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**A CONSUMER BASED THEORY OF STRONG BRANDS AND ITS IMPLICATIONS
FOR BRAND EQUITY AND BRAND MANAGEMENT**

by

Samar Kumar Das

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A Dissertation Submitted to the Faculty of the
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For the Degree of

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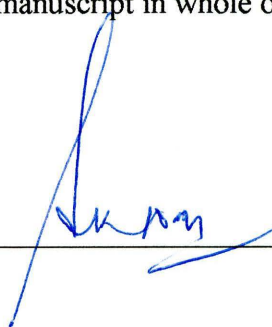
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A handwritten signature in blue ink, written over a horizontal line. The signature is stylized and appears to be 'A. M. ...'.

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This research was two decades in the making! No, I did not spend 20 years in the Ph.D. program. My passion for brands and product management was instilled in a course I took with Late Professor Labdhi Bhandari at the Indian Institute of Management at Ahmedabad, India during my MBA years. It was a sad day for me at Calcutta, India, when I heard on the national TV news that Professor Bhandari died in a plane crash, traveling from Bombay to Ahmedabad, at the young age of 42 years. If it wasn't for Professor Bhandari's inspiration and guidance - I wouldn't be here today, at the United States, pursuing a Ph.D. rather than working for a corporation in India. I dedicate this dissertation to the memory of a great professor, who touched my life and changed it forever.

I have been rather fortunate at the University of Arizona too. I found liberation in Professor Merrie Brucks' course on Perspectives in Marketing, when she let me pursue a particularly messy project idea on Involvement. Professor Melanie Wallendorf's seminar on Marketing Theory was intellectually inspiring and a lot of my theoretical rigor in this dissertation comes from what I learnt in that class. After taking that course, I found I enjoyed both the qualitative and the quantitative side of marketing - this dissertation research is a testimony to that.

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*Dedicated to the memory of Late Dr. Labdhipat Raj Bhandari,
State Trading Corporation Professor of Marketing
at the Indian Institute of Management, Ahmedabad.....*

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ABSTRACT

The power of brands like Coke, Levi's and Nike defies conventional understanding. How do such strong brands get created? What are the sources of their phenomenal strength? The traditional thinking reflected in the brand literature traces the sources of brand strength to the consumer's cognitive knowledge of brand's functional and image attributes, and other associations linked to the brand. I draw upon past research in marketing and social psychology to propose a user-centered view of brand strength. I suggest that loyal consumers actively create 'brandspaces' based on personal, social and cultural factors. These brand knowledge structures may be more insular since they are self generated and anchored in the personal and social self of the user.

In Essay 1 of this dissertation, I take the user-centered approach to propose a method for mapping and measuring consumer-based brand equity. I developed a structural model for the sneakers product category with five consumer-based sources of brand equity ('functional attributes', 'brand image', 'appeal', 'self-brand relationship', and 'perceived popularity') as independent variables, and study their impact on a four indicator measure of brand equity.

In Essay 2, I investigate the role of self-brand relationship schema in promoting insularity of strong brands. I hypothesize that strong brand users, who have high self-brand relationship, suppress or discount negative brand information, as compared to strong users who have low self-brand relationship. Experimental results confirm this central hypothesis. This study clearly shows the centrality of self-brand relationship in promoting brand insularity and brand strength.

CHAPTER I: INTRODUCTION

Brands are at the heart of most consumer businesses (Kapferer 1992; Aaker 1996; Keller 1998). Brands represent intangible assets that are frequently more valuable than the physical and financial assets of such businesses. Even in high technology consumer products, where large capital outlays are required on research and development and on manufacturing capabilities, successful branding may be the key to build price premium and market share - Intel and Microsoft take as much care in developing technology as they do in building their respective brands.

Branding is not rocket science (Keller, 1998; pp. xv). In some senses, it would be easier if it was! There are no strict physical laws guiding the launch and trajectory of brands. Brands have to navigate through the mind spaces of consumers - a far more ephemeral environment than the celestial. Marketers share the world-view of the social scientist in trying to understand the psychological, social and cultural factors that accompany brand building - with the added complexity that brand building is frequently an art - beyond the realms of scientific logic. Creating a brand may require meticulous scientific tools of marketing research, accurate assessment of competition and the marketplace, and the creative genius of advertising agency copywriters and art directors. A successful brand is thus a product of art, science and strategic thinking. This, however, should not imply that studying brands is more complex than other fields of scientific endeavors - just that it is different. We can and do utilize science to study brands, knowing fully well that it may never completely explain the mysteries of why some brands become powerful and strong, and why many others fail. At best, therefore, we may strive

to bring scientific knowledge to bear on the art of brand building as guides rather than scientific prescriptions.

This dissertation research was motivated with the desire to build upon the past research on brands and find such guides that can help a brand manager create, nurture and manage strong brands. What makes a Coke, a Tide, a Nike such powerful brands? How does one create such brands in the future? How does one manage, protect and grow the intangible brand assets, that may sometimes be valued in billions of dollars? To a brand manager, these are important issues, since even with all the advancement in marketing know how and technology - 80% of new brand launches still fail in the marketplace. Out of the few that survive, fewer still get established as strong brands. Even these lucky few face constant threat from competitors, shifting consumer priorities, and technological and life cycle obsolescence. A theoretical understanding of the processes that underlie the creation and maintenance of strong brands could help the marketer to do a better job of managing such brands.

Strong brands can be studied from several different perspectives. A brand could be strong since it holds a dominant market share, a strong competitive position, or a loyal and sizable consumer franchise. Each one of these perspectives could suggest a different theoretical account of how such brands should be managed. The view I take in this research, however, is that of the consumer based sources of brand strength. In the ultimate analysis, a brand exists in the minds of the consumer (Ries and Trout, 1986). A strong brand is strong only because it has a sizable franchise of consumers who adopt and stay with the brand - despite competitive inducements and other pressures on their limited

financial resources. Consumers are often whimsical or even inertial in their choice of brands, but they can also be extremely loyal and faithful to some brands. Such consumer loyalty is actually at the core of most strong brands and can be considered to be the most important assets of such brands (Aaker 1996). Learning what could account for such loyalty, how such loyalty forms, and how one nurtures and maintains it, will guide our thinking on how to create and maintain strong brands.

This dissertation provides some understanding of these processes. In this chapter, I review past research in marketing and social psychology to present a systemic view of user-created and user-centered brandspaces that lead to the formation of strong consumer-brand relationships. The central thesis I propose is that brands that become a part of the personal, social, and cultural world of consumers are the brands that develop strong and enduring ties with consumers.

In essay 1 of this dissertation, I take the user-centered view of brand equity to propose a method for mapping and measuring consumer-based brand equity. I developed a structural model that maps five consumer based sources of brand strength as independent variables, and study their impact on a four indicator measure of brand equity. I demonstrate the method for the sneakers product category. The suggested method can help us determine what consumer-based sources drive the brand equity of strong brands.

In Essay 2, I investigate the role of self-brand relationship schema in promoting brand insularity of strong brands. I define insularity as the propensity of strong consumers of such brands to resist or discount negative brand related information. I hypothesize that strong users of brands who have high self-brand relationship, suppress or discount

negative information for focal brands, leading to strong brand insularity effects. I conducted an experiment, manipulating brand related information in a news story format, that shows significant information processing differences between strong users of brands based on whether they have high or low relationship with the brands.

In the following section, I present a conceptual overview that builds on my central thesis that strong brandspaces are user-created and user-centered. In the next chapter, I present a synopsis of the main findings of the two essays that comprise this dissertation.

CONCEPTUAL OVERVIEW

American Marketing Association defines a brand as “a name, term, sign, symbol, or design, or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition.” At a very basic level, a brand is merely a trademark or a symbol that helps consumer identify a product of a manufacturer. Over time a consumer may learn to trust a brand name as a symbol of quality and good value.

A brand, however, does more than merely provide functional benefits to the consumer. Most marketing text books talk of brands as having a core and an augmented dimension (Kotler 1994, Zikmund and d’Amico 1993). The core level provides the basic essential benefits. The augmented dimension includes additional features like packaging, warranties, manufacturer’s perceived reputation, brand name, and other tangible and intangible product benefits. At the core, most brands in a product category tend to be undifferentiated since they offer the same generic benefits. Brand differentiation typically occurs at the augmented product level.

In the literature there are multiple perspectives on what constitutes a strong brand. Most agree, however, that strong brands tend to be highly differentiated from the competition, are held in high esteem, have personal relevance for the consumers, and evoke a rich set of associations (Keller 1998; Aaker 1996). A strong brand may be identified based on market share, salience with respect to the product category (share of mind), esteem (perceived quality, perceived leadership) etc. In this essay, however, I am more interested in the process dimensions - how are strong brands formed. I look at two

aspects of this process dimension - the cognitive aspects - what is in the minds of the consumers; and the social, cultural, personal aspects - how these dimensions impact the formation and creation of strong brands.

Keller (1993, 1998) presents a cognitive view of brands - what consumers know about the brand and its implications for marketing strategy. He conceptualizes brand knowledge structure as consisting of a brand node in the memory to which a variety of brand related associations are linked. The dimensions of brand knowledge, as proposed by Keller, include brand awareness and brand image. Brand image is the sum total of attribute knowledge; functional, symbolic and experiential benefits; and brand attitudes. Attribute knowledge could be based on product-related aspects, as well as non-product-related aspects like user and usage imagery. The favorability, strength and uniqueness of the brand associations lead to brand preference. The basic brand knowledge - what the brand stands for symbolically and what are the functional uses of the brand - may often be adequate knowledge for consumers to adopt a brand and show strong preference for the brand.

Aaker (1996) presents a more extended framework in his exposition on strong brands. He includes brand name awareness, brand loyalty, perceived quality and distinctive brand associations as the important dimensions of strong brand. Aaker particularly emphasizes brand loyalty as the dimension that many other conceptualizations of strong brand miss in their framework. A loyal customer base is at the heart of strong brands - since it "represents a barrier to entry, a possible price premium, time to respond to competitor innovations, and a bulwark against deleterious price competition," (Aaker

1996, pp. 319).

In describing unique brand associations, Aaker amplifies the focus beyond tangible benefits to additional aspects that includes emotional and self-expressive benefits and four brand identity perspectives organized around the brand-as-product, the brand-as-organization, the brand-as-person; and the brand-as-symbol. In Aaker's words, "the brand identity should help establish a relationship between the brand and the customer by generating a value proposition involving functional, emotional or self-expressive benefits," (Aaker 1996, pp 68).

Aaker's descriptions of brand identity and brand relationship with customers provide a good backdrop to study the social, cultural and personal dimensions of strong brands. These additional facets of strong brands are not as innocuous as they sound. They provide a different, though complementary view, of what processes are responsible for creating strong brands. The conventional view that guides our thinking and practice in marketing almost assumes the consumer to be a passive receptacle of information. The cognitive view of brands (as conceptualized by Keller (1993, 1998)) suggests consumer learning take place with marketer created actions. The mental knowledge configuration is hypothesized to center on a brand node, with all brand knowledge and brand experiences linked to this node. The personal, social, and cultural view, however, imply that consumers are not passive receptacles of information, but active creators of their own brandspaces. Brands acquire meaning and space in consumers' consciousness, not entirely due to ideas planted (positioned, in marketing terms) in their minds by skillful marketers, but by a very active and comprehensive process that involves consumers' self knowledge,

her understanding of the social and cultural nuances, and a reliance on her own experiences and inferred judgments of the product. In the following paragraphs, I outline the user-centered view of brands, citing a growing literature base that supports this alternate view.

The view that the consumer is an active agent in creating brandspaces is not a new paradigm emerging only now in marketing thought. In 1959, Sidney Levy, while talking of brands as symbols, proposed that. "A symbol is appropriate (and the product will be used and enjoyed) when it joins with, meshes with, adds to, or reinforces the way the consumer thinks about himself" (Levy 1959). Even a cursory analysis of these words suggests a need to reorient the way we think of brands. First, it puts the consumer own self at the center - a brand symbol is often meaningless, unless it joins with the way the consumer thinks of herself. The idea that it has to mesh in - is suggestive of elaborate cognitive processing - guided by the self. Reinforcement brings in the notion of maintaining coherence and stability in the consumer's own view of who she is to herself and to the world around her. The important point in all this is that brands as symbols have to carry meaning and substance in the universe of consumer's own world - a world that is guided by her own concerns, of who she is and what she means to the world.

What are the social-psychological processes that can illuminate these observations? The process of selective appropriation of relevant information from a cluttered environment finds support in Hazel Markus's (1977) work on self-schemata. She suggests that the quantity and variety of social stimulation available to an individual at any time is vastly greater than a person can process and even attend to. She quotes research on self-

perception (Bem 1967, 1972) and self-monitoring (Snyder 1974), to put forth the view that the individual is an active constructive information processor - selecting information that is relevant to the self. The extension of this thinking almost automatically applies to the marketing environment. An average consumer is inundated with marketing messages, most of which she chooses to ignore. The little that gets noticed have to be somehow relevant to her needs or to her self.

The relevance to needs is almost axiomatic. Why would someone buy a brand that does not meet needs? What are human needs, however, is a complex question. To view consumers as utility driven, the economists' view of the world is limiting - to say the least. Consumers *are* sometimes utility driven, but that is almost the starting point. The need to be appreciated and accepted in a social world, the need to feel one is worth something (self esteem), and the need to self actualize - are not exactly utility driven needs (Maslow, 1954). These are needs that involve the consumers' social and personal worlds. My central thesis is that brands that become part of this world are the brands that become strong. Ideally then, the social, personal and cultural factors do not only provide the context, but the *reason* for the existence of strong brands. A user centered theory of strong brands would focus on (1) user's personal characteristics (self schema) and how it influences her selection of a brand symbol; (2) her understanding of social and cultural context in which the brand is situated from which she derives the social and cultural meaning of the brand symbol; (3) the processes she undergoes in actively constructing brand meaning and personalizing it; (4) the processes that bond her with the brand and help her form a relationship with the brand.

An Active 'Self'. An individual's perceptions of self is a complex (Linville 1985, 1987), multifaceted knowledge structure (Higgins 1987; Markus 1977). The self-schema may have multiple levels (Rosenberg 1979; Atkin 1981; Feldman 1979). At the minimum, we may talk about the personal self and the social self. The knowledge of who I am, what I stand for, my talents and my shortcomings, my view of myself are all part of the personal self. The social self is constructed around how I think others view me, and what I would like them to think about me. The family, community and group identity influences both the personal self and the social self.

A product cue is evaluated in this self-schematic frame of reference. A product cue activates relevant aspects of the self-schema that guides the meaning abstraction and inference processes. Munson and Spivey (1981) suggest product images could activate self perceptions of who I am (personal self) and how I believe others view me (social self) given preference for a specific product. Sirgy's (1980, 1981) self image / product image congruity theory proposes a self selection of brand symbols based on image congruity - a symbol that is 'me' or helps define 'me' to myself or others is likely to be adopted. The physical characteristics, the advertising, price and packaging, and other associations like stereotypical user imagery determine the symbolic imageries in a product (Sirgy 1982). He argues that the meaning and value derived in a product symbol is inferred from the evoked self-image dimensions. Several other authors have also described the important role material possessions play in defining self identity (Kleine, Kleine, Allen 1995; Belk, 1988; Richins 1994; Levy 1981).

Social and Cultural Context. Some other authors propose a social constructionist approach - the meaning of possessions is socially constituted and socially shared (Dittmar 1991; Solomon 1983; Douglas and Isherwood 1979). Possessions are viewed as part of an elaborate social communication system - communicating information about the possessors and about social relationships. Individuals assign meaning to others based on these symbolic interpretations. More importantly, they assign a social identity to themselves based on similar understanding of the social meaning of the product. Products are thus used not only for impression management, but also for self-definition (Solomon 1983).

McCracken (1986; 1988) locates the product's meaning in a cultural context. Culturally constituted world, is the "world of everyday experiences in which the phenomenal world presents itself to the individual's senses fully shaped and constituted by the beliefs and assumptions of her / her culture," (McCracken 1986, pp. 72). The cultural categories and principles help shape the meaning of a consumer good. He views cultural meaning as being mobile - cultural meaning is drawn from a culturally constituted world, transferred to a consumer good, and ultimately to the consumer. He states that, "one of the ways individuals satisfy the freedom and fulfill responsibility of self-definition is through the systematic appropriation of the meaningful properties of goods," (McCracken 1986, pp. 80).

Meaning Construction Processes. Meaning construction can be viewed as a two way process. Brand symbols have commercial, social and cultural meaning - meanings that the consumer deciphers and abstracts. On the other hand, the consumer also invests

meaning in the brand - through personalization and accumulated history with the brand - reflecting personal episodes and shared associations and linkages with others (Wallendorf and Arnould, 1988; Belk 1988; Richins 1994; Levy 1981; Kleine, Kleine, Allen 1995).

The first process, that of the consumer abstracting meaning from the consumer good may be studied from the social-psychological, social constructionist, and cultural perspectives. In addition to these perspectives, a lot has been written on the semiotic significance of symbols. The discussions of semiotics and the interpretation of signs in a given context is yet another way one can study the meaning abstraction process (Mick 1986, Mick and Buhl 1992).

Kleine and Kernan (1991) offer a social-psychological model for studying how individuals ascribe meaning to an object perceived in a context. The context could be both extrinsic and intrinsic. The features in the object's environment represent the external context. The intrinsic context consists of idiosyncratic personal knowledge and shared cultural knowledge. Whereas they do not shed any light on how the information is extracted, they feel that the meaning creation process is filtered through the individual's intrinsic psychological context. Meaning identification is idiosyncratic, because it results from perception - though there also has to be a shared common understanding of what the object means to other people.

The social constructionist view suggests meaning is socially constituted and socially shared. The socialization process begins in childhood. Cultural and social symbols are learned through enculturation processes and are likely to be highly consensual. The learned symbolic value of the product helps in evaluation of others who

use the product. The same evaluation is also used reflexively to define personal identity (Solomon 1983).

Offering the cultural perspective, McCracken (1986) suggests that the meaning transfer from the culturally constituted world to the product takes place through advertising and propagation of fashion systems. The consumer transfers the meaning from the consumer good to the 'self' following several ritualistic processes. Exchange rituals like gift giving, possessions rituals that involve personalization of the product, grooming rituals that apparently coax out the properties of the product and transfer them to the user, and divestment rituals - are the instruments that transfer the meaning inherent in the physical good to the consumer.

