This is consistent with the rationale that trusted brands are perceptually enhanced and facilitate recall, while the role of advertising is also to facilitate awareness and recall (e.g., Lee and Labroo 2004). The coupling of the two cues, one internal (trust) and one external (advertising), has a synergistic impact on sales and, thus, market share. This is important, since for the same dollar investment in advertising, a high-trust brand would reap a larger increase in its share of market vis-à-vis its low-trust competitor. Hence, managers in consumer goods firms would gain from building trust in their brands.

Our hypotheses pertaining to the moderating effect of trust with respect to brand differentiation, gets moderate support for the investigated brand outcomes. Though we find support for the moderating role of trust in the case of advertising efficiency, the effect fails to show for market share. Concurrent with Smith and Park (1992), we find a main effect of brand differentiation on market share but not on advertising efficiency. At the same time, we find that trust moderates the relationship of brand differentiation and ad efficiency. Thus, differentiated brands enjoying high levels of trust have a positive association with advertising efficiency. It may be that trust perceptually enhances the brand so that advertisements for the trusted brand get more attention from consumers despite any advertising clutter. Consumer attention to the advertisements also helps counter the memory erosion that can happen for the differentiated attributes, making differentiation more effective. Thus, for differentiated brands, high trust produces greater advertising efficiency vis-à-vis less trusted counterparts, once again documenting the importance of building brand trust.

This begs the question as to why trust moderates the effect of differentiation on advertising efficiency but not on market share. Why do trusted brands help the relationship of differentiation and advertising efficiency but not of differentiation and market share? One possibility is that consumer knowledge about the uniqueness or differentiation of a brand, relative to other brands, produces a brand retrieval cue that is sufficient to generate greater relative sales and market share for the brand at the point of purchase. Consumers are perceptually "vigilant" (Assael 1998, p.220) about finding differences between brands and this, to some extent, determines their purchases and the market shares of highly differentiated brands. Thus, what drives the sale of the differentiated brands is their delivery of something unique in the product category. Since, brand-trust does not entail strengthening perceptions of uniqueness, once the customer perceives brand uniqueness it is sufficient to create the sale and trust does not add to this effect.

So why does trust moderate the effect of differentiation on advertising efficiency? Advertising is one avenue by which consumers learn about the differences between brands. However, advertising clutter for the various brands makes this a difficult task, unless neutralized by the strength of consumers' trust in the advertised brand. It may be that learning for the advertised brand needs to be bolstered by the addition of brand-trust, which functions to block the deprecations of competitive advertisements. This promotes greater learning about the unique attributes of the trusted brand vis-à-vis its less trusted counterparts. In sum, for the same advertising investment, consumers may be less likely to learn about the unique attributes of brands when brand-trust is low as opposed to when it is high. Accordingly, brand trust functions to lower advertising costs, and thereby, to raise advertising efficiency. For managers, this means that it is not enough for a brand to be different. It must also be trusted.

Directions for Future Research

The current study only looks at one relationship variable, namely trust. It would be useful to look at other relationship variables identified in the domain of business markets such as brand commitment and examine them in the context of consumer markets. Future research must also delve into the antecedents of trust. For example, what consumer and brand characteristics create trust? Do these interact in some manner? Do product category characteristics (involvement, perceived risk, among others) influence brand trust? What can managers do to create trust?

Finally, the usual disclaimer for causality applies in this study as in all studies using regression analysis with cross sectional data. We find, for instance, that trust leads to market share. This does not necessarily mean that market share, in turn, does not create brand trust. This reciprocal effect is also feasible and must remain for future studies to ponder upon and elucidate.

CONCLUSION

So, are trusted brands important in advertising consumer goods? The answer from this study is "Yes, in more than one way." First, consistent with research in the domain of business markets, trust plays an important role in generating positive brand outcomes. In particular, we find that trust has a positive relationship with market share as well as with advertising efficiency. These results can be expected to be especially robust as a result of the additional effort expended in data collection from two different sources in this study. Brand trust was measured at the consumer level and brand outcomes were measured by input provided by brand managers. Thus, the results are not an artifice of asking the same respondents to provide information on both dependent and independent measures in a study. Additionally, our study replicates many of the main effect relationships from previous research, which further bolsters the robustness of our results. For example, we find the same main effects of brand differentiation on both market share and ad efficiency as evidenced in a previous study by Smith and Park (1992).

Second, we find that trusted brands have an additional advantage in increasing the effect of share of voice on market share. In this study, trust augmented the relationship between share of voice in advertising and market share. In other words, the positive effect of share of voice on market share in this study was seen to be even greater for trusted brands than for less trusted brands.