The complementary processes of meaning creation, where the consumer invests the brand with personal meanings could result in very strong linkages with the product. Some of these personalized meanings could be very simple - viz. the idiosyncratic way in which one uses a product or projecting a meaning for the self that may be considered unique to the self. Some others could be far more complex, where a consumer animates the product by infusing personal history into the product - memories of significant people, places and times. Some of this personalization may take place by stripping the product of its commercial meaning and creating a new identity for it entirely based on personal meanings. In the next section I review some of these processes that lead to special bonding with the product and may develop strong relationship and attachment with the product.

Consumer Bonding and Attachment with Products. Wallendorf and Arnould (1988) found that consumers develop attachment with favorite objects based on personal memories and shared history. The “favorite objects serve as beacons or guideposts to orient the individual in, and personalize, both space and time,” (Wallendorf and Arnould, 1989, pp. 538). The favorite objects provide individualized cues for self-expression. In the view of the authors, the object attachment process is very different from social linkage processes. They suggest that the object preference is built over time through a dialectical process involving meaning and affect transfer between individuals and objects. Rochberg-Halton (1979) and Csikszentmihalyi and Rochberg-Halton (1981) state the same thing when they suggest that the value and meaning of an object develops over time resulting from experiences with it and from the psychic and emotional energy invested in it. Richins (1994) confirms a similar view when she states that the private meaning of an object includes the personal history in relation to the object.

Belk (1988) sees the link of the self with objects (possessions) in an even more radical light. Some possessions become part of who we are - extending the ‘self’. We impose our identities on such possessions. In turn, such possessions impose their identity on us - viz. we may believe that a object is ‘me’. Such objects reinforce our sense of identity. In fact, “our identities may reside in objects more than they reside in individuals” (Belk 1988, pp. 141). How do such processes occur? Perceived control, creation, or knowledge of an object are the ways in which an object becomes a part of the extended self. Control signifies mastery, ownership and conquest of an object form. Learning a new software, driving a first car are examples of this kind of control. Creating an object -

a material object or an abstract thought and idea, fosters the identity of the creator. An intimate knowledge of a person, place or thing, also makes it a part of the extended self. These processes are user initiated and very idiosyncratic. The framework of control, creation and personal knowledge may be very useful in the study of strong brands.

Fournier (1998) extends the notion of object bonding to relationship with a brand. A brand could be “an active contributing member of a relationship dyad, and not just a passive object of marketing transactions,” (pp. 344). Brands are frequently humanized and personalized - through spokespersons, use of brand characters (viz. the Pillsbury Doughboy), or infusion of personal meaning due to brand-person associations. She suggests that relationships could be grouped into two broad categories - instrumental relationships that are functionally tied to the attainment of objectives, and socio-emotional relationships that provide social identity functions (e.g. reassurance of self worth) as well as other rewards like security, nurturance, guidance etc. She also comments that relationships could be substantively grounded (task, obligation) or emotionally-based. The emotionally based relationship could range from superficial affect and liking - all the way to passionate love and addictive obsession. Relationships are formed by a series of repeated interactions between the two parties in the dyad. Over time the relationship evolves between the two partners in response to these interactions. A relationship may grow in phases from ‘initiation’ and ‘growth’ to ‘relationship maintenance’ resulting in commitment and trust. Some relationships may deteriorate, due to personal, situational or dyadic stressors (e.g. life stage transitions). Such relationships may ultimately dissolve following a breakdown trajectory. Fournier (1998) identifies different relationship forms

in her research ranging from casual friends and buddies to flings, committed partnerships and obsessive dependencies. She also identifies negative relationship patterns - enemyships and enslavement.

Summary. I reviewed concepts in cognitive and social psychology, cultural anthropology, and dyadic relationship theories - to present the idea that brands are created actively by the user in a dynamic setting - involving the social and cultural milieu, user's personal history and personal associations, and a two way process of meaning creation.

The conventional notion of brands applies too much emphasis on the marketers' actions. Brand knowledge and learning are myopically viewed as resulting from brand and advertising exposures and the elements of brand related information that marketers succeed in planting in the consumers' minds. If the alternate view presented in this conceptual overview of a user-centered and user-created brandspaces is true, then it might suggest a fundamentally different approach to brand management.

EXPLANATION OF THE DISSERTATION FORMAT

The dissertation is comprised of the two closely related essays mentioned earlier. Each of the two essays examines some aspect of strong brands and uses a different methodological approach to do so. Though the essays are closely related, they are also independent studies when viewed individually. The essays are presented in journal manuscript format. Essay 1 is targeted for submission to the *Journal of Marketing Research*. Essay 2 is targeted for submission to the *Journal of Consumer Research*.

This dissertation research was not part of a larger collaborative project. The dissertation research was conducted under the supervision of my dissertation committee, and I obtained valuable inputs from several members of the committee. The dissertation director, Professor Merrie Brucks, was closely involved in supervising both the essay studies. I benefited from her advice, inputs and suggestions while designing the studies as well as in interpreting the results. I am grateful to Professor Jennifer Escalas for letting me use the Self Connection scale she developed for her doctoral dissertation research. She also suggested a more efficient approach in designing the study for Essay 2. Professors Sidney Levy, Jeff Greenberg, Lee Sechrest, and Jennifer Escalas made valuable comments on my dissertation proposal that helped me sharpen the theoretical and conceptual framework of the two studies.

CHAPTER II: PRESENT STUDIES

The conceptual overview, methods, results, and conclusions of the two studies are presented in the papers appended to this dissertation. The following is a summary of the most important findings in these papers.

Essay I: A Structural Model of Consumer-Based Brand Equity

Overview. In this paper, I define consumer-based brand equity as the differential effect of consumer based sources of brand equity on the outcome measures of brand equity when two brands in a product category are compared to each other. I propose a structural modeling approach to measure brand equity and demonstrate the technique for the sneakers product category. The identified sources of brand equity for this category were ‘functional attributes’, ‘self-brand connection’, ‘perceived popularity’, ‘brand image’, and ‘styling and appeal’. Four items were used to measure brand equity. The items were based on ‘price premium willing to pay’, ‘discount to switch’, ‘brand worth’, and ‘price premium willing to pay at 50% intention to buy level’. Brand equity models were developed for two cases - a strong brand model, comparing the most preferred brand to the third most preferred brand in the product category; and a secondary brand model, comparing the second most preferred brand to the third most preferred brand in the product category. A brand equity model was also developed for Nike, the strongest brand in the product category.

Summary of Findings. Functional attributes had a marginal role in driving brand equity for the strong brand and an insignificant role for the secondary brand. These results support the notion of perceived product parity, in terms of functional quality, among top

brands in the sneakers product category.

Self connection with the brand was found to have a very important mediating role in driving brand equity for both the strong and the secondary brand. Positive self connection with the brand was an important factor in enhancing brand equity.

Interestingly, indifference to the brand (neutral self connection) or an actual distancing with the brand (negative self connection) had an equally important and opposite role of depressing brand equity.

Self connection with the brand induced consumers to form a highly inflated perception (halo effects) of functional attributes. Such halo effects were seen both for the strong brand and the secondary brand, but the effect was much weaker for the secondary brand.

Other than self connection, aesthetic appeal of sneakers was important in driving brand equity. The styling and looks of sneakers were more important than the functional attributes in driving brand equity.

All the four brands in the study had distinctive brand and user imageries. The differences in their perceived imageries, however, did not impact brand equity directly! Only when these imageries fostered high self brand connection, they became important in driving brand equity. Perceived popularity also did not affect brand equity directly, but played a significant role in the formation of self brand connection.

The Nike brand equity model was estimated with Asics as the comparison brand. The brand equity of Nike - Asics was calculated as \$42.18. The dollar impact on brand equity of the five sources of brand equity was also calculated and is shown in the paper.

Essay II: A Theory of Self-Brand Relationship Schema and it's Role in Promoting Brand Insularity

Overview. Brand Insularity, the propensity of consumers to resist negative information about a brand or competitive inducements to switch, can easily be viewed as the most essential ingredient of strong brands. In this essay, I propose that consumers who have strong self-brand relationship are more likely to suppress or discount negative or ambiguous information about the brand, resulting in stronger brand insularity, as compared to consumers who do not have high self-brand relationship.

I conducted an experimental study to validate a set of hypotheses resulting from the above proposition. Strong users of two leading brands of sneakers - Nike and Reebok were identified based on current and past usage and preference ratings for the brand. They were asked to read a fictitious news story about their own brand. After reading the news story, they did a free recall task and then evaluated the previously presented news information on several measures. Brand and functional attribute ratings were also obtained, both pre- and post- exposure. The subjects were classified, post-hoc, into two groups as Self-Brand Relationship (SBR) schematics and non-SBR schematics, based on their scores on a 13 item Self-Brand Relationship scale.

The main hypotheses, comparing the SBR schematics with non-SBR schematics, were: (1) SBR schematics would evaluate negative and ambiguous information more positively than the non-SBR schematics; (2) SBR schematics were more likely to suppress negative information about the brand in the long term memory; (3) SBR schematics would have a less negative change in brand attitude post exposure; and (4) SBR schematics

would have a higher 'intention to try' the brand.

Summary of Findings. The initial brand attitude and brand preference were statistically comparable in both the SBR and the non-SBR group. In the negative information condition, SBR schematics evaluated the brand information significantly more positively than the non-SBR schematics. The findings were repeated for the mixed, ambiguous information condition also. Thus, both the information processing hypotheses were supported.

The free memory recall data supported the hypothesis that SBR group would have fewer recall of negative information as compared to the non-SBR group. The recall for positive information, however, was the same in both the groups. Thus, only one of the two memory hypotheses was supported.

The post-exposure measures of brand attitude was significantly higher for the SBR group. Since the subjects had read negative and ambiguous information about the focal brands, the change in brand attitude (initial - final brand attitude) was negative for both the groups. The change in brand attitude, however, was significantly less for the SBR group, as hypothesized.

The 'intention to try' the brand was positive for both the groups, but was significantly higher for the SBR group as compared to the non-SBR group. This measure was important, since it could be closest predictor of insular behavior in the market place.

Thus all the main hypotheses, except the positive information memory recall hypothesis, were supported. This study clearly shows the centrality of self-brand relationship in promoting brand insularity and brand strength.

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APPENDIX A

**A STRUCTURAL MODEL OF
CONSUMER-BASED BRAND EQUITY**

INTRODUCTION

Brands are complex entities. How does one explain the phenomenal power of a Coke, a Tide or a Nike? One could analyze their sources of strength from several different perspectives - competitive strength, dominant market share, distribution channel clout etc. However, the most important source of their strength perhaps lies in their core consumer base - in what such consumers know, think and feel about these brands. This is the fountainhead that makes all the other dimensions of brand strength possible. An understanding of the consumer based sources of brand strength and how it impacts the brand equity of such brands can tell us a lot about what drives the power of these brands. Such an understanding is vital to effectively manage such brands and keep them on the right trajectory. More importantly, it should help the weaker brands competing in the same market, to develop their competitive response to such powerful brands.

In this study we propose a structural model of consumer based brand equity for strong brands. We adopt a consumer based view of strong brands, as brands that have a mix of the following characteristics in their core consumer base: favorable and distinctive brand perceptions leading to high brand preference and market share; brand loyalty and brand commitment such that a consumer is unwilling to or resists switching to another brand; and a willingness to pay a price premium for the brand over other brands available in the market. There may be other ways of describing strong brands based on brand salience and esteem (e.g. Landor Associates definition of a strong brand based on 'Share of Mind' and 'Esteem' dimensions; Owen 1993); consumers' perceptions of quality (Equitrend survey; Lefton 1991); dominant market share, financial valuation of the brand

name (Interbrand, Birkin 1994) etc. In this paper, however, we look at strong brands only from the consumer perspective, since the motivation is to study the consumer based sources of brand strength. It is implicit in this consumer driven view that strong brands can be defined only with respect to a strong consumer base. Thus, a niche brand that does not enjoy dominant market share in the total product category, can still be classified as a strong brand if it dominates the niche it serves and has a strong consumer following in its own niche segment. A rival brand that desires to penetrate this segment would need to understand what drives the consumers in this niche segment.

Our aim is to develop a model that maps the various cognitive sources of consumer based brand equity and gauges their impact on a multidimensional measure of brand equity. Unfortunately, however, brand equity does not have a clear and universally accepted definition in marketing. We first review how the understanding of 'brand equity' has evolved in the marketing literature and develop our definition of consumer based brand equity. Following this we present our structural modeling approach to study the sources and outcomes of consumer driven brand equity of strong brands. We then illustrate the proposed method for the athletic shoes product category.

BRAND EQUITY

The word equity has its origin in the financial world. It stands for investment or property. The financial roots suggest we should be able to measure it clearly and unambiguously. Thus, calculation of brand worth to represent it as an intangible asset on the balance sheet, or valuation of a brand for divestment, need preciseness and underlying transparency that meet the standards of financial objectivity. Several authors have looked at brand equity from the financial viewpoint. For example, Simon and Sullivan (1993) propose an equity measurement approach based on stock market estimation of a firm's worth. Mahajan, et al. (1990) measure brand equity under conditions of acquisitions and divestment. Wentz and Martin (1989) develop an approach based on a brand-earnings multiplier. Farquhar et al. (1991) propose a momentum accounting system of brand valuation. In addition, several commercial firms and financial newsmagazines have developed their own system of valuing brands (Interbrand; Financial World; see descriptions in Keller 1998).

Financial valuation of the brand's worth served an important purpose in marketing - it helped us focus on brands as long term assets. Extending the financial paradigm to the marketing context has, however, created several ambiguous expectations. To maintain parity with the financial notion perhaps, scholars have tried to define brand equity in marketing as a single measure using words that are synonymous with financial terms. Thus several authors have defined equity as the worth of the brand or the 'added worth' endowed by the brand name to the product (Aaker 1991; Biel 1991; Farquhar 1989; Kamakura and Russell, 1993; Srinivasan 1979). The added worth has frequently been

measured on a price metric (Aaker 1996; Srinivasan 1979, 1994; Swait et al. 1993), often as the 'price premium consumers are willing to pay' for the brand over a baseline brand. The choice of a price premium based measure appears to be reasonable from a financial viewpoint because it can be easily translated to reflect the profit potential of the brand and its imputed financial worth. However, it does not serve the marketer very well, despite the fact that, "price premium may be the best single measure of brand equity available, because it directly captures the loyalty of customers in a most relevant way" (Aaker 1996, pp 321). It focuses on the outcome measures and does not link brand equity to the sources of brand equity - namely what is in the consumers' minds. Thus it is of limited use in guiding and developing brand management strategies. Further, in a competitive market, ability to hold on to and expand market share, ability to launch brand extensions, being able to advertise more efficiently due to the existing favorable knowledge base of the consumers - all have an impact on the profitability of the brand (Aaker 1996; Keller 1993, 1998). Most of these other elements of brand's intrinsic profitability potential cannot be captured by using a price premium as the sole measure of brand equity.

There are other limitations with this approach of defining brand equity. The 'added worth' definition of brand equity invites a comparison of the brand name product with a baseline fictitiously named product (Keller 1993). A fictitious product does not exist in reality. A pure commodity would be closest to a fictitious product - but most branded products are manufactured goods and hence not available as commodities. Some authors have used a store brand as the baseline brand for comparison (e.g. Srinivasan 1994), which may not be an entirely correct approach since store brands do carry some

equity of the brand name of the store itself. Thus Safeway Coffee is not really an unbranded coffee - it may carry the equity of the Safeway name. In some cases, if the baseline brand is not in the consideration set of the consumer, it may actually carry a negative equity for that consumer, because he may not be willing to use the product even if he got it for free!

An absolute measure of brand equity based on comparison with a fictitious brand could also be misleading at times. A brand manager enamored by the high equity of his brand may be tempted to extract maximum profitability by increasing the prices to a level suggested by the high absolute measure of brand equity. However, brands exist in competition with other real brands in the product category and not with some fictitious brand. The other brands may have sizable equity of their own. At a high price level, some consumers may just switch to other brands, despite holding a superior price perception of the initial brand. The brand switch could occur due to a host of reasons like incremental perceived disutility at high prices, or a willingness to accept lesser options because they meet needs sufficiently. Hence, some measure of brand commitment, the propensity to stay with a brand despite competitive inducements or price differentials, could be another important dimension of brand equity. Aaker (1996) suggests using 'discount to switch' as another measure of brand equity. Since the switch to a lesser brand might occur despite the higher brand worth perception of the initial brand, the brand commitment indicator may not be a parallel measure to the price premium based measure of brand equity. One could argue that the price premium measures are obtained as 'willingness to pay a price premium' and consequently it reflects brand commitment. Willingness to pay, however,

may not imply that the consumer will certainly pay that premium. To make the measure meaningful, we should also determine 'how willing is the consumer' to pay the price premium at different price levels.

Brand Equity - Sources and Outcomes

Recent additions to the brand equity literature have moved from the 'added worth' definition of brand equity to defining equity both in terms of the sources and marketing related outcomes. For example, Keller (1993, 1998) suggests that we should both look at the (1) sources of brand equity (what is in the consumers' minds - brand knowledge and brand awareness) and (2) how it impacts consumers' response to different elements of the firm's marketing program. In this way we can determine "what aspects of brand knowledge cause the differential response that creates customer based brand equity". This is a more comprehensive framework. It recognizes that the equity of the brand actually lies in the 'property' the brand owns in the minds of the consumer. Through marketing actions we create, guard and enhance this property. The outcomes of this 'property' owned by the brand may not all be captured in an unidimensional price premium measure of brand equity. Other broad based indicators of brand equity may be considered as well - like brand loyalty, brand insularity, brand preference, response to advertising, brand extensions etc.

Aaker (1996) proposes a set of ten indicators that he calls the Brand Equity Ten to measure brand equity. Though he explains that the price premium may be the best single measure of brand equity available, he proposes other constructs based on buyer perceptions (price premium, satisfaction, perceived quality, popularity, esteem, perceived

value, differentiation, and awareness) to measure brand equity. He recommends constructing a summary measure based on the importance of the dimensions for a given brand in a particular competitive situation.

Both Aaker's (1996) and Keller's (1993) approach are descriptive. It may help us to understand the brand's situation on different source dimensions - but it does not help us to estimate the impact of these source dimension on some measurable dimension of brand equity. How the different elements of the sources of brand equity impact the marketing related outcomes still remain an issue to contend with. Without this kind of knowledge, formulating optimal marketing strategy can still be difficult.

In a 1994 paper, Park and Srinivasan propose a method where they estimate brand equity arising from attribute based and non attribute based sources for brands in two product categories. Their finding that among top brands, attribute based sources do not account for much variation in brand equity, has important implications for marketers. The major drawback with their approach is that it does not help us to understand the non attribute sources of brand equity. Marketers need to know what aspects of the non attribute sources are actually resulting in enhanced brand equity of their brands.

In our paper we propose a method that enables us to map the cognitive sources of attribute based and several non-attribute based sources of brand equity and measure their relative impact on a multidimensional measure of brand equity. We present the details of our approach, starting with our definition of brand equity.

CONSUMER BASED BRAND EQUITY

We define *consumer based brand equity* as the differential effect of the consumer based sources of brand equity on the outcome measures of brand equity when two brands in a product category are compared to each other. This definition is based on Keller's definition of customer based brand equity as the differential effect of brand knowledge on consumer response to the marketing of the brand (Keller 1993). However there are some important differences that are outlined below:

Keller's use of the term 'customer-based brand equity' does not make any distinction between customers and consumers of the brand. We restrict the scope of our definition to the *consumers of the product category* since past research suggests that knowledge structures shaped by actual use experiences are likely to be different than knowledge structures based merely on brand awareness and knowledge.

Brand equity of a brand in our definition is measured relative to other brands in the product category and not with respect to any baseline fictitious brand. Measuring brand equity of a brand relative to another brand in the category may look like a very cumbersome process, since the number of pairs of brands to study might become very large if there are several brands in the category. However, for product categories where few top brands account for the major share of the market, this might not be an issue, since studying the top two or three brands in the category could be enough to understand what consumer based sources drive the equity of the strongest brands in the segment. Frequently the objective may not be to profile the individual brands in the category, but to find out the critical consumer based sources of brand equity that drive the relative price

premium (or other outcome measures of brand equity) of the most preferred brand over second and third options. Different brands can be ranked differently by each consumer, but merely looking at the three pairs of preference rankings (first preferred - third preferred; first preferred - second preferred; second preferred - third preferred) we can find out the critical consumer based sources that account for price premiums (or other outcome measures of brand equity) among top brands in the product category.

We do not restrict the sources of brand equity to consumer knowledge about the brand. Consumers' response to a brand need not be entirely rooted in brand knowledge, particularly for the core consumers of strong brands. Increasing evidence in the literature suggests that consumers actively participate in abstracting brand meanings, in personalizing the brand meaning, and in building self connections and relationship with the brand (McCracken 1988; Belk 1988; Richins 1994, Solomon 1983; Sirgy 1982; Escalas 1997; Fournier 1997). In an exploratory phase, we studied these processes in-depth using qualitative techniques. We interviewed a cross section of 14 informants to find out the underlying reason for their loyalty and commitment to brands they were using regularly. The salient findings are summarized here: (1) The processes of meaning abstraction and personalization are likely to occur for those brands where the informant has favorable perceptions and experiences with the brand, and identifies with the brand's personality and image. (2) Direct knowledge about brands tend to be superficial and sketchy. However, most informants had a rich repertoire of personal experiences and episodes associated with their favorite brands. Brand evaluation seem to be heavily influenced and biased by their personal experiences and anecdotal evidences about such brands collected from personal

sources like family and friends. (3) Self connection and relationship with a brand generally developed over a period of time. Sometimes the relationship could be inherited - the brand parents used became the brand of choice. Significantly, such brands are imbued with trust and faith, in addition to understandable nostalgia. (4) The most important relationship pattern seem to be that of trust based on a brand meeting expectations consistently over time. However, evidence of other kind of relationships, both positive and negative, were found aplenty. Once settled in a positive relationship pattern, most informants in the study were uncomfortable harboring thoughts of checking out other brands and evaluating merits and demerits of their chosen brands vis-à-vis other brands. They built defenses by undermining other brands (often without any objective information) or arguing that it was not worth their time anyway. (5) Brand meaning personalization was quite common. Interestingly, even when the personalized meaning attached to the brand echoed the brand's advertising message, informants would not overtly see the connection. (6) Self connection and identification with a brand could happen for all kind of products - symbolic as well as utilitarian. The self connection 'points' and processes could however be different for different kinds of products. For symbolic products, an internalization of the brand's image and ultimate 'merging' with the self concept and self image of the informant seemed to be the connecting process. For utilitarian products, the first level of connection might occur at the level of the functional attributes itself. The brand's functional properties frequently achieved a 'hallowed' status - the 'best', the 'only', and 'nothing can ever compare with this' sentiments. In granting this hallowed status to the brand, the reflected message was often that the informant was knowledgeable

and appreciated good value, used only the best, was proud to do so and felt very confident in her choice. Higher level and more meaningful connections were fostered with the core self concept, such as 'I am a good mom, I must always dress my kids 'Tide' clean'. Most such products thus found a connection at the level of self esteem, self worth and associations with what could be called the core or aspirational values of the consumer.

These exploratory findings suggest that strong brands could be driven by cognitive structures that are anchored in the self, rather than in the brand. The self created and self experienced elements of the knowledge structure should have a stronger impact on the brand outcomes than the elements directly associated with the brand - like brand image, user imagery, popularity and esteem, etc. Thus, we propose that the 'self brand connection' variable would have a greater impact on brand equity than the other source variables for strong brands. However, since positive brand image and brand perceptions (both attribute based and non-attribute based) are necessary for a strong self connection to develop with the brand, we propose that all these other sources may have a significant impact on the formation of 'self brand connection', and could impact brand equity through 'self brand connection' as the mediating variable. In addition, these sources of brand equity could also have a direct impact on the outcomes of brand equity. Since we noticed some evidence of a strong self connection leading to an inflated perception of functional attributes, we propose that the 'self connection' variable could lead to holistic processing of the functional attributes. At the same time, since good functional quality and performance is important for self connection to develop (the brand should meet quality expectations), we feel functional attributes could also directly influence the formation of

self connection with the brand.

We use structural modeling technique (using Lisrel 8 software) to map the sources of brand equity and measure their impact on brand equity as the dependent variable. The choice of structural modeling technique was dictated by several considerations specific to the study: (1) The latent variables measuring the sources of brand equity could be structurally related. Structural modeling enables us to study causal or mediating relationships among variables simultaneously. (2) Several outcome measures of Brand Equity can be modeled simultaneously as dependent endogenous variables. (3) The latent variables representing the sources of brand equity, particularly the non-attribute variables are likely to be highly correlated. This could lead to high measurement errors as well as multicollinearity problems. In such conditions, structural modeling technique should be more sensitive since it partials out the measurement errors from the variables. Further, the technique allows for modeling correlated latent variables. (4) Under conditions of holistic processing, as could be the case with 'halo effects' associated with strong brands, some variables may have bi-directional relationships. For example, it is possible that high perceptions of functional attributes could lead to high esteem of the brand. At the same time, because a brand is held in high esteem, it could result in inflated perceptions of functional attributes. Structural modeling techniques can help us tease apart such influences as will be demonstrated later in our results section.

However, the problem with the structural modeling approach could be its inherent flexibility which makes choosing a definitive model difficult. Several acceptable models can be generated merely by iterating relationship equations and trying out different data

fitting strategies. It is therefore important to have theoretically grounded justification for all relationships among variables modeled in the simultaneous equations. Further, adequate care should be taken in developing the measurement model so that indicators for each variable load uniquely on factors and do not have theoretically invalid correlation among themselves. Keeping these caveats in mind, we started out with a large set of indicators for each variable in our model, and did extensive pretests to arrive at a final set of indicators that do not show theoretically invalid correlation. The model building steps are explained in as much detail as possible, so that the procedure is transparent. The same model structure is obtained in several runs with different sets of data, ensuring the validity of the findings.

The sources of brand equity considered in the model were adapted from Keller (1993) and Aaker (1996), as well as generated from a qualitative study done on the selected product category. Keller proposes measuring brand awareness; price perception; perceptions of functional attributes; brand image; user imagery; and brand attitudes (Keller 1993). Aaker's brand equity ten measures include price premium, satisfaction / loyalty; perceived quality and leadership; esteem; perceived value; distinctive brand and user personality; brand differentiation; awareness and other measures based on market behavior (Aaker 1996).

In our study the subjects were screened on awareness of the four test brands selected for the study. The respondents were classified into strong or weak users based on loyalty and brand preference measures. The source variables considered in our model included: Functional Attributes; Brand and user Imagery; Perceived popularity and

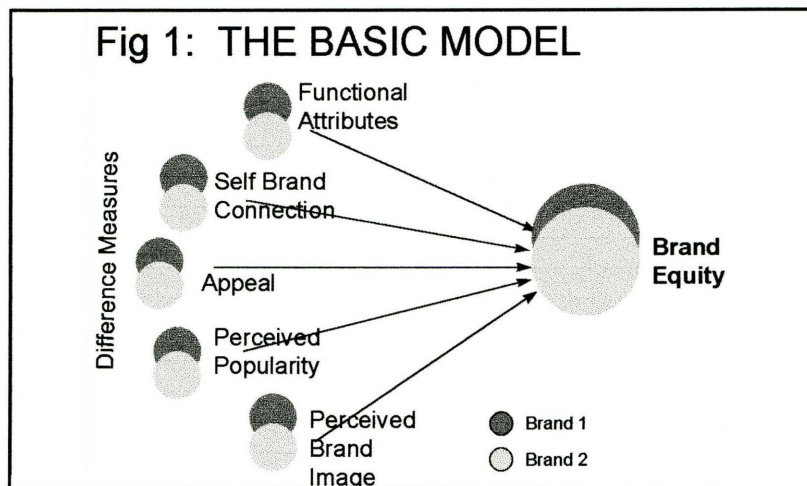
leadership; Aesthetic appeal (since the product category studied had a high value expressive dimension); and Self Brand Connection. The last variable (Self Brand Connection) was introduced in the model to understand the role of user created connection and relationship with the brand and how it impacts the formation of brand equity. We measured outcomes of brand equity on a scale that had four indicators, designed to reflect price premium, perceived worth, intention to buy at different price levels and discount to switch to a less preferred brand. A hierarchical structural causal model estimated the impact of the differences of ratings on source variables for pairs of brands on measures of brand equity.

METHOD

Design Overview. We selected athletic shoes as the product category to investigate, for reasons outlined later in this section. Subjects were presented a Concept Statement for a fictitious product extension called 'All Purpose Sneakers'. They were told that four top manufacturers (Asics, Etonic, Nike and Reebok) were planning to introduce all purpose sneakers in the near future. After reading the concept statement, subjects ranked the four brands in order of preference and then provided ratings on four measures of brand equity based on price premium willing to pay, discount to switch, perceived brand worth and intention to buy at different price ranges. After this task they rated the four brands on several items that mapped the sources of brand equity. These source variables were - 'functional attributes', 'brand image', 'self brand connection', 'perceived popularity', and 'styling and appeal'.

The four selected brands were ascertained to have comparable functional quality based on a '*Consumer Reports*' (1995) finding. To operationalize our definition of consumer based brand equity, we formulated structural models by taking the differences of perceived ratings for different pairs of brands. Since the four test brands had comparable objective functional quality, differential brand equity between two brands can be attributed to the perceived subjective differences between the brands.

The basic analytical model is shown in figure 1. After initial runs with the basic model, hierarchical models were formulated to study the mediating structural relationship of 'Self Brand Connection' with other independent variables in the study.



The details of all aspects of the study design follows:

Product Category. The product category (athletic shoes) was chosen to meet several criterion. First, the category had to be one for which college students would be a primary target market. Second, the major identified sources of brand equity, both attribute based and non-attribute based, should be considered highly relevant by marketing experts. At the same time, the study of brand equity requires that the actual functional quality of the products must be controlled. A *'Consumer Report'* (1995) article on running shoes indicated little difference in functional properties among some top brands, based on extensive laboratory tests and performance reports collected on a trained panel of six men and six women. In their report they state that "despite all the jargon, we have found little difference in how the various materials and devices perform - most get the job done". In the men's running shoes category, Nike Air Structure, Asics Gel-Lyte, Etonic Stable Air Pro and Reebok Ventilator obtained very close overall score (80 - 85 out of 100). In the women's category, Nike Air Max, Etonic Stable Air Pro obtained the same score (80) whereas Asics Gel Exult and Reebok Ventilator obtained around 70 points.

However, different brands from the same manufacturer (e.g. Nike Air Max and Nike Air Wind Runner) had some differences in their overall score.

We selected Nike, Asics, Reebok and Etonic, the four top brands with comparable overall score on functional quality, as the four test brands to conduct our study. To get around the problem of different brands from the same manufacturer having some differences in overall score, we decided to create the fictitious product extension called “All Purpose Sneakers”.

Procedure: A survey questionnaire was administered to student subjects. In part A, subjects provided some demographic information and then indicated their awareness and usage of brands in the athletic shoes category. They also indicated the brand they were most likely to buy on the next purchase occasion. Subjects were classified post hoc into strong or weak users of particular brands based on current usage (using the brand for at least one year) and intention to buy (most likely to buy the brand on the next purchase occasion).

In part B of the survey, subjects read a concept statement for “New All Purpose Sneakers”. The concept statement presented a cover story that across the country on college campuses, sneakers have become the footwear of choice - to be worn in all seasons, all occasions, and everyday, and following this trend, major manufacturers were expected to introduce sneakers for all purpose and everyday wear. The concept statement explained that these sneakers would be ideal for light sporting activities like jogging and cross training, and the styling of these shoes were expected to reflect the current fashion trends. The purpose of the study, as mentioned in the concept statement, was to obtain

consumer reactions to these new kind of sneakers.

After reading the concept statement, subjects were asked to evaluate 'All Purpose Sneakers' if it were to be introduced by the following four manufacturers - Asics, Etonic, Nike and Reebok. They were first told to indicate their rank preference for these four brands, *assuming that all the four brands were priced about the same*. After this task, the subjects responded to four measures of brand equity for each brand.

After the concept test, subjects' ratings were obtained on a battery of items for each of the four test brands on the source dimensions: "Functional Attributes" (8 items); "Perceived Popularity" (5 items); "Self-Brand Connection" (9 items); "Appeal" (2 items) and "Image" (3 items). After completing this task the subjects were debriefed and dismissed. Over 200 subjects participated in this final study for course credit, yielding 188 usable questionnaires.

Dependent Variable. Four items were used to measure Brand Equity. Following Park and Srinivasan (1994) and Aaker (1996), one item was based on 'price premium willing to pay' for the first preferred brand over the second preferred brand. The item was repeated to obtain 'price premium willing to pay' for the first preferred brand over the third preferred brand. The fourth brand was excluded from the analysis to avoid extreme scores (Park and Srinivasan 1994). The subjects had read in the concept statement that these sneakers were likely to be priced in the average range. The item on 'price premium willing to pay' suggested that these sneakers were likely to be priced in the range of \$30 to \$120 to provide a reference price range.

Aaker (1996) suggests using 'discount to switch' as another measure for measuring brand equity. Though conceptually we feel 'discount to switch' may not be a parallel measure to 'price premium willing to pay' due to considerations outlined earlier, we included this item to map the brand insularity dimension of brand equity, since it shows how resistant the consumers are to competitive brands. The item was posed as, "Let us suppose that your most preferred brand was available at a retail price of \$100. How much of a discount in \$ terms would make you switch to your second most preferred brand?" The same question was repeated for obtaining the discount to switch with respect to the third preferred brand. An earlier pretest had revealed that some subjects were not likely to switch irrespective of the discount offered. So this item provided two options to the subject - indicate 'discount to switch' or check the box that said "I am not likely to switch irrespective of the discount offered". For those few subjects who indicated that they were not likely to switch irrespective of the discount offered, we later coded the 'discount to switch' as being equal to the 'perceived brand worth' of the more preferred brand (obtained from another item measure of brand equity). Conceptually, coding this as equal to the price of the more preferred brand is equivalent to saying that they would take the less preferred brand for free.

Though 'price premium willing to pay' as a measure of brand equity has been suggested and used by other scholars, our pretests had revealed some problems with this measure of brand equity, particularly for a product category where there are several models from the same manufacturer and there could be a lot of variance in the actual prices in the marketplace. In this situation, we feel, consumers may have a wide range of

reference prices in their mind and their responses may be somewhat arbitrary. Further, as explained earlier, 'price premium willing to pay' does not ask the very pertinent complementary question 'how willing to pay'. Consumers' willingness to pay a price premium may differ at different price premium levels. So we developed another item where we presented the subject with ten price tiers (\$30 to \$120 in \$10 increments). The item asked the subjects to indicate how likely they were to buy the brand of 'All Purpose Sneakers' on a 10 point scale for each of the ten price tiers. This item was repeated for all the four brands. The mid point of the highest price tier (e.g. \$65 for the range \$61 - \$70) at which the subject first provided at least 50% intention to buy rating was coded as the 'likely price willing to pay' for the brand. Differences of 'likely price willing to pay' between brands (first - third most preferred; second - third most preferred; first - second most preferred) were computed and coded as the 'price premium willing to pay at 50% intention to buy' level.

Following the notion of brand equity as 'added worth', we decided to have a fourth item that measured the perceived brand worth of each of the four test brands. We presented the subjects with four 'brand worth meters' (one for each brand) - drawn to look like thermometers with points (\$20 to \$120 in \$10 increments) marked on the stem of the meter. Subjects were asked to indicate the worth of the brand by filling in the stem of the meter or by marking on the stem. Differences of brand worth between pairs of brands (first - third most preferred; second - third most preferred; first - second most preferred) were taken as measures of perceived brand worth.