Third, in spite of the lack of a main effect of differentiation on ad efficiency, we still find an interaction effect of trust and differentiation in enhancing advertising efficiency. This result provides another important contribution from our study. It shows that there exists a pure moderating effect of trust on brand differentiation with regard to enhancing advertising efficiency. In other words, differentiated brands obtain gains in cost efficient advertising only when these brands are also high in the level of

consumer trust associated with them. Thus, with regard to ad efficiency, it is not enough to simply differentiate a brand. Managers of consumer goods companies should invest resources in building consumer trust in their brands.

REFERENCES

- Alba, Joseph W. and Amitava Chattopadhyay (1986), "Salience Effects in Brand Recall," *Journal of Marketing Research*, 23 (November), 363-69.
- _____ and _____ (1985), "Effects of Context and Part-Category Cues on Recall of Competing Brands," *Journal of Marketing Research*, 22 (August), 340-49.
- _____, J. Wesley Hutchinson and John G. Lynch (1990), "Memory and Decision Making," in *Handbook of Consumer Behavior*, Eds. Thomas S. Robertson and Harold H. Kassirjian, Englewood Cliffs, NJ: Prentice Hall, 1-49.
- Anderson, Eugene W., Claes Fornell and Donald R. Lehmann (1994), "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden," *Journal of Marketing*, 58, 3, (July), 53-66.
- Anderson, John R. (1983), "A Spreading Activation Theory of Memory," *Journal of Verbal Learning and Verbal Behavior*, 22 (June), 261-295.
- Armstrong, J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14 (August), 396-402.
- Assael, Henry (1998), *Consumer Behavior and Marketing Action*, 6th Edition, Cincinnati, Ohio, South-Western, 220-221.
- Atkin, Charles and Martin Block (1983), "Effectiveness of Celebrity Endorsers," *Journal of Advertising Research*, 23 (February/March), 57-61.
- Batra, Rajeev, John G. Myers and David A. Aaker (1996), *Advertising Management*, 5th Edition, Upper Saddle River, New Jersey, Prentice Hall, p. 698.
- Butters, Gerard R. (1976), "New Developments in the Theory of Monopolistic Competition: A Survey of Advertising and Market Structure," *The American Economic Review*, 22 (May), 392-397.
- Bowman, Douglas and Hubert Gatignon (1996), "Order of Entry as a Moderator of the Effect of the Marketing Mix on Market Share," *Marketing Science*, 15, 3, 222-242.
- Chaudhuri, Arjun (2002), "How Brand Reputation Affects the Advertising-Brand Equity Link," *Journal of Advertising Research*, 42 (May/June), 33-43.
- _____ and Morris Holbrook (2001), "The Chain of Effects from Brand Trust to Brand Performance: The Role of Brand Loyalty," *Journal of Marketing*, 65 (2), 81-93.
- _____ and Ipshita Ray (2003), "Relationships Between Satisfaction, Trust and Commitment in a Retail Environment", presented at the *American Marketing Association's Winter Educators' Conference*, Orlando, Florida.
- Collins, Allan M. and Elizabeth F. Loftus (1975), "A Spreading-Activation Theory of Semantic Processing," *Psychological Review*, 82 (November), 407-428.
- Cronbach, Lee J. (1987), "Statistical Tests for Moderator Variables: Flaws in Analyses Recently Proposed," *Psychological Bulletin*, 102, 3, 414-417.
- Day, George and Robin Wensley (1988), "Assessing Advantage: A Framework for Diagnosing Competitive Superiority," *Journal of Marketing*, 52 (April), 1-20.
- Dickson, Peter R. and James L. Ginter (1987), "Market Segmentation, Product Differentiation, and Marketing Strategy," *Journal of Marketing*, 51 (April), 1-10.
- Ehrenberg, Andrew, N. Barnard and J. Scriven (1997), "Differentiation or Salience", *Journal of Advertising Research*, 37 (November/December), 82-91.
- Fazio, Russell H. and Mark P. Zanna (1981), "Direct Experience and Attitude-Behavior Consistency," in *Advances in Experimental Social Psychology*, Vol. 14, ed. Leonard Berkowitz, New York: Academic Press Inc., 161-202.