Independent Variables. The list of functional attributes (8 items) was compiled from *Consumer Reports* (1995) and from a pretest done earlier on student subjects. The pretest on functional attributes also attempted to obtain the importance of these functional attributes to elicit the preference structure. However, the pretest revealed that most subjects rate all the functional attributes about equally important. In addition to the functional attributes, the styling and appeal of athletic shoes came out to be an important attribute, and hence was included as another factor in our study (2 items). The Self Brand Connection items (9 items) were adapted from an item inventory developed by Escalas (1996). Aaker (1996) suggests perceived popularity and leadership, and brand image as other important measures of brand equity. We developed 5 items that measured the perceived popularity of the brands, and 3 items that measured brand image. An important consideration in generating items for measuring brand image was to keep the statements general and not specific to any brand. The 3 brand image items measured distinctiveness of brand personality, distinctiveness of user imagery and appeal to self. The functional attributes were presented on 7 point semantic differential scales. All other independent variable items were measured on 7 point Likert scales.

Two data sets with $n = 188$ each were created initially by taking the differences of ratings for the (1) first preferred brand and the third preferred brand and (2) the second preferred brand and the third preferred brand. These two data sets were created in order to test the brand equity for the first and the second preferred brand with the third preferred brand serving as the baseline brand. The fourth preferred brand (which was the least preferred brand in the set of four brands) would generally get extreme scores and hence

was not considered suitable as a baseline brand for comparison (Park and Srinivasan, 1994). These data sets look at differences between brands ranked in order of preference, and hence includes all brands that may have occurred in any of the preference ranks. Later in the analysis, we look at individual brand pairs. Exploratory factor analysis on each of the two initial data sets helped us to identify the items that load on each of the measurement factors. We subsequently ran confirmatory factor analysis using Lisrel 8 on both the data sets to identify the items that load uniquely on each factor. Identical items loaded uniquely for each factor in both the data sets. The items that were retained for each factor after this analysis and the model fit indices are presented below:

Table 1: Measurement Items

A. Brand Equity (4 items):

Cronbach Alpha for standardized variables: .80

P: Price premium willing to pay

D: Discount to switch

E: Price premium at 50% intention to buy

W: Added brand worth

B. Functional Attributes (4 items):

Cronbach alpha for standardized variables: .82

U2: Cushions feet from impact.

U5: Comfortable to wear

U6: Good arch support

U8: Good fit

C: Self Brand Connection (4 items):

Cronbach alpha for standardized variables: .79

SC3: The image of brand X agrees with my self image.

SC4: I feel a personal connection to brand X.

SC6: Brand X reflects who I am.

SC8: I feel affection towards brand X.

D: Perceived Brand Image (2 items):

Cronbach alpha for standardized variables: .54

PI2: Brand X has a clear brand personality.

(measures distinctive brand image)

PI3: I have a clear image of the type of person who would use brand X.

(measures distinctive user imagery)

E: Perceived Popularity (2 items):

Cronbach alpha for standardized variables: .92

POP2: Most college students on the campus wear X brand of sneakers.

POP3: In comparison to other brands, X is the most popular brand of sneakers among college students.

F: Styling and Appeal (2 items):

Cronbach alpha for standardized variables: .92

ST2: I like the styling of X shoes.

ST3: X sneakers look good.

Confirmatory factor analysis model fit indices:

N = 188 for both data sets.

Data set 1 (first preferred brand - third preferred brand):

$p = .060$; RMSEA = .033; Goodness of Fit: .92; Adjusted Goodness of Fit: .89

Data set 2 (second preferred brand - third preferred brand):

$p = .071$; RMSEA = .032; Goodness of Fit: .93; Adjusted Goodness of Fit: .89

RESULTS AND DISCUSSIONS

Our plan of presenting the analyses is as follows: We will first consider the general model where we develop structural models for two cases: (1) Strong Brand Model - formulated by taking the differences of ratings for the most preferred brand (the strong brand) over the third preferred brand and (2) Secondary Brand Model - formulated similarly for the differences between the second preferred brand (the secondary brand) and the third preferred brand. At this stage, we consider all brands that may have appeared in any of the preference rankings. The four brands in the study together account for almost 60% market share. Thus these two general models should help us determine the consumer based sources that drive brand equity among top brands in the sneakers product category. After we have demonstrated the general models, we will illustrate how we can use a similar modeling approach to study the brand equity of individual brands.

Strong Brand Model. This model is based on the differences of ratings for the first preferred brand to the third preferred brand. The dependent variable is Brand Equity (BE) and the independent variables are Functional Attributes (ATT), Self Brand Connection (SCON), Appeal (APPEAL), Brand Image (IMAGE), and Perceived Popularity (POP). The measurement model shows a good fit with all items loading uniquely on the latent variables, and with no correlated measurement indicators (indicators and variables shown in table 1). The fit indices were $p = .060$; Root Mean Square Error of Approximation (RMSEA) = .033, Goodness of Fit (GFI) = .92, Adjusted Goodness of Fit (AGFI) = .89 for $n=188$ cases. Unless otherwise stated, the following models are developed from covariance matrices. All estimated coefficients are standardized and calculated as

deviations from the mean.

We first examine the full model, with all independent variables in the model, directly impacting Brand Equity:

<u>STRONG BRAND MODEL 1A: Direct Effects Full Model</u>					
BE = .12 ATT	+ .41 SCON	+ .15 APPEAL	- .075 IMAGE	+ .13 POP	R² = .35
p<.1	p<.001	p<.1	ns	ns	
Model Fit: p = .060; RMSEA = .033; GFI = .92; AGFI = .89; N = 188.					

The full model suggests a very strong role of Self Brand Connection in explaining Brand Equity. Attributes and Appeal are the only two other variables that approach marginal significance at $p < .1$ in this model. To understand the independent role of the variables in the model, we look at the following restrictive models.

<u>Model 1B: Constraining SELF CON on BE to Zero:</u>					
BE = .20 ATT	+ .33 APPEAL	- .090 IMAGE	+ .22 POP	R² = .26	
(p<.05)	(p<.0001)	ns	(p<.05)		
Model Fit: RMSEA = .041; GFI = .92; AGFI = .89; N=188.					
<u>Model 1C: Constraining APPEAL, IMAGE, POP on BE to Zero:</u>					
BE = .33 ATT				R² = .11	
(p<.0001)					
Model Fit: RMSEA=.051; GFI = .91; AGFI = .87; N=188.					

The restrictive model 1B suggests that in absence of Self Brand Connection in the model, the non attribute sources Appeal and Popularity have significant direct effect

($p < .0001$ and $p < .05$ respectively) on Brand Equity. Recall that Appeal measures the styling and looks of the sneakers. This model demonstrates that the perceptions of styling and looks of the sneakers have the strongest impact on Brand Equity as compared to the other attribute and non attribute based sources of Brand Equity. The negative coefficient for Image, though non significant, is a little surprising. An examination of the correlation of the independent variables reveals that Image is highly correlated with Perceived Popularity (disattenuated correlation .64). Dropping Popularity from the model changes the sign of the coefficient of Image in the positive direction, but it still does not reach significance levels. The Image indicators measured two aspects of brand image - distinctive brand personality and distinctive user imagery. These results suggest that the top sneakers brands have clearly defined personality and user imagery but the differences of ratings on these dimensions do not have any appreciable direct impact on Brand Equity. Does it mean that brand imageries do not matter? Our results (shown later in this section) suggest that brand imageries do matter, but only to the extent that it appeals to the self and forms a connection with the self, as captured indirectly in the Self Brand Connection construct.

Perceptions of differences in Functional Attributes also play a significant role in driving Brand Equity, though as model 1C shows, the variance explained by Functional Attributes is marginal (11%). This replicates the results of Park and Srinivasan (1994) where they found that the attribute based sources account for much less variation in Brand Equity across brands in two product category, as compared to the non attribute based sources. These results are somewhat disconcerting - are we suggesting that marketers

should stop paying attention to functional product quality? We decided to examine the role of functional attributes in determining the absolute price and worth of a brand. We formulated a model with only the ratings of the first preferred brand (not *differences of ratings* as in the earlier models) on all the independent variables and Brand Worth as the dependent variable (measured by 'likely price willing to pay at 50% intention to buy'; and 'perceived brand worth' as the two indicators). The results present a different story:

BR WORTH=.39	ATT+.19	SCON+.13	APPEAL-.012	IMAGE+.13	POP	R²=.23
p<.01	ns	ns	ns	ns	ns	

Model Fit: p=.10; RMSEA=.039; GFI=.91; AGFI=.86.

Thus functional attributes are very important in determining the absolute worth of these brands, but among top brands in the product category, the perceived differences in functional quality have, at best, only a marginal impact on brand equity. These results support the notion of perceived product parity, in terms of functional quality, among top brands in the sneakers product category.

Since Self Brand Connection may have mediating relationship with Appeal, Image, and Popularity in the formation of Brand Equity, the role of Self Brand Connection may not be inferred clearly from the direct effects model. We therefore develop a hierarchical effects model with Appeal, Image and Popularity causally related to Self Brand Connection. The theoretical relationship of Attributes with Self Connection, however, may be bi-directional. Consumers' belief that the brand has good functional quality may be an important factor in forming Self Connection with the brand. It is also possible that due to strong Self Connection, consumers may holistically form the perception that the

brand is of superior quality. We examine these considerations in the following hierarchical structural model:

<u>STRONG BRAND MODEL 1D: HIERARCHICAL EFFECTS MODEL</u>					
ATT	= .51	SCON	R² = .12		
	(p<.0001)				
SCON	= - .22	ATT	+ .55	APPEAL	+ .086
	(p<.1)		(p<.0001)	ns	ns
					R² = .37
BE	= .12	ATT	+ .41	SCON	+ .14
	(p<.1)		(p<.0001)	(p<.1)	ns
				ns	ns
					R² = .35
Model Fit: p = .039; RMSEA = .036; GFI = .92; AGFI = .89.					

The significant negative coefficient of Attributes in the Self Connection equation suggests a model misspecification (Bollen 1989). To better understand the relationship of Self Connection with Attributes, we examine the model piece wise. Dropping the Attribute = Self Connection equation from the above model leads to the following results:

SCON	= .18	ATT	+ .42	APPEAL	- .0037	IMAGE	+ .22	POP	R² = .38
	(p<.05)		(p<.0001)		ns		(p<.05)		
BE	= .12	ATT	+ .41	SCON	+ .15	APPEAL	- .075	IMAGE	+ .13
	(p<.1)		(p<.0001)		(p<.1)		ns		ns
									R² = .35
Model Fit: p = .060; RMSEA = .033; GFI = .92; AGFI = .89.									

In the alternate model, we drop Attributes from the Self Connection equation, and introduce the Attributes = Self Connection into the model:

ATT = .34 SCON	R² = .12
(p < .001)	
SCON = .49 APPEAL + .045 IMAGE + .16 POP R² = .37	
(p < .0001)	ns (p < .05)
BE = .11 ATT + .42 SCON + .14 APPEAL - .066 IMAGE + .12 POP R² = .35	
(p < .1)	(p < .0001) ns (p < .1) ns ns
Model Fit: p = .034; RMSEA = .036; GFI = .92; AGFI = .89.	

The above model shows a slight deterioration in the p value as compared to the previous model, however, the other fit parameters remain virtually unchanged. Thus both these models can be considered acceptable. An examination of the coefficients show that Attribute = Self Connection direction of causality yields a larger coefficient (.34) and a stronger significance level as compared to the case where Self Connection is modeled as a function of Attributes. The R² for Self Connection remains almost same (.38 versus .37). The second model (with Attribute = Self Con equation) is also conceptually more insightful, since it suggests that self connection with the brand can induce strong holistic and favorable perceptions of functional attributes.

The equation for Self Connection shows that Image is non significant and popularity is significant at p < .05. However, since these two variables are highly correlated (disattenuated correlation .64), it is advisable to look at their individual effect:

$$\text{SCON} = .50 \text{ APPEAL} + .18 \text{ IMAGE} \quad R^2 = .37$$

(p<.0001) (p<.05)

$$\text{SCON} = .50 \text{ APPEAL} + .19 \text{ POP}$$

(p<.0001) (p<.01)

Both Image and Popularity are highly significant when considered individually in the model. These results suggest that all the three non attribute sources of brand equity have a significant and sizable impact on the formation of Self Connection.

Based on all the discussions presented above, we propose the following structural model as the final model that represents the structure of brand equity for the Strong Brand case.

STRONG BRAND MODEL 1E: FINAL HIERARCHICAL EFFECTS MODEL

$$\text{ATT} = .34 \text{ SCON} \quad R^2 = .12$$

(p<.0001)

$$\text{SCON} = .49 \text{ APPEAL} + .19 \text{ POP}^{**} \quad R^2 = .37$$

(p<.0001) (p<.05)

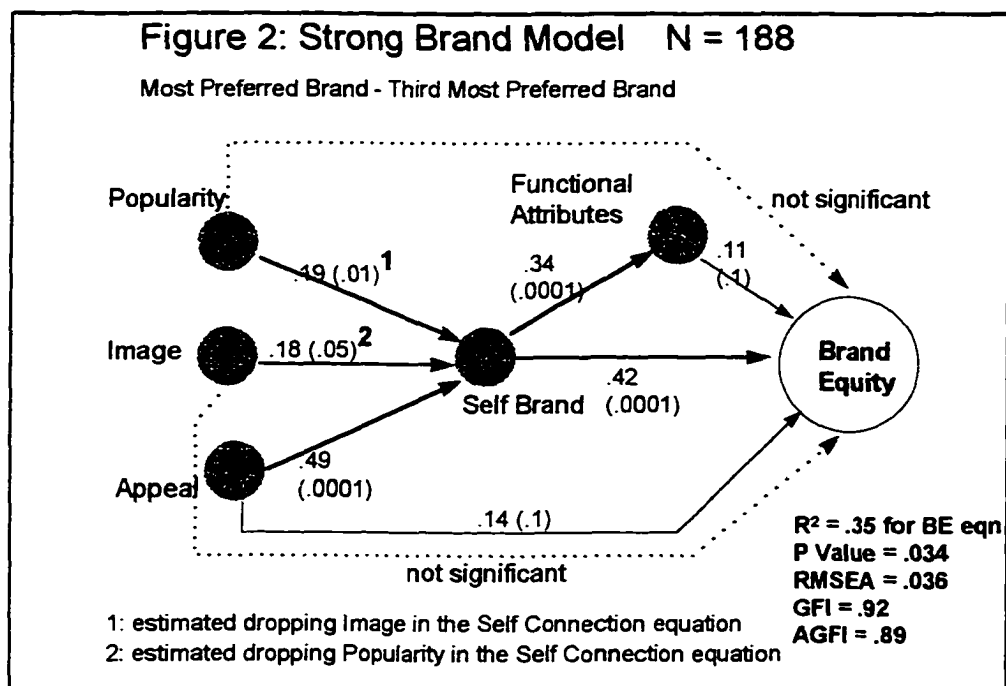
$$\text{BE} = .11 \text{ ATT} + .42 \text{ SCON} + .14 \text{ APPEAL} - .060 \text{ IMAGE} + .11 \text{ POP} \quad R^2 = .35$$

(p<.1) (p<.0001) (p<.1) ns ns

Model Fit: p = .038; RMSEA = .036; GFI = .92; AGFI = .89.

Note: **Substituting POP with IMAGE: IMAGE coeff 0.18 at p<.05

Figure 2 shows the final structural model:



All coefficients in the model are standardized and expressed as deviation from the means. The mean and standard deviation for all the variables in the model are as follows:

<u>Variable</u>	<u>First Brand Mean</u>	<u>Third Brand Mean</u>	<u>Difference of Means</u>
Brand Equity			\$41.64
Attributes	6.37	4.64	1.74*
Self Connection	4.33	2.55	1.77*
Popularity	6.24	2.72	3.51*
Image	5.62	3.87	1.75*
Appeal	6.48	3.86	2.62*

(*significant at p<.0001 level)

Note: Brand Equity measured in dollars. Attributes measured on 7 point (1= negative to 7 = positive) semantic differential scale. All other variables measured on 7 point Likert scale (1 = strongly disagree to 7 = strongly agree).

Both the first and the third preference brands are rated positively on functional attributes (6.37 versus 4.64), whereas on all other variables, the third brand is either rated negatively or only mildly positively. Hence it is not surprising that the difference between the two brands on functional attributes (1.74) has a marginal direct impact on Brand Equity (Coeff. .11, $p < .1$). The first ranked brand is perceived to be much more popular (mean difference 3.51); has a more distinctive image (mean difference 1.75); and a stronger appeal (mean difference 2.62). Of the three non attribute sources Appeal has the strongest impact in driving brand equity directly as well as on the formation of Self Brand Connection (Coeff. .49, $p < .0001$). The dominant role of Appeal is understandable since sneakers are highly value expressive product category. But it is very insightful to observe that styling and appeal of sneakers comes out as more important than the functional attributes in generating a price premium in this market. The Image ratings for both the brands are positive (5.62 versus 3.87). The test brands in our sample are well known brands, hence it is possible that these brands have fairly distinctive brand personality and distinctive user imagery. The image differences are not strong enough to drive brand equity directly, but play a role in the formation of self brand connection (Coeff. .18, $p < .05$). This suggests that merely having distinctive brand and user imagery may not be a sufficient factor in driving brand equity. When the distinctive image has a favorable appeal to self however, it may play a significant indirect role in building brand equity through the formation of a positive self connection with the brand.

Lastly, we will examine the role of Self Connection in the model. The first preferred brand has a positive Self Connection (4.33), whereas the third preferred brand

has a negative Self Connection (2.55). Self Connection has the strongest direct impact on Brand Equity (Coeff .42; $p < .0001$). Self Connection also drives the perceptions of functional quality differences between the brands. All other non attribute sources of brand equity in the model lead to the formation of Self Connection with the brand and have stronger **indirect** impact on Brand Equity through Self Connection rather than directly. The role of Self Connection is therefore central in the formation of brand equity.

Secondary Brand Model. This model looks at the differences of perceived ratings for the second preferred brand to the third preferred brand. The measurement model for this data set is identical to the model 1 data set. The confirmatory factor analysis showed a good fit with the data: $p = .071$; RMSEA = .032; GFI = .93 and AGFI = .89.

As in the case of model 1, we ran several step wise models to clearly understand the role of the attribute based and non attribute sources of brand equity. The initial model runs are presented below:

<u>SECONDARY BRAND MODEL 2A: Direct Effects Full Model</u>					
BE = .027	ATT+.39	SCON+.17	APPEAL-.23	IMAGE+.22 POP	R²=.28
ns	($p < .001$)	($p < .1$)	ns	ns	
Model Fit: $p = .071$; RMSEA=.032; GFI=.93; AGFI=.89.					
<u>MODEL 2B: Constraining Self Con To Zero</u>					
BE = .058	ATT + .34	APPEAL - .24	IMAGE + .32	POP	R²=.18
ns	($p < .001$)	ns	ns		
Model Fit: $p = .030$, RMSEA = .037; GFI = .92; AGFI = .89.					
<u>MODEL 2C: Constraining All Non Attribute Sources To Zero</u>					
BE = .14	ATT				R² = .020
ns					
Model Fit: RMSEA = .045; GFI = .91; AGFI = .88					

Significant departures from the 'Strong Brand Model' are immediately evident: Functional Attributes have virtually no impact on Brand Equity. The explained variance is 2% and the Attribute coefficient is not significant in all the three model runs. Of the three non attribute sources, Image and Popularity have no impact and only Appeal comes out to be significant. Self Brand Connection dominates the model as in the previous strong brand case. We now look at the hierarchical effects model to understand the role of Self Brand Connection.

SECONDARY BRAND MODEL 2D: HIERARCHICAL EFFECTS MODEL

$$\begin{array}{l}
 \text{ATT} = .27 \text{ SCON} \quad \quad \quad \text{R}^2 = .073 \\
 \quad \quad \quad (p < .001) \\
 \text{SCON} = .46 \text{ APPEAL} + .23 \text{ IMAGE} - .0026 \text{ POP} \quad \quad \quad \text{R}^2 = .36 \\
 \quad \quad \quad (p < .0001) \quad \quad \quad \text{ns} \quad \quad \quad \text{ns} \\
 \text{BE} = -.027 \text{ ATT} + .43 \text{ SCON} + .16 \text{ APPEAL} - .22 \text{ IMAGE} + .21 \text{ POP} \quad \quad \quad \text{R}^2 = .28 \\
 \quad \quad \quad \text{ns} \quad \quad \quad (p < .001) \quad \quad \quad (p < .1) \quad \quad \quad \text{ns} \quad \quad \quad \text{ns}
 \end{array}$$

Chi Square with 123 df = 159; p = .016; RMSEA = .040; GFI = .92; AGFI = .89.

MODEL 2E: WITHOUT THE ATT = SCON EQUATION IN THE MODEL

$$\begin{array}{l}
 \text{SCON} = .041 \text{ ATT} + .42 \text{ APPEAL} + .12 \text{ IMAGE} + .11 \text{ POP} \quad \quad \quad \text{R}^2 = .33 \\
 \quad \quad \quad \text{ns} \quad \quad \quad (p < .0001) \quad \quad \quad \text{ns} \quad \quad \quad \text{ns} \\
 \text{BE} = .39 \text{ SCON} + .027 \text{ ATT} + .17 \text{ APPEAL} - .23 \text{ IMAGE} + .22 \text{ POP} \quad \quad \quad \text{R}^2 = .28 \\
 \quad \quad \quad (p < .001) \quad \quad \quad \text{ns} \quad \quad \quad (p < .1) \quad \quad \quad \text{ns} \quad \quad \quad \text{ns}
 \end{array}$$

Chi Square with 120 df = 143; p = .07; RMSEA = .032; GFI = .93; AGFI = .89.

Both model 2D and model 2E have acceptable fit to the data. However, model 2E shows a statistically better fit (Likelihood Ratio test: Chi Square 16 with df=3, p<.001; see Bollen 1989), as well as some improvement on other model fit indices as well. Model 2D

shows a significant influence of Self Connection on Functional Attributes (coeff .34, $p < .001$), however, the impact is not as strong as in the case of the strong brand model (coeff .51, $p < .0001$). Given that the overall impact of Functional Attributes in the secondary brand model is virtually non existence, we are inclined to accept model 2E (without the Attribute = Self Connection equation) as the final model.

As in the strong brand model, perceived popularity and image were highly correlated in this data set also (disattenuated correlation .85). We examined the impact of these two variables individually in both the Brand Equity equation as well as the Self Connection equation in model 2E. Significance levels for these two variables do not show any change in the Brand Equity equation. However, in the Self Brand Connection equation, both these variables come out to be significant, when they are taken in the model one at a time: Image (coeff .23; $p < .01$); Popularity (coeff .21, $p < .01$).

We present the brand means of all the variables in the model 2 in table 3 below:

<u>Variable</u>	<u>Second Brand Mean</u>	<u>Third Brand Mean</u>	<u>Difference of Means</u>
Brand Equity			15.37
Attributes	5.51	4.64	.87*
Self Connection	3.31	2.55	.77*
Popularity	3.63	2.72	.91*
Image	4.48	3.87	.61*
Appeal	5.15	3.86	1.28*

(*significant at $p < .0001$)

Note: Brand Equity measured in dollars. Attributes measured on 7 point (1 = negative to 7 = positive) semantic differential scale. All other variables measured on 7 point Likert scale (1 = strongly disagree to 7 = strongly agree).

Self Brand Connection was found to be the most important driver of Brand Equity for both the strong and the secondary brand models. However, examining the mean Self Brand Connection ratings of the first, second and the third preferred brands reveals some interesting insights into the nature of Self Brand Connection that drives these two models. In the strong brand model the first preferred brand had a positive self connection (4.33). In the secondary brand model, however, the second preferred brand has a neutral self connection (3.31; Likert scale midpoint 3.5). In both the models, the baseline third preferred brand has a negative self connection (2.55). Thus, in the strong brand model, it is the positive self connection for the first preferred brand over the third preferred brand that drives the model. In the secondary brand model, however, the second preferred brand does not have any positive Self Brand Connection. The model is driven entirely by an aversion (negative self connection) for the third preferred brand. These results are even more striking, considering that both the second and the third preferred brand are viewed positively on Functional Attributes (5.51 and 4.64 respectively); Image (4.48 and 3.87); and Appeal (5.14 and 3.86). Thus even when the brands are viewed favorably on most sources of Brand Equity, consumers can be negatively oriented towards a brand just because they do not feel a self connection with the brand.

The other notable departure in the secondary brand model over the strong brand model is in the role of functional attributes. Both the brands in the secondary brand model have positive perceptions of attributes. However, the difference of perceptions of the functional attributes are not strong enough to have any impact on the brand equity - either directly or indirectly through Self Brand Connection.

Nike Brand Equity Model. We will now illustrate the usefulness of this analytical approach for individual brands. As mentioned earlier, Nike is the market leader in the sneakers product category currently holding 43% market share (1997 Nike Annual Report). It may be interesting to find out what drives the equity of Nike among its strong users. This kind of analysis could be useful to brand managers since it gives important insights into the strongest segment of the market. We formulate the Nike model using Asics as the baseline brand. We define strong users of Nike as those who are currently using the brand (for at least one year), and state that they are most likely to buy the brand on the next purchase occasion.

The Nike - Asics data set has the differences of subjective ratings between Nike and Asics, with Nike as the most preferred brand and Asics in either second or third preference ranking. The measurement model was developed as earlier for the strong and secondary brand models. Same set of indicators were found to load uniquely on each latent variable as shown in table 1. None of the indicators correlated with each other. The measurement model fit indices were: $p = .26$; $RMSEA = .027$; $GFI = .89$; $AGFI = .85$; $N = 109$.

The critical model iterations were:

<u>NIKE MODEL 1: Direct Effects Full Model</u>						
BE=.16	ATT+.40	SCON+.23	APPEAL+.054	IMAGE-.0090	POP	R²=.50
ns	(p<.05)	(p<.05)	ns	ns		
Model Fit: p=.26; RMSEA=.027; GFI=.89; AGFI=.85; N=109.						

NIKE MODEL 1A: Constraining Self Con to zero:

$$BE = .30 \text{ ATT} + .36 \text{ APPEAL} + .11 \text{ IMAGE} + .083 \text{ POP} \quad R^2 = .45$$

(p<.05) (p<.001) ns ns

Note: Disattenuated correlation between Image and Pop .54. Both variables marginally significant when taken in the model one at a time: POP (coeff. .14, p<.1), IMAGE (coeff. .18, p<.1).

Model Fit: p = .19; RMSEA=.032; GFI=.89; AGFI=.85; N=109.

NIKE MODEL 1B: Constraining all non attribute sources to zero

$$BE = .60 \text{ ATT} \quad R^2 = .36$$

(p<.0001)

Model Fit: p=.054; RMSEA=.044; GFI=.88; AGFI=.83; N=109.

The three models depicted above show that perceived attribute differences between Nike and Asics are important and significant and explain 36% of the variance when Attributes are the only independent variable in the model. Non attribute sources of brand equity - Appeal, Image and Popularity are all significant when Self Connection is not in the model. Adding Self Connection to the model, however, alters the model with Self Connection and Appeal remaining significant in the model. As in the earlier cases of strong and secondary brand models, this suggests a mediating relationship of Self Connection with the other independent variables in the model.

The final hierarchical model for Nike - Asics is as under:

NIKE MODEL 2: Final Hierarchical Effects Model

$$\text{ATT} = .61 \text{ SCON} \quad R^2 = .38$$

(p<.0001)

$$\text{SCON} = .48 \text{ APPEAL} + .29 \text{ IMAGE} + .15 \text{ POP} \quad R^2 = .54$$

(p<.0001) (p<.05) (p<.1)

$$\text{BE} = .16 \text{ ATT} + .42 \text{ SCON} + .22 \text{ APPEAL} + .035 \text{ IMAGE} - .0023 \text{ POP} \quad R^2 = .49$$

ns (p<.05) (p<.05) ns ns

Model Fit: $\rho = .19$; RMSEA=.032; GFI=.88; AGFI=.84; N=109.

This model replicates the structure found earlier for strong brand model. Appeal and Self Connection directly impact Brand Equity. All three non attribute sources of Brand Equity impact Self Connection. Attributes are processed holistically and are driven by Self Connection.

All the above Nike - Asics models are presented in terms of standardized latent variables. Since the units of measurement of all independent variable indicators are the same (7 point scales), it may be more meaningful to assign units of measurement to the latent variables. We do this by fixing the coefficient of 1 for one indicator (indicator with the highest R^2 value) in each latent variable. The results are now scaled and can be interpreted in terms of the units of measurement of the latent variables:

NIKE MODEL 3: Scaled Latent Variables

$$\begin{aligned}
 \text{ATT} &= .42 \text{ SCON} & R^2 &= .38 \\
 & (p < .0001) \\
 \\
 \text{SCON} &= .48 \text{ APPEAL} + .30 \text{ IMAGE} + .13 \text{ POP} & R^2 &= .54 \\
 & (p < .0001) & (p < .05) & (p < .1) \\
 \\
 \text{BE} &= 2.15 \text{ ATT} + 3.89 \text{ SCON} + 2.04 \text{ APPEAL} + .35 \text{ IMAGE} - .019 \text{ POP} & R^2 &= .49 \\
 & \text{ns} & (p < .05) & (p < .05) & \text{ns} & \text{ns}
 \end{aligned}$$

The above model may be interpreted as follows: A one unit increase in the ratings of Self Connection (measured on a 7 point scale) leads to an increase of \$3.89 in the price premium (Brand Equity) of Nike over Asics.

The brand means for Nike and Asics and the difference of means on all independent variables are shown in table 4:

TABLE 4: NIKE - ASICS: Differences of Brand Means

<u>Variable</u>	<u>Mean: Nike</u>	<u>Mean: Asics</u>	<u>Difference of Means</u>
Brand Equity			\$42.18
Attributes	6.42	4.91	1.51*
Self Connection	4.44	2.64	1.80*
Popularity	6.56	2.54	4.02*
Image	5.74	3.92	1.82*
Appeal	6.63	4.10	2.53*

(*significant at $p < .0001$ level)

Note: Brand Equity measured in dollars. Attributes measured on 7 point (1 = negative to 7 = positive) semantic differential scale. All other variables measured on 7 point Likert scale (1 = strongly disagree to 7 = strongly agree).

The Nike Scaled Model 3 is expressed in terms of deviations from the mean. Plugging in the mean difference ratings obtained on all the independent variables in the model, we calculate the dollar impact of each independent variable and a constant term in the Brand Equity equation. The results are as follows:

Brand Equity of Nike - Asics: \$ 42.18.

Constant = \$26.12; Attributes = \$3.25; Self Brand Connection = \$7.00;

Appeal = \$5.16; Image = \$ 0.64; Popularity = - \$ 0.07.

Recall that this model was developed for the strong users of Nike, with Nike as the first preferred brand and Asics in either second or third preference ranking. These findings suggest that to effectively compete in this segment, Asics should follow a marketing strategy that enhances the perceived self connection of their brand and improve the styling and appeal aspects of their line of sneakers. Competing on functional attributes may not be very worthwhile since attribute differences do not account for much variation in the perceived price premium. These findings are contrary to what is being done in the sneakers market currently. Most rival brands to Nike position and advertise their products primarily on functional attributes.

Since perceived self connection with the brand plays such a vital role in the formation of brand equity, how should rival brands enhance this dimension of Brand Equity? The model suggests that perceived image, popularity and appeal - all play a role in the formation of self connection with the brand. A favorable brand image, high brand visibility to make the brand seem popular, and improving the styling aspects may all seem to be reasonable strategy to enhance the price premium of the weaker brand. In addition

to all these, however, it may be necessary to conduct extensive qualitative research to determine how consumers connect with the leading brand Nike. This should enable the weaker brand to decide on the right advertising and communication strategy to promote self connection with the brand.

CONCLUSION AND GENERAL DISCUSSIONS

In this paper we presented an approach to map and measure consumer based brand equity. We applied the model to develop an understanding of what drives the equity of a strong brand (first preferred brand) and a secondary brand (second preferred brand) in the athletic shoes product category. We also developed a brand equity model for Nike, the market leader in the product category, as an illustration of how this modeling approach can be used to study individual brands. A summary of the critical findings follow:

Summary of Findings. Functional attributes play a marginal role in driving brand equity for the strong brand and an insignificant role for the secondary brand. These results support the notion of perceived product parity, in terms of functional quality, among top brands in the sneakers product category.

Self connection with the brand has a very important mediating role in driving brand equity for both the strong and the secondary brand. Positive self connection with the brand is an important factor in enhancing brand equity. Interestingly, indifference to the brand (neutral self connection) or an actual distancing with the brand (negative self connection) play an equally important and opposite role by depressing brand equity.

Self connection with the brand induces consumers to form a highly inflated perception (halo effects) of functional attributes. Such halo effects were seen both for the strong brand and the secondary brand, but the effect was much weaker for the secondary brand.

Other than self connection, aesthetic appeal of sneakers is important in driving brand equity. This may not be news for a product category that has a strong symbolic

component. What may be newsworthy, however, is that the styling and looks of sneakers matter more than the functional properties in driving brand equity in this market. The current marketing practices in the industry seem to emphasize functional properties of the brands. Specifically, the weak brands in the market try to compete in the market touting new innovations in sneaker technology. These findings suggest that sneaker marketers should primarily focus on stylistic appeal without diluting the functional attribute perceptions.

All the four brands in the study had distinctive brand and user imageries. The differences in their perceived imageries, however, did not move the brand equity needle directly! Thus, only when these imageries foster high self brand connection, they become important in driving brand equity.

Perceived popularity has a significant impact on the formation of self connection. Why should it be so? Perceived popularity is an indicator of the perceived acceptance of these brand symbols in the social system represented by the market segment. Favorable perception of socially held brand meaning is crucial in initiating the brand meaning personalization process (McCracken 1988; Solomon 1983), and consequently in the formation of self connection with the brand. Thus, the ubiquity of the Nike symbol in sporting events and in the media could be viewed as a deliberate strategy to establish the social meaning of the brand and foster self connection with the brand.

Generalizability. We will now address the generalizability issues with this modeling approach and the findings of our study. The modeling technique was demonstrated with a product category that has both a functional utilitarian appeal and a value expressive

appeal, although the results suggest that value expressive appeal dominates in this product category. In general, we feel, this modeling approach should work for any consumer product category where there are strong dominant brands, for after all, most brands would have attribute based and non-attribute based sources of brand equity. The specific non-attribute sources might vary a little from product category to product category, and should be established with prior exploratory research.

The measurement indicators for latent variables used in this study can be adapted to develop indicators for the product category being investigated, as long as the indicators are kept fairly general and not specific to any particular brand in the category. It is important to understand that this technique does not aim to uncover the unique imageries associated with specific brands. The idea is more to understand how salient aspects of these imageries - particularly their distinctiveness and appeal to self - impact the formation of brand equity. The functional attribute indicators used in this model were not weighted for importance, since we did not find significant differences in a pretest. They were also not attenuated for objective ratings, since the tested brands had comparable objective functional quality. These aspects might differ for other product categories and test brands, and hence the indicators of functional attributes should be modified accordingly.

Will this modeling approach work for utilitarian product categories? Whereas most of the source variables used in the modeling approach should be common across product categories, there might be some concerns with the self connection construct. Our qualitative research (summarized earlier) suggests that self connection and relationship forms with all kinds of products, however, the 'points' of connection might be different

among primarily utilitarian and primarily symbolic product categories. A major problem in studying utilitarian product categories could be the availability of a tested and validated scale for measuring self brand connection. Self connection and relationship formation with the brand is still an emergent area of research, and we expect future research developments will alleviate this problem.

We claim this modeling technique to be appropriate for studying strong brands, although we modeled secondary brands also. Both these models were generated with respect to the third preferred brand in the category. Can this modeling approach be extended to pairs of weaker brands in the market, brands that are placed lower in the preference rankings? We feel, for such brands, the proposed method may not be very suitable. Consumers may not have very well developed image and attribute perceptions of such brands leading to high errors in measurement and poor measurement models. Most of the critical variables and processes that hold for strong brand, like the formation of self connection, may not happen in the case of weak brands, limiting the diagnostic value of this modeling approach.

This technique, however, need not be limited to the strongest brands in the total product category. Recall that we earlier described a strong brand with respect to a strong consumer base. A niche brand with a strong consumer base in it's own niche segment can be easily studied using this approach. This implies that this technique can be used to study the segment wise characteristics of the market and can be helpful in identifying the critical source variables that operate in different market segments of the product category. In fact, we recommend that the model should be used in this manner, because the sources of

brand equity that drive different segments could be markedly different. This should be particularly helpful for weak brands to identify the segments where they should concentrate their efforts, consistent with their strength and weaknesses.