- Festinger, Leon (1957), *A Theory of Cognitive Dissonance*, Stanford, CA: Stanford University Press.
- Fournier, Susan (1998), "Consumers and their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343-373.
- Hoch, Stephen J. and John Deighton (1989), "Managing What Consumers Learn from Experience," *Journal of Marketing*, 53, 2 (April), 1-20.
- Hovland, Carl I. and Walter Weiss (1951), "The Influence of Source Credibility on Communication Effectiveness," *Public Opinion Quarterly*, 15, 635-650.
- Jones, John Philip (1990), "Ad Spending: Maintaining Market Share," *Harvard Business Review*, 68 (January-February), 38-48.
- Lee, Angela Y. (2002), "Effects of Implicit Memory on Memory-Based Versus Stimulus-Based Brand Choice," *Journal of Marketing Research*, 39 (November), 440-454.
- _____ and Aparna A. Labroo (2004), "The Effect of Conceptual and Perceptual Fluency on Brand Evaluation," *Journal of Marketing Research*, 41 (May), 151-165.
- McAllister, Daniel J. (1995), "Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations," *Academy of Management Journal*, 38, 1, 24-59.
- Miller, Stephen and Lisette Berry (1998), "Brand Salience Versus Brand Image: Two Theories of Advertising Effectiveness," *Journal of Advertising Research*, 38, 5 (September/October), 77-82.
- Moorman, Christine, Rohit Deshpande and Gerald Zaltman (1993), "Factors Affecting Trust in Market Research Relationships," *Journal of Marketing*, 57, 1, (January), 81-101.
- Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58, 3, (July), 20-38.
- Nedungadi, Prakash (1990), "Recall and Consumer Consideration Sets: Influencing Choice without Altering Brand Evaluations," *Journal of Consumer Research*, 17 (December), 263-276.
- _____ and J. Wesley Hutchinson (1985), "The Prototypicality of Brands: Relationships with Brand Awareness, Preference and Usage," in *Advances in Consumer Research*, Vol. 12, ed. Elizabeth C. Hirschman and Morris B. Holbrook, Provo, UT: Association for Consumer Research, 498-503.
- Nevin, John R. (1995), "Relationship Marketing and Distribution Channels: Exploring Fundamental Issues," *Journal of the Academy of Marketing Science*, 23, 4, 327-334.
- Newman, Joseph W. (1977), "Consumer External Search: Amount and Determinants," in *Consumer and Industrial Buying Behavior*, eds, Arch Woodside, Jagdish Sheth, and Peter Bennett, New York: Elsevier, 79-84.
- Ohanian, Roobina (1991), "The Impact of Celebrity Spokespersons' Perceived Image on Consumers' Intention to Purchase," *Journal of Advertising Research*, (February/March), 46-54.
- _____ (1990), "Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness," *Journal of Advertising*, 19 (3), 39-52.
- Pollay, Richard W., S. Siddharth, Michael Siegel and Anne Haddix (1996), "The Last Straw? Cigarette Advertising and Realized Market Shares Among Youths and Adults, 1979-1993," *Journal of Marketing*, 60 (April), 1-16.
- Robinson, William T. (1988), "Sources of Market Pioneer Advantages: The Case of Industrial Goods Industries," *Journal of Marketing Research*, 25, 1, (February), 87-94.
- _____ and Claes Fornell (1985), "Sources of Market Pioneer Advantages in Consumer Goods Industries," *Journal of Marketing Research*, 22, 3, (August), 305-317.
- Rotter, Julian B. (1967), "A New Scale for the Measurement of Interpersonal Trust," *Journal of Personality*, 35 (4), 651-65.
- Sheth, Jagdish and Atul Parvatiyar (1995), "Relationship Marketing in Consumer Markets: Antecedents and Consequences," *Journal of the Academy of Marketing Science*, 23, 4 (Fall), 255-271.

- Sirdeshmukh Deepak, Jagdip Singh and Barry Sabol (2002), "Consumer Trust, Value, and Loyalty in Relational Exchanges," *Journal of Marketing*, 66 (January), 15-37.
- Smith, Daniel C. and C. Whan Park (1992), "The Effects of Brand Extensions on Market Share and Advertising Efficiency," *Journal of Marketing Research*, 29, 3, (August), 296-313.
- Song, X. Michael and Mark E. Parry (1997), "A Cross-National Comparative Study of New Product Development Processes: Japan and the United States," *Journal of Marketing*, 61, 2, (April), 1-18.
- Sujan, Mita and James R. Bettman (1989), "The Effects of Brand Positioning Strategies on Consumer's Brand and Category Perceptions: Some Insights from Schema Research," *Journal of Marketing Research*, 26 (November), 454-467.
- Urban Glen L., Fareena Sultan and William J Qualls (2000), "Placing Trust at the Center of Your Internet Strategy," *Sloan Management Review*, 42 (Fall), 39-49.
- Weitz, Barton A. and Sandy D. Jap (1995), "Relationship Marketing and Distribution Channels," *Journal of the Academy of Marketing Science*, 23, 4 (Fall), 305-320.
- Westbrook, Robert A. and Richard Oliver (1991), "The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction," *Journal of Consumer Research*, 18 (June), 84-91.
- Wilkinson, J.B., J. Barry Mason and Christie H. Paksoy (1982), "Assessing the Impact of Short-Term Supermarket Variables," *Journal of Marketing Research*, 19 (February), 72-86.