The other issue is about the generalizability of the findings. One of the most important findings in this paper is the dominant role of Self Brand Connection as the mediating variable in the formation of brand equity. Whereas self connection and relationship with the brand has been identified by some authors as playing an important role in brands, the centrality of this phenomenon has not been empirically demonstrated so far. The pivotal role of self brand connection opens up new vistas in our understanding of brands. This research suggests that user initiated processes - developing brand connections and relationship - underlie the structure of strong brands. Studying the universality of this phenomenon, and finding out the differences in the self connection process among different kinds of products could be an extensive new area of research by itself.

Do we expect to find the same structural relationships across different product categories? Probably not. Different product categories may have different equity drivers. But, in our opinion, therein lies the diagnostic appeal of this modeling approach. Using this modeling approach, we should be able to structure our understanding of the sources and processes that have an impact on brand equity for each specific case.

Generalizability is always a concern when college students are used as subjects. For the selected product category, however, the choice of college students as subjects is highly appropriate since they are the largest and the most important segment of the market. Most sneaker advertising and marketing efforts are directed at this segment as the

primary segment. Subjects in our study had extensive usage experience with sneakers (minimum one year; average seven to eight years), and often with multiple brands. Qualitative research done earlier with student subjects suggested that they have rich personal associations with their chosen brands as well as highly developed perceptions of different brands in the product category. The only generalizability problem we see in this modeling approach with other segments in the market could be in the comprehension of the indicator items. This method can certainly be a problem for the less educated adult or the teenager segment. Minor simplification of the indicator items may be necessary for these segments. Further, teenagers may not have sufficient experience with the product category - though, this also might be a debatable point. Sneakers are now all pervasive as footwear of choice even for school going children!

Limitations of the Study. Development of the indicators could be a very cumbersome and problematic process. Since most of the non-attribute sources of brand equity can be highly correlated among themselves, to find indicators that are not correlated among themselves and still adequately map the constructs, may not always be possible. In this study, an issue may be raised about the reliability of the brand image indicators. We tested several measures, and ideally we would have liked to include more indicators for reliability. We found it difficult, however, to isolate indicators that were not correlated with other indicators in the model. The two final indicators of brand image used in the model appear to be valid since they map both the brand personality and the user imagery, but their reliability is marginal at best (Cronbach alpha .54).

Use of structural modeling techniques imposes its own limitations. Due to the

flexibility of the technique a large number of statistically acceptable models can be generated. Minor changes in the restrictions imposed on the indicators can alter the results significantly. The model fit interpretations tend to be highly subjective and the problem is compounded by the availability of several fit indicators that can be confusing. We adopted a very cautious approach in our modeling effort. The measurement models were highly restricted allowing no correlation among the indicators. Model fits were evaluated on several fit indices, in addition to the four critical indices reported in this paper for each model. We developed and interpreted several alternative models that met the twin requirements of substantive theoretical explanation as well as statistical rigor. The measurement model and the structural model were replicated in several subsets of the data, building our confidence in the validity and reliability of the findings.

DIRECTIONS FOR FUTURE RESEARCH

We have already pointed out the urgent need to research the self connection process more fully and develop a self connection scale for primarily utilitarian product categories. The self connection processes should be studied across product categories and across different kinds of consumers, not only to understand the phenomenon, but also to know the boundary conditions under which they do not occur.

In our conceptualization of consumer based brand equity, we proposed that the outcomes of brand equity could be multifaceted: thus, besides price premium and brand commitment, one could extend the study to several other outcome measures like insularity to negative information about the brand; willingness to accept brand extensions more readily; more efficient processing of advertising messages etc.

Are there suggestions of a brand building hierarchy hidden in these findings? For example, do brands grow in strength with consumers in quantum levels - from a base of familiarity, positive image and perceptions of good quality; to consecutively higher levels of strength like perceptions of popularity and comprehension of the shared meaning of the brand in the social system; personalized meaning abstraction and self connection formation; and ultimately development of stable relationship with the brand. Are these the only mechanisms for building brand strength, or are there other alternate processes as well? Resolving these issues could enhance our understanding of strong brands, and suggest better ways to create, nurture and manage such brands.

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APPENDIX B
QUESTIONNAIRE FOR ESSAY I

A Concept Test for All Purpose Sneakers

Expt Group _____

Date _____

Time _____

THANK YOU FOR JOINING US FOR THIS STUDY

This is a very sensitive experimental test and the results would depend entirely on how carefully you respond to the various questions. Please DO NOT RESPOND TO THE QUESTIONS IN AN ARBITRARY MANNER! In case you have any questions, please ask the experimenter.

WE APPRECIATE THE TIME AND EFFORT YOU ARE SPENDING ON THIS RESEARCH. WE DO HOPE YOU WILL ENJOY DOING THIS EXPERIMENT.

**Personal Profile:**

1. Please tell us something about yourself:

1. Sex: Male [] Female []

2. Age: []

3. Year: _____

4. Major: _____

Brand Use Profile:

2. What brand of jeans you wear most often? _____

3. What is your favorite brand of soft drinks? _____

4. Do you wear sneakers regularly? YES [] NO []

IF YES:

a. Which brand of sneakers do you wear most often? _____

b. For how many years now, have you been wearing this brand? [] years]

c. What are the other brands of sneakers you wear sometimes? Or, have worn in the past?

Wear sometimes 1. _____ 2. _____ 3. _____

Worn in the past 1. _____ 2. _____ 3. _____

d. What are the other brands of sneakers you are familiar with. List all the brand names you can recall.

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

5. _____ 6. _____ 7. _____ 8. _____

e. If you were to buy a new pair of sneakers, which brand are you most likely to buy?

MOST LIKELY TO BUY _____ (MENTION BRAND)

MAY CONSIDER TO BUY _____ (MENTION BRAND)

f. Please list **all** the important **factors** you would consider in buying a new pair of sneakers.

5. Please circle the number that best reflects how well these phrases describe you.

- I am quite knowledgeable about sneakers.

-3	-2	-1	0	1	2	3
completely false			neutral			completely true

- I know a lot about different kinds of sneakers.

-3	-2	-1	0	1	2	3
completely false			neutral			completely true

- I feel confused at the large variety of sneakers available in the market.

-3	-2	-1	0	1	2	3
completely false			neutral			completely true

B**PLEASE ANSWER THE FOLLOWING QUESTIONS:**

- Please check the five top features from the following list that you would consider in buying sneakers. After you have done that, please rank these five features in order of importance.

<u>Features</u>		<u>Rank</u>
Durability	[]	_____
Comfort	[]	_____
Styling	[]	_____
Shock Absorption	[]	_____
Fit	[]	_____
Arch Support	[]	_____
Traction	[]	_____
Cushioned sole	[]	_____
Breathability	[]	_____
Looks	[]	_____
Stability	[]	_____
Flexibility	[]	_____

IN THIS STUDY WE WILL DO A CONCEPT TEST FOR ALL PURPOSE SNEAKERS. PLEASE READ THE CONCEPT STATEMENT ON PAGE C CAREFULLY.

Concept statement for New All Purpose Sneakers

Across the country on college campuses, sneakers have become the footwear of choice - to be worn in all seasons, all occasions, and everyday. Marketers predict that the major manufacturers will soon be introducing sneakers for all purpose wear.

In this study we are trying to understand your reactions to NEW ALL PURPOSE SNEAKERS, if it were to be introduced by some top manufacturers in the near future.

These sneakers are expected to be priced in the average range, and will be crafted for everyday wear. They will also be ideal for light sporting activities like jogging and cross training. Styling of these shoes are expected to reflect the current fashion trends.

D**PLEASE READ CAREFULLY:**

We want to evaluate the concept for the following four brands. If you have not heard of any name from this list, please call the research assistant.

ASICS	ETONIC	NIKE	REEBOK
--------------	---------------	-------------	---------------

- If all purpose sneakers of these four brand names were available at the same price, which one would you prefer the most. Please state your order of preference for all the four brands.

MOST PREFERRED BRAND (A) _____

SECOND MOST PREFERRED BRAND (B) _____

THIRD MOST PREFERRED BRAND (C) _____

LEAST PREFERRED BRAND (D) _____

- We have indicated some probable price ranges below. For your **most preferred brand** _____ (please write the brand name here), indicate how likely you are to buy at **each of the given price ranges**.

If priced at:	Definitely Not Buy	Definitely Buy
\$120+	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$110 - \$119	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$100 - \$109	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$90 - \$99	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$80 - \$89	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$70 - \$79	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$60 - \$69	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$50 - \$59	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$40 - \$49	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$30 - \$39	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	

- For your **second most preferred brand** _____ (please write the brand name here), indicate how likely you are to buy at **each** of the given price ranges.

If priced at:	Definitely Not Buy	Definitely Buy
\$120+	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$110 - \$119	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$100 - \$109	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$90 - \$99	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$80 - \$89	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$70 - \$79	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$60 - \$69	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$50 - \$59	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$40 - \$49	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$30 - \$39	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	

- For your **third most preferred brand** _____ (please write the brand name here), indicate how likely you are to buy at **each** of the given price ranges.

If priced at:	Definitely Not Buy	Definitely Buy
\$120+	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$110 - \$119	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$100 - \$109	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$90 - \$99	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$80 - \$89	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$70 - \$79	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$60 - \$69	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$50 - \$59	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$40 - \$49	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	
\$30 - \$39	0 _ 1 _ 2 _ 3 _ 4 _ 5 _ 6 _ 7 _ 8 _ 9 _ 10	

- The retail prices for All Purpose Sneakers is likely to be in the range of \$30 to \$120. How much more in \$ would you be willing to pay for your **most preferred brand (A)** than your **second most preferred brand (B)** ?

I would be willing to pay **up to \$** _____ **more.**

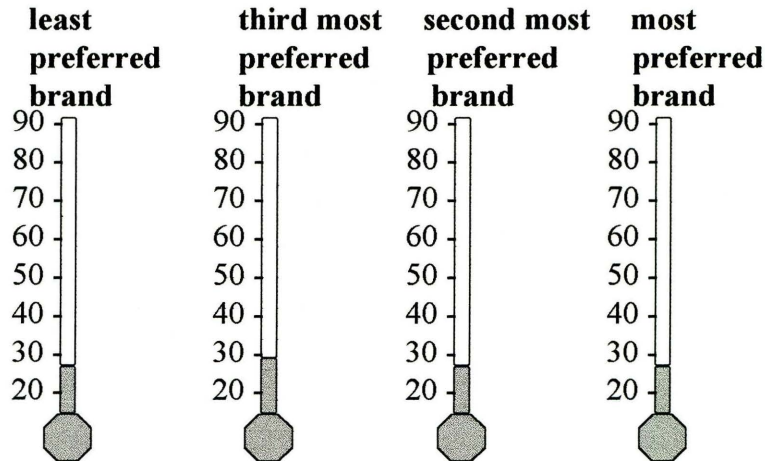
- And how much more in \$ would you be willing to pay for your most preferred brand (A) than your **third most preferred brand (C)** ?

I would be willing to pay **up to \$** _____ **more.**

- Assume that we have a device that can measure the worth of a brand on a “brand worth meter” as shown below:

First, indicate the names of the four brands in the blanks below. Now carefully think how much would be the worth of the least preferred brand on this meter. Please indicate the “worth” by filling in the stem of the meter or by marking on the stem.

Similarly, fill in the “worth” of the other three brands.



Please write the brand names here

- Let us suppose that your **most preferred brand** was available at a retail price of \$100. How much of a discount in \$ terms would make you switch to your **second most preferred brand**? Answer one of the two options that may apply to you.
 - A discount of \$ _____ over the **most preferred brand** would make me switch to my **second most preferred brand**.
 - I am not likely to switch irrespective of the discount offered.
- Similarly, how much of a discount in \$ terms would make you switch from your **most preferred brand** to your **third most preferred brand**? Answer one of the two options that may apply to you.
 - A discount of \$ _____ over the **most preferred brand** would make me switch to my **third most preferred brand**.
 - I am not likely to switch irrespective of the discount offered.
- Consider the following equation.

$$\text{Seiko} + \$ \underline{\quad} = \text{Timex} + \$ \underline{\quad}$$

If Seiko is worth \$100 to you, and Timex is worth \$50, you may balance the above equation by filling in \$50 in the blank on the right hand side as follows.

$$\text{Seiko} + \$ \underline{\quad} = \text{Timex} + \$50$$

Please look at the following equations carefully. Fill in one of the blanks in each equation such that they are balanced.

Reebok + \$ _____	=	Etonic + \$ _____
Asics + \$ _____	=	Etonic + \$ _____
Nike + \$ _____	=	Reebok + \$ _____
Asics + \$ _____	=	Nike + \$ _____

E

Please read the following descriptions carefully. Please check the cell that best describes what you feel is applicable to the brand name mentioned. In this scale, the end positions are very descriptive of the brand. The center position is neutral. The intermediate positions are somewhat descriptive of the brand.

ASICS:

not comfortable to wear	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	very comfortable to wear
poor arch support	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	good arch support
wears out fast	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	long lasting
poor fit	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	very good fit
poor breathing properties	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	good breathing properties
does not cushion feet from impact	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	cushions feet from impact
bad for your feet	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	good for your feet
poor traction	_ _ _ _ _ _ _ -3 -2 -1 0 +1 +2 +3	good traction

E

Please read the following descriptions carefully. Please check the cell that best describes what you feel is applicable to the brand name mentioned. In this scale, the end positions are very descriptive of the brand. The center position is neutral. The intermediate positions are somewhat descriptive of the brand.

ETONIC:

poor breathing properties	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good breathing properties
	-3 -2 -1 0 +1 +2 +3	
does not cushion feet from impact	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	cushions feet from impact
	-3 -2 -1 0 +1 +2 +3	
bad for your feet	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good for your feet
	-3 -2 -1 0 +1 +2 +3	
poor traction	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good traction
	-3 -2 -1 0 +1 +2 +3	
not comfortable to wear	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	very comfortable to wear
	-3 -2 -1 0 +1 +2 +3	
poor arch support	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good arch support
	-3 -2 -1 0 +1 +2 +3	
wears out fast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	long lasting
	-3 -2 -1 0 +1 +2 +3	
poor fit	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	very good fit
	-3 -2 -1 0 +1 +2 +3	

E

Please read the following descriptions carefully. Please check the cell that best describes what you feel is applicable to the brand name mentioned. In this scale, the end positions are very descriptive of the brand. The center position is neutral. The intermediate positions are somewhat descriptive of the brand.

REEBOK:

poor breathing properties	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good breathing properties
	-3 -2 -1 0 +1 +2 +3	
does not cushion feet from impact	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	cushions feet from impact
	-3 -2 -1 0 +1 +2 +3	
bad for your feet	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good for your feet
	-3 -2 -1 0 +1 +2 +3	
poor traction	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good traction
	-3 -2 -1 0 +1 +2 +3	
not comfortable to wear	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	very comfortable to wear
	-3 -2 -1 0 +1 +2 +3	
poor arch support	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good arch support
	-3 -2 -1 0 +1 +2 +3	
wears out fast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	long lasting
	-3 -2 -1 0 +1 +2 +3	
poor fit	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	very good fit
	-3 -2 -1 0 +1 +2 +3	

E

Please read the following descriptions carefully. Please check the cell that best describes what you feel is applicable to the brand name mentioned. In this scale, the end positions are very descriptive of the brand. The center position is neutral. The intermediate positions are somewhat descriptive of the brand.

NIKE:

not comfortable to wear	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	very comfortable to wear
	-3 -2 -1 0 +1 +2 +3	
poor arch support	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good arch support
	-3 -2 -1 0 +1 +2 +3	
wears out fast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	long lasting
	-3 -2 -1 0 +1 +2 +3	
poor fit	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	very good fit
	-3 -2 -1 0 +1 +2 +3	
poor breathing properties	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good breathing properties
	-3 -2 -1 0 +1 +2 +3	
does not cushion feet from impact	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	cushions feet from impact
	-3 -2 -1 0 +1 +2 +3	
bad for your feet	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good for your feet
	-3 -2 -1 0 +1 +2 +3	
poor traction	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	good traction
	-3 -2 -1 0 +1 +2 +3	

F

- **In the following pages, there are several statements about different brand of sneakers. These statements help us to understand your feelings towards different brands of sneakers. Please circle the number that best describes how well the statement applies to you.**
-

- The image of Asics agrees with my self image.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel a personal connection to Asics.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I like the styling of Asics shoes.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Asics sneakers look good.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I think Asics could help me become the type of person I want to be.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Asics reflects who I am.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Asics suits me well.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Asics has a clear brand personality.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Most college students on the campus wear Asics brand of sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I have a clear image of the type of person who would use Asics.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- In comparison with other brands, Asics is the most popular brand of sneakers amongst college students.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- People really like the looks of Asics sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel affection towards Asics.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I would feel uncomfortable wearing Asics sneakers in public.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I can identify with Asics.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- The image of Asics appeals to me.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Wearing Asics could say a lot about who I am to other people.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Wearing Asics would make me feel good about myself.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Asics sneakers are very trendy.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I can identify with Nike.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- The image of Nike appeals to me.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Wearing Nike could say a lot about who I am to other people.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Wearing Nike would make me feel good about myself.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Nike sneakers are very trendy.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- The image of Nike agrees with my self image.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel a personal connection to Nike.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I like the styling of Nike shoes.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Nike sneakers look good.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I think Nike could help me become the type of person I want to be.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Nike reflects who I am.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Nike suits me well.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Nike has a clear brand personality.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Most college students on the campus wear Nike brand of sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I have a clear image of the type of person who would use Nike.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- In comparison with other brands, Nike is the most popular brand of sneakers amongst college students.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- People really like the looks of Nike sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel affection towards Nike.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I would feel uncomfortable wearing Nike sneakers in public.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- People really like the looks of Reebok sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel affection towards Reebok.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I would feel uncomfortable wearing Reebok sneakers in public.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I can identify with Reebok.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- The image of Reebok appeals to me.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Wearing Reebok could say a lot about who I am to other people.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Wearing Reebok would make me feel good about myself.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Reebok sneakers are very trendy.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- The image of Reebok agrees with my self image.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel a personal connection to Reebok.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I like the styling of Reebok shoes.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Reebok sneakers look good.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I think Reebok could help me become the type of person I want to be.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Reebok reflects who I am.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Reebok suits me well.

-3 -2 -1 0 1 2 3
 Not at all Neutral Extremely Well

- Reebok has a clear brand personality.

-3 -2 -1 0 1 2 3
 Strongly Neutral Strongly
 Disagree Agree

- Most college students on the campus wear Reebok brand of sneakers.

-3 -2 -1 0 1 2 3
 Strongly Neutral Strongly
 Disagree Agree

- I have a clear image of the type of person who would use Reebok.

-3 -2 -1 0 1 2 3
 Strongly Neutral Strongly
 Disagree Agree

- In comparison with other brands, Reebok is the most popular brand of sneakers amongst college students.

-3 -2 -1 0 1 2 3
 Strongly Neutral Strongly
 Disagree Agree

- People really like the looks of Etonic sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel affection towards Etonic.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I would feel uncomfortable wearing Etonic sneakers in public.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I can identify with Etonic.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- The image of Etonic appeals to me.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Wearing Etonic could say a lot about who I am to other people.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Wearing Etonic would make me feel good about myself.

-3	-2	-1	0	1	2	3
Completely False			Neutral			Completely True

- Etonic sneakers are very trendy.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- The image of Etonic agrees with my self image.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I feel a personal connection to Etonic.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- I like the styling of Etonic shoes.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Etonic sneakers look good.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I think Etonic could help me become the type of person I want to be.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Etonic reflects who I am.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Etonic suits me well.

-3	-2	-1	0	1	2	3
Not at all			Neutral			Extremely Well

- Etonic has a clear brand personality.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- Most college students on the campus wear Etonic brand of sneakers.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- I have a clear image of the type of person who would use Etonic.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

- In comparison with other brands, Etonic is the most popular brand of sneakers amongst college students.

-3	-2	-1	0	1	2	3
Strongly Disagree			Neutral			Strongly Agree

G

Consumer Reports, an independent, non profit testing and information organization, published the following ratings on different brands of sneakers. Please look at the ratings table carefully and answer the following questions:

- Do you think this table would be useful to you for making your purchase decision for a new brand of sneakers?

IF YES:

- Which information is most helpful to you in making your decision?

IF NO:

Could you explain why this table is not useful to you in making your decision?

- What would be your basic conclusion about sneakers from the Consumer Report ratings and the article?

- In your opinion, how reliable are the ratings given in the Consumer Reports?

Not at all Reliable |----|----|----|----|----| Extremely Reliable

PLEASE HELP US BY GIVING YOUR HONEST ASSESSMENT ON THE FOLLOWING STATEMENTS. REMEMBER YOUR CONFIDENTIALITY IS ASSURED!

I found the experiment tiring. disagree 1--2--3--4--5 agree

I just wanted to be done with the experiment. disagree 1--2--3--4--5 agree

I responded to all the questions very carefully. disagree 1--2--3--4--5 agree

I feel I did my best in this experiment. disagree 1--2--3--4--5 agree

THANK YOU. WE HOPE YOU ENJOYED THE EXPERIMENT. PLEASE DO NOT LEAVE UNTIL EVERYONE ELSE IS DONE.

APPENDIX C

**A THEORY OF SELF-BRAND RELATIONSHIP SCHEMA AND
IT'S ROLE IN PROMOTING BRAND INSULARITY**

INTRODUCTION

Building brands that can weather many competitive pressures and retain loyal consumers is extremely important to marketers. Brand insularity, the consumer's propensity to resist negative information about a brand or competitive inducements to switch, can easily be claimed as the most essential ingredient of strong brands. For after all, an insular consumer is a loyal consumer - the most valuable asset of strong brands (Aaker 1996). What underlies the insular characteristics of such brands? The extant literature on brands suggests that superior perceived quality, distinctive and favorable brand image, and positive brand associations create strong brands, and by implication loyal or insular consumers (Aaker 1996, Keller 1993, 1998). Recent additions to the marketing literature, suggests that beyond brand knowledge, some consumers engage in developing self connections (Escalas 1997) and relationship with the brand (Fournier, 1996). In this paper, we draw upon the relevant literature in marketing and social psychology to understand the formation and characteristics of self brand relationship based brand knowledge structure. We apply concepts from cognitive and social psychology to propose that the self brand relationship based knowledge structure is likely to be more resistant to negative or ambiguous information about the brand resulting in stronger brand insularity, as compared to the case where the brand knowledge structure is not rooted in self brand relationship.

The organization of the paper is as follows: First, we present a conceptual framework, synthesizing the relevant literature in marketing and social psychology to understand the formation and nature of self brand relationship knowledge structure and

articulate how this structure might be different from a brand centered knowledge structure. We then develop our hypotheses to show how this knowledge structure mediates the processing of brand related negative and ambiguous information, leading to brand insularity. Next, we describe an experimental study to test these hypotheses and present the results of our study. In the final section, we discuss the general findings and limitations of this study and suggest directions for future research.

CONCEPTUAL FRAMEWORK

Keller (1993, 1998) conceptualized brand knowledge structure as consisting of a brand node in the memory to which a variety of brand related associations are linked. The dimensions of brand knowledge, as proposed by Keller, includes brand awareness and brand image. Brand image is the sum total of attribute knowledge; functional, symbolic and experiential benefits; and brand attitudes. Attribute knowledge could be based on product related aspects, as well as non-product related aspects like user and usage imagery. The favorability, strength and uniqueness of the brand associations lead to brand preference. The basic brand knowledge - what the brand stands for symbolically and what are the functional uses of the brand - may often be adequate knowledge for consumers to adopt a brand and show strong preference for the brand.

Strong users of particular brands are likely to have well organized knowledge structures (schema) about the brand. The existence of a brand knowledge structure may induce such consumers to engage in 'top down' holistic processing of brand stimuli, resulting in 'halo effects' for the brand. The knowledge structure is also likely to mediate the evaluation of any brand related information. We apply concepts from the schema theory to understand how these processes work.

A schema is defined as a large scale abstract or generic knowledge structure, stored in memory, that specifies the defining features and relevant attributes of some stimulus domain and the interrelation among these attributes (Fiske & Linville, 1980; Hastie 1981; Rumelhart & Ortony 1978; Taylor & Crocker 1981). Schemas facilitate top down processing and guide the interpretation of input information. They also guide the

storage of knowledge in the long term memory. Schematic structures tend to be very resilient in the long term memory and resist changes by the process of abstraction, interpretation and integration of the message with the schema (Alba & Hasher, 1983). Schemas can carry affective charge (Fiske 1982) and there is some evidence that the affective charge can be evoked nonconsciously (Baldwin, Carell and Lopez 1990).

Brand schema and category based schema concepts have been used to study several marketing related issues. Schematic processing approaches have been employed to study how consumers evaluate discrepant information (Sujan, 1985); how brand sub-typing versus brand differentiation strategies are formed based on brand and category perceptions (Sujan and Bettman, 1989); and to research determinants of typicality and its relationship with attitude for each category level (Loken and Ward, 1990). Some brand extension studies have been based on schema consistency to predict favorable or unfavorable extensions (Aaker and Keller, 1990; Park, Milberg and Lawson, 1991). Admittedly, the concept of brand and category level schema is well established in marketing.

The schematic processing outcomes, like 'halo effects', biased evaluation of brand related information, and resilience in the long term memory, depend on the nature and characteristics of the knowledge structure that guides such processing. In this paper, we propose that a schematic brand knowledge structure that is rooted in self connections and relationship with the brand is likely to be more complex and varied in content (since it includes aspects of the self), more strongly held, more accessible and resilient in the memory, and hence more resistant to change. An understanding of how these structures

form is important to map the content and characteristics of these schemas. In the following sections, we develop our theory of Self-Brand Relationship Schemas, schemas that are formed out of the self connection and relationship processes, and show how the insular properties are obtained in these structures.

A Theory Of Self-Brand Relationship Schema

Brands have several layers of meaning - functional, symbolic, social and personal (Levy 1959; McCracken 1988; Belk 1988; Richins 1994, Solomon 1983; Sirgy 1982). Marketers initiate the process of creating the brand by seeding the brand concept in the minds of the consumers through advertising and other brand related communication. If brands have to gain significant strength in the minds of the consumers, however, they have to move beyond the basic brand concept to what it 'means' to the members of the social system (McCracken 1986; Solomon 1983) and then finally what it 'means' to the consumers of the brand in a personal sense (Richins 1994; Belk 1988). Consumers, in abstracting and internalizing the brand meaning (whether consensual or private), go through psychological processes such that the derived meaning of the brand becomes a unique and personal property of the consumers' 'self'. In other words, *the meaning might originate in the brand but it ultimately gets anchored in the person*. If this were indeed the case then the schema that is formed is not likely to be brand centered but user centered, and the associations and the images in the schema are more likely to be extensions of the self rather than that of the brand.

Interaction of the Self with the Brand. The consumers' environment is saturated with marketing noise - brands with all kinds of functional and symbolic messages

clamoring for attention. In this environment very few brands are likely to get noticed and fewer still will get adopted. The consumer has to be selective in what they notice and learn from the environment. Research on self perception (Bem 1967, 1972) suggests that the individual does not act as a passive receptacle of information - instead she is an active constructive information processor. For a brand to find acceptance and then get established in the mind as a strong brand, it has to resonate with the internal cognitive structures. Levy (1959) expresses the same thing in another way while speaking of brands as symbols: "A symbol is appropriate (and the product will be used and enjoyed) when it joins with, meshes with, adds to, or reinforces the way the consumer thinks about himself". Several other researchers have made the same point that the construction of product or brand image is not a unilateral phenomenon. The image is created, defined and internalized by the consumer in accord with her self image. For example, Sirgy (1981, 1982a, 1982b) proposed that product cues involving images usually activate a self schema involving the same images. Sirgy argues that the value or meaning of a product is not independently derived but is rather inferred from evoked self image dimensions.

Belk (1988) sees the link of the self with possessions in an even more radical light. He proposes that some possessions become part of the self - creating an extended self. In a sense, we are what we own and consume. McCracken (1986) echoes similar sentiments: "one of the ways individuals satisfy the freedom and fulfill responsibility of self definition is through the systematic appropriation of the meaningful properties of goods". In a related vein, Munson and Spivey (1981, 1982) defined the 'product expressive self constructs' - how one perceives oneself given a preference for a specific product; and how

a person believes other people view her given a preference for a specific product. Other researchers have also described the important role possessions play in forming and reflecting the self (Solomon 1983; Grubb and Grathwohl 1967; Wicklund and Gollwitzer 1982).

The Self-Brand Relationship Perspective. The value and the meaning that is attached to the brand is cultivated over time and “emanates from the psychic energy invested in it and experiences related to it” (Rochberg-Halton 1979; Csikszentmihalyi and Rochberg-Halton 1981). The consumer may build a pattern of interaction with the brand over a long period of time, after experiencing the brand several times, cognitively processing and “digesting” what the brand means to her; and investing emotional and psychic energy in the brand. This process seems to be very similar to how human relationships form. For instance, Planalp’s (1987) proposes a theory to account for human relationships around the notion that “relationships are grounded in patterns of interactions” . She contends that understanding the nature of these interactions, and the cognitive sources that creates these interactions, can help us diagnose how human relationships form. To quote Planalp (1987): “the events and interactions that make up relationships are seldom if ever ‘brute facts’ (Searle 1969) or ‘undigested interactions’ (Duck and Sants 1983). Rather, events and interactions are interpreted and produced through complex cognitive processes. Cognitive processes might be considered the ‘digestive processes’ that transform raw sense data into meaningful, useful forms and integrate them with pre-existing knowledge.” In a parallel to the brand scenario, a hypothetical case of unwavering loyalty (a relationship dimension) to a brand may be, in

part, due to all the emotional energy invested in the brand over time and the sense of self that is enmeshed with the brand through several experiences with the brand. Thus, this personal dynamic might result in the consumer settling down to a comfortable trusting relationship with, say, a brand of detergent with tremendous resistance to examine other brands and switch loyalties, even in the face of competitive superiority of rival products. The decision to switch, if it ever happens, involves both the self and the brand and may sometimes even invoke feelings of guilt and remorse as if some part of the brand's long relationship with the self was being betrayed.

In advancing this thesis, we are not suggesting that all cases of brand loyalty would be rooted in such complex cognitive processes. Some consumers may build loyalty entirely out of inertia, buying and using the brand out of sheer habit. In such cases, repeated usage may still induce some favorable bonds with the brand due to familiarity effects (Zajonc and Markus, 1982) or instrumental conditioning (e.g. Peter and Olson, 1993). Such consumers, however, may not be very resistant to change. They may not proactively investigate the other options, but any event that disturbs the inertial equilibrium - competitive inducements, an opportunity to try other brands (temporary unavailability of the current brand; getting rival brands as gifts etc.) - may be adequate to switch such consumers. Thus, such consumers may not actually be highly insular or loyal consumers.

The relationship notion is gaining increasing currency in marketing. Aaker (1996) feels brand-customer relationship is the basis for forming enduring brands with long term consumer loyalty. Fournier (1996) has even isolated constructs that she calls 'Brand

Relationship Quality’ - love and passion; self connections; interdependence; commitment; intimacy; brand partner quality. Practitioners in advertising agency talk about creating brand identity such that the brand can forge meaningful relationship with the consumer. Thus the notion of ‘relationship’ has some face validity. We therefore call the schema formed out of the self connection and relationship process with the brand as the ‘self-brand relationship’ schema. The preceding discussions suggest that the self brand relationship schema is likely to be a complex structure composed of several elements: abstracted brand meaning rooted in self; brand knowledge modified by personal experiences with the brand; projections of self as a user of the brand; personal episodes involving the brand; and emotional attachment and stable relationship pattern developed with the brand over a period of time.

Insularity of the Self-Brand Relationship Schema. Why should the self-brand relationship schema be more insular than a brand knowledge schema that is not rooted in self connections and relationship with the brand? The most important reason, perhaps, stems from the fact that this schema involves the self schema of the user. The self schema itself is a complex (Linville 1985, 1987), multi-faceted knowledge structure (Higgins 1987; Markus 1977), and is highly resistant to change (Fiske and Taylor, 1991; Greenwald and Banaji, 1989; Kihlstorm et al. 1988). Aspects of the self that get enmeshed with the brand’s personalized meaning may activate the self schema of the user. The brand may be seen as self enhancing, improve self esteem, or have other relevant personal meaning for the self. Such self-referencing may lead the user to be highly motivated to preserve the feelings and knowledge about the brand (Greenwald, Bellezza, and Banaji, 1988;

Burnkrant and Unnava, 1995).

The self-brand relationship schema itself may have a more complex structure than brand knowledge structure - personal episodes, memories, nostalgia, projections of the self as a user of the brand - add dimensions and facets to the schema that may not exist in the case where relationship has not formed with the brand. In fact, similar to the dimensionality of the self schema (Linville and Carlston, 1994), the self brand relationship schema may be considered to be multi-dimensional. It may have personalized brand meaning and projections of the self as a user of the brand (centrality dimension); elements generated by past experiences with the brand (temporal dimension); positive and negative affect (valence dimension); episodes involving the self and the brand (episodicity dimension). Further, since these elements are self generated, they are likely to be more strongly held and more accessible in the memory (Fazio and Zanna, 1981).

The centrality of some of the self related elements of the schema, richness and complexity of the schema structure, and strength of associations among elements in the schema suggest that these structures would be more resistant to change, more resilient in the memory and more likely to induce top down processing. We propose that such a structure protects the consumer from changing perceptions about the brand negatively, hence promoting insularity for the brand. The negative perceptions about the brand can be formed in several different ways. Credible sources like newspapers and *Consumer Reports* could present negative stories and evaluations of the brand. In comparative advertising, competitors could project the relative weaknesses of the focal brand in comparison to their own brand. Even in cases of non-comparative competitive

advertising, competitors attempts to create superior perceptions of their product relative to the focal brand may happen sometimes only if they can make a dent in the consumers' existing perceptions of the focal brand.

HYPOTHESES

The conceptual discussions suggest two information processing related hypotheses. Self-brand relationship schematics (SBR) are more likely to resist negative information about the brand, and their long term schematic memory is likely to be more resilient to change, as compared to the non SBR brand schematics. We develop the following hypotheses, comparing two groups of strong brand users. We define the two groups of consumers as having equally strong and comparable initial brand attitude; brand preference (highest preference for the brand); and current usage experience with the brand (minimum one year). The two groups differ only on the self brand relationship dimension. We classify the two groups as SBR schematics or non-SBR schematics based on scores obtained on a 13 item SBR scale. We derive the following hypotheses for comparative effect in these two groups:

Information Evaluation Hypothesis. The SBR schematics are more likely to engage in meaning abstraction and inference process such that the presented information is perceived and evaluated in a way consistent with their schemas.

Hypothesis 1a: The post exposure evaluation of negatively presented information will be more positive for self brand relationship schematics than for non self brand relationship schematics.

The meaning abstraction and selective inference process also suggests that when the presented information is ambiguous in nature (for example, mixed reviews of a brand), the SBR schematics will attach more importance to the positive aspects of the message, and less importance to the negative aspects of the message - resulting in more favorable

impression and evaluation of the message than non SBR schematics. Thus:

Hypothesis 1b: The post exposure evaluation of an ambiguous information will be more positive for the self brand relationship schematics than for the non self brand relationship schematics.

Long Term Memory Hypothesis. When presented with a complex information relevant to the domain, schema theory predicts that the information will be selectively processed such that schema consistent information will be retained in the memory and schema inconsistent information will be discarded and lost from the memory (Alba and Hasher, 1983). The stronger the schematic structure, more likely it is that these memory processes will occur. Further, schemas that are based on 'self' are also more resilient in the long term memory (Fiske and Taylor, 1991). Thus, we propose that as compared to the non-SBR schematics, the SBR schematics are more likely to engage in a memory reconstruction process suppressing negative information and selectively recalling positive information, consistent with their schema:

Hypothesis 2: In a memory recall task of a previously presented brand related information, the self brand relationship schematics are (a) less likely to recall negative information, and (b) more likely to recall positive information about the brand, from the long term memory, as compared to the non-self brand relationship schematic.

Hypotheses 1 and 2 relate to the information processing mechanism that may explain how the SBR schematics build greater insularity over the non-SBR schematic.

The outcomes of greater insularity should be visible in more resilient brand attitude, and a

higher intention to try the brand, despite receiving negative or ambivalent information about the brand:

Brand Attitude Hypothesis. The biased processing and evaluation of information (hypothesis 1) and the memory reconstructive processes that favor retaining positive information over negative information (hypothesis 2), suggest that the SBR schematics would be more positively oriented to the brand, after receiving negative information about the brand, than the non-SBR schematics. This should lead the SBR schematics to be more resilient in their held brand attitudes.

Hypothesis 3: After receiving negative or ambiguous information about the brand, there will be a smaller negative change in brand attitude for self brand relationship schematics than for non-self brand relationship schematics.

Intention to Try Hypothesis. The ultimate test of insularity would be to find out how the two group of schematics differ on their intention to try the brand, after receiving negative and ambivalent communication about the brand. We propose that the self brand schematics would be more willing to try the new brand than the non self brand schematics, since they process the information differently and are more positively oriented to the brand:

Hypothesis 4: The self brand schematics are more likely to try the brand, than the non self brand schematics.

METHOD

Design Overview. Strong users of two leading brands of sneakers, Nike and Reebok read a fictitious news story about their own brand. After reading the news story they did a distracter task, and then performed a free recall task writing the story in their own words. In the following sections of the study, they evaluated the presented news information on several measures. The subjects were classified, post-hoc, into two groups as Self-Brand Relationship (SBR) schematics and non-SBR schematics, based on their scores on a SBR scale. The study aimed at finding out the differences in processing of positive, negative and neutral brand information presented in the news item between the two groups of SBR schematics and non-SBR schematics. The initial brand attitude and initial functional benefits ratings in the two group were held as covariates in the analytical model. The details of the study design follows.

Strong users of the two brands, Nike and Reebok, were selected based on their current usage (minimum one year) and first preference ranking of the brand. The news story was prepared in several matched versions for each of the two brands, as described later. Nike users read the Nike version of the news story. Similarly, Reebok users read the Reebok version of the news story. The news story profiled the emergence of a fictitious new product category extension in sneakers, called the 'All Purpose Sneakers'. It presented a fictitious *Consumer Reports* evaluation of three novel innovations supposedly being introduced by the focal brand (Nike or Reebok): 'Wipe-and-Go' ease of maintenance; 'Elastic Fit' for comfortable fit and 'Ultra Light Sole' for light weight shoes. Each version of the news story presented all the three new innovations, but the reported

Consumer Reports evaluation of these innovations differed in different versions of the news story. Thus, in each version, one innovation appeared with positive evaluation of the functional benefits, the other with negative evaluation and the third with mixed evaluation (somewhat positive and somewhat negative). To counterbalance the treatments (valenced information), such that each innovation appeared in all the three evaluation valence conditions (positive, negative, mixed) and in all the three possible positions in the news item (mentioned first, second, or third in the news item), nine matched versions of the news item were prepared for each of the two brands. Within each version of the news story, we followed a Latin Square design to rotate the order of presentation of the three valence conditions (positive, negative, mixed; mixed, positive, negative; negative, mixed, positive); as well as the order of presentation of the three innovations (innovations 1-2-3; 2-3-1; 3-2-1).

The positive and negative evaluation information for each of the three innovations were framed on critical functional benefits. Thus the positive evaluations for the three innovations were: Wipe and Go - very easy to clean; Elastic Fit - very comfortable fit; Ultra Light Sole - comfortable to wear for long hours. Similarly, the negative evaluations for the three innovations were: Wipe and Go - unappealing plastic looks of the shoe uppers; Elastic Fit - traps moisture; and Ultra Light Sole - results in poor shock absorbency. The mixed evaluation condition was presented as some members of the *Consumer Reports* panel of users liking the positive benefit whereas some others expressing reservation about the perceived negative consequences.

The dependent variables in the study were Free Recall from long term memory of the presented information; post exposure evaluation of the Positive, Negative and Mixed information about the three innovations; post exposure Brand Attitude and Intention to Try the new brand extension. The within subjects independent variable were Information Type (Wipe-and-Go; Elastic Fit; Ultra Light Sole); and Information Treatments (positive; negative; mixed valence conditions). The between subjects independent variables in the study were Self-Brand Relationship (High SBR; Low SBR); Treatment Order; Information Type Order; and interaction of Treatment with Self-Brand Relationship. Subjects were nested in (SBR*Treatment Order*Information Order), and this term was included as an independent variable in the analytical model.

Stimuli. A short story is a good way to trigger schematic processing of information (Anderson and Pichert, 1978). We decided to use the news story format and *Consumer Reports* evaluations to present the information, since we felt this would be the most credible way to introduce positive, negative and mixed information about the brands. Nine matched versions of a fictitious news item were prepared in the *USA Today* newspaper format for each of the two brands. The font style and size, the column width and layout were designed to look exactly like a regular *USA Today* news article. A sample of the news item appears in Exhibit 1. A manipulation check revealed that the news item was perceived as real (5.55 on a 7 point Likert scale) and subjects found it easy to read (6.32 on a 7 point Likert scale). All versions of the news item were 450 words long, and consisted of 81 idea units, out of which 27 idea units (9 per innovation) presented the *Consumer Reports* evaluation of the three innovations.

The news item presented a cover story about a fictitious product category extension called the ‘All Purpose Sneakers’. It reported that across the country on college campuses, sneakers have become the footwear of choice - to be worn in all seasons, all occasions, and everyday, and following this trend, major manufacturers were expected to introduce a new generation of sneakers for all purpose and everyday wear. The news item then went on to describe the three novel innovations and the evaluations, quoting a fictitious *Consumer Reports* test. A manipulation check of the positive and negative benefits describing the innovations revealed that the subjects perceived them as such. Subjects rated these functional benefits on a semantic differential scale (Extremely Negative: 1; Extremely Positive: 7) as follows: Easy to clean (5.63); Comfortable Fit (6.70); Comfortable to wear for long hours (6.65); Unappealing plastic looks (1.95); Traps moisture (2.01); Poor shock absorbency (1.52). Since all the treatments were counterbalanced across valence treatments, minor differences in ratings among the functional benefits in the same valence condition, should not be of any concern. The innovations and the reported *Consumer Reports* evaluations for each innovation is shown in table 1 below:

TABLE 1: THE NEWS STORY STIMULI

<u>Innovation</u>	<u>Evaluation Statements from ‘Consumer Report’ User Panel</u>
Wipe-and-Go	<p>Positive: Its amazing! No matter how much dust and grime you collect, it just goes away with one easy swipe.</p> <p>Negative: Most of the panelists complained that the shoe uppers had an unappealing plastic look.</p>

Mixed: Some liked the convenient cleaning - others felt that the shoe uppers had a very unappealing plastic look.

Elastic Fit

Positive: Their verdict - it's amazing! The comfort and feel is like nothing you have ever experienced in a shoe before.

Negative: Most of them complained that it traps moisture.

Mixed: Some felt that it really makes the sneakers very comfortable to wear - others complained that it traps moisture.

Ultra Light Sole

Positive: They felt that the shoes were amazingly light and very comfortable to wear for long hours.

Negative: They felt that it has poor shock absorption.

Mixed: Some felt that the shoes were light and comfortable - others complained of poor shock absorbency.

Experimental Procedure. The experiment was run in several small batches of 12-18 subjects. Over 200 subjects participated in the study. Initially, as the subjects signed in for the experiment, a small screening questionnaire was administered to identify the current users of Nike or Reebok sneakers. Subjects who did not qualify as either Nike or Reebok users were assigned to another unrelated experiment being conducted in a different room. In part A of the experiment, subjects filled out a survey profiling their brand usage of sneakers. The survey collected information on demographics, brand awareness, past usage and current usage of sneakers. Subjects indicated the brands of sneakers they were currently using and for how long they have been using the brand. Following these questions, they rated Nike and Reebok on a 7 point brand preference scale and a brand attitude scale. After providing this information, they rated the brand

they use most often on 9 functional benefits. The 9 functional benefits included 6 benefits that were similar to the benefits of the innovations presented in the news item, while 3 functional benefits were listed as decoys. The wording of the items pertaining to the 6 relevant functional benefits were kept slightly different from the wordings used in describing these functional benefits in the post exposure measures. The idea was to obtain initial attitude ratings on the 6 functional benefits, without contaminating (as far as possible) the ratings obtained on the same benefits in the post exposure test.

After completing the part A procedure, subjects did a distracter task (career aspirations after graduating), while a research monitor distributed Nike or Reebok versions of the experimental booklets, matching it to the subject's usage profile obtained in the part A survey. The experimental booklets looked exactly the same, and there was no way for the subjects to guess that they were getting different booklets. There were a few subjects who had less than one year usage experience with their current brand (Nike or Reebok) and / or did not rate their current brand higher than the other brand (Nike or Reebok) in the preference rankings. Responses obtained from these subjects were later dropped from the analysis.

In part B of the experiment, subjects were told to carefully read the news item insert in their booklet. To ensure that they paid attention to the task, they were asked not to proceed to the next section of the booklet until told to do so by the research monitor. After providing about 2.5 minutes for this task, subjects were asked to go to the next section where they spent 2 minutes completing a distracter task in order to clear working memory. During this period the news insert was collected back by the research monitor.

Following the distracter task, the free recall task was administered. The instructions were to 'recall everything you read in the news article and write it down in your own words'. The subjects were asked to be as thorough as possible, but not to mention anything that was not included in the news item. To ensure that the subjects made reasonable effort to recall and write down their responses, they were told that they had 7 minutes to do this task, and that they should not move to the next section until told to do so by the research monitor.

In the following section of the experiment, subjects filled in a 12 item opinion scale to elicit their evaluation of each of the three innovations (4 items per innovation) presented in the news item. There were two additional items to check the perceived credibility and the ease of comprehension of the news item.

In the following sections, subjects provided ratings for the 6 functional benefits; brand attitude; and intention to try the brand. Next, they responded to a Self Brand Relationship scale. Lastly, 6 manipulation check items were administered to find out the subjects' general perceptions (1: extremely negative; 7: extremely positive) of the six functional benefits used in the study. The subjects were debriefed and dismissed after this task.

Over 200 subjects participated in the study for course credit. A total of 151 usable questionnaires qualified for analysis, based on the screening criteria (Nike or Reebok strong user) laid out earlier.

Dependent Variables. The dependent variables in the study were free recall of the presented information; post exposure evaluation of the positive, negative and mixed

functional benefits information presented in the news item; post exposure brand attitude and intention to try. The details of these measures are as follows:

(a) Free recall from the long-term memory of the information presented in the news item.

This information was analyzed using verbal protocol analysis technique.

(b) Post exposure ratings of the three innovations presented in the news item, obtained on a 12-item opinion scale and a 6 item semantic differential scale. In the opinion scale, there were 4 statements for each of the three innovations. Two of the items measured the overall opinion of the innovation. One item each mapped the positive and the negative functional benefits of the innovation. Responses to these statements were obtained on 7 point Likert scales (1: Strongly Disagree; 7: Strongly Agree). The statements for an innovation (Elastic Fit) are illustrated below. Similar statements were used for the other two innovations.

Overall: In my opinion, elastic fit is a very useful new feature.

Overall: I feel the elastic fit technology is hardly going to make any difference to the user. (Reverse scored in the analysis)

Positive: I feel that the elastic fit technology will dramatically enhance the comfort and fit of these sneakers.

Negative: I feel the elastic fit technology will create serious problems by trapping moisture in the sneakers. (Reverse scored in the analysis)

The positive statements were worded as extremely positive and the negative statements were worded as extremely negative to obtain a wider range in the responses.

The 6 item 7 point semantic differential scale also measured the positive and the negative functional benefits of each of the three innovations. Thus, between the two scales, there were two measures each for the positive and the negative functional benefits, and two overall measures, for each innovation featured in the news items.

(c) Post exposure brand attitude was obtained on a 3 item 7 point semantic differential scale (very unfavorable - very favorable; very good - very bad; like very much - dislike very much).

(d) Intention to Try was obtained on a 7 point scale with 1: Definitely would not try and 7: Definitely Would Try as the anchor points.

Independent Variables. The between subjects independent variables in the study were Self Brand Relationship (High SBR; Low SBR); Valence order conditions; Information order conditions; and interaction of Treatment with Self Brand Relationship. The within subjects independent variable were Information type (Wipe-and-Go; Elastic Fit; Ultra Light Sole); and Information valence treatment (positive; negative; mixed). Since there were 9 different matched versions of the news story for each brand, reflecting the valence order conditions and information type order conditions, subjects were nested in one of the nine experimental conditions. Further, self brand relationship scores were used, post hoc, to classify the subjects into two groups. Thus the subjects were nested in (SBR*Treatment Order*Information Order), and this term was included as an independent variable in the analytical model.

Self Brand Relationship Scale. The Self Brand Relationship scale was constructed from an original item inventory of 18 items mapping self congruency and self connection

with the brand (adapted from Escalas 1997); schema buildup processes; and brand relationship dimensions. An exploratory oblique principal components factor analysis suggested a three-factor solution with a total of 13 items. The three factors were interpreted as (a) Self Connection (SCON) with the brand - 4 items; (b) Schema buildup and relationship formation (SCH) - 6 items; and © Relationship (RLT) outcomes - 3 items. These three factors thus map the formation and outcomes of the self brand relationship processes. A confirmatory factor analysis done using Lisrel 8 with the suggested three factor structure yielded a satisfactory model fit (Goodness of Fit .93; Adjusted Goodness of Fit .89). The disattenuated correlations resulting from the Lisrel analysis were (a) SCON and SCH: .75; (b) SCON and RLT: .61; © SCH and RLT: .63. These three factors are highly correlated, as it should be, since they map the formation, development and outcomes of the self brand relationship process. The SBR scale is shown in table 2.

TABLE 2: SBR SCALE

SELF CONNECTION:

- The Nike image agrees with my self image.
- Nike is a brand for people like me.
- Nike reflects who I am.
- Wearing Nikes could say a lot about who I am to other people.

SCHEMA BUILDUP AND RELATIONSHIP FORMATION:

- I remember almost everything about the first time I bought a pair of Nikes.
-

- I can tell you a lot about my personal experiences as a Nike user.
- I associate a lot of personal memories with this brand (Nike).
- I feel a personal connection to Nike.
- If Nike was a 'person', he/she would be a very special friend to me.
- I would get upset if people said bad things about Nike.

RELATIONSHIP OUTCOMES:

- If I had to buy other brands of sneakers, I will feel disloyal to Nike.
- I am so happy with Nike that I see no reason to check out other brands.
- I feel affection towards Nike.

Note: Similar items were used for Reebok users, replacing 'Nike' with 'Reebok' in the above statements.

Subjects' mean score on each factor was weighted with .33 and added to yield the final SBR score. The final SBR score ranged from 1 to 7. The mid-point of the scale, 3.5, was used as a cutoff to divide the subjects as either high or low SBR subjects. Out of 151 subjects, 66 qualified as High SBR with a score of 3.5 and greater; and 85 qualified as Low SBR with a score less than 3.5.

RESULTS AND DISCUSSIONS

Covariates in the Analytical Model. The four hypotheses in this study aim to show the insularity differences between the high and low SBR groups, controlling for initial brand attitude and initial ratings on the functional benefits used in presenting the information. The least square adjusted means for the initial brand attitude and initial ratings on the functional benefits for the High SBR and the Low SBR groups were as follows. All the ratings are on 7 point scales.

TABLE 3: INITIAL BRAND AND FUNCTIONAL BENEFITS RATINGS

	High SBR (N=66)	Low SBR (N=85)	Difference of LSMEANS (significance levels)
Initial Brand Attitude	6.48	6.28	ns
Initial Brand Preference	6.60	6.46	ns
Initial Ratings of Functional Benefits: (Manova Test for overall SBR effect - ns)			
Comfortable to wear	6.54	6.43	ns
Easy to clean	5.12	4.65	p<.05
Unappealing looks*	6.39	5.97	p<.1
Excellent Fit	6.23	6.08	ns
Breathable Fabric	5.48	5.14	ns
Poor Shock Absorbency*	6.14	5.77	p<.1

* Reverse Scored

Initial brand attitude and brand preference was not significantly different in the two groups. A MANOVA test with all the six functional benefits ratings as dependent variables did not indicate a significant difference between the two groups. In Anova tests, however, one of the functional benefits was significantly different at $p < .05$ and two others were marginally different at $p < .1$. To ascertain the influence of SBR on these initial ratings, a correlation analysis of SBR was done with initial brand attitude, brand preference and initial ratings on the functional benefits. The correlation analysis revealed very weak correlations across all the initial ratings. The correlations with SBR were: Initial Brand Attitude (.27); Brand Preference (.22); 6 Functional Benefits (ranging from .01 to .29). Though this analysis suggests that SBR has very marginal influence on these variables, we decided to hold the initial functional benefit ratings as covariates in the analytical model. Note that the six functional benefits represent the positive and negative benefits for each of the three innovations presented in the news item. The initial functional benefits ratings were matched to the corresponding innovations in the analysis.

Hypotheses 1a and 1b: Information Evaluation Hypotheses. These two hypotheses state that the evaluation of negative and ambiguous (mixed) information will be more positive for the SBR schematics than for non-SBR schematics. To examine these hypotheses, we consider the post exposure evaluation of the information obtained on the 12 item opinion scale and 6 item semantic differential scale. The opinion scale had 2 items per innovation to measure overall opinion. These two items were summed to yield the Overall Evaluation (OVERALL) variable (Cronbach alpha: .65). The positive functional benefit information for each of the three innovation was measured on one item, per

innovation, in the opinion scale as well as the semantic differential scale. The two positive items for each innovation were summed as the Positive Evaluation (POS) variable. The reliability of the POS variable was low (Cronbach alpha: .46). This variable, however, is not central to our hypotheses, since we are mainly studying insularity phenomenon with respect to negative information. The two negative functional benefit items were summed as the Negative Evaluation (NEG) variable (Cronbach alpha: .69). A summary measure TOTAL evaluation (Cronbach alpha: .75), was also constructed by adding all the six items for each innovation. Thus $TOTAL = OVERALL + POS + NEG$. All negatively worded items in the two scales were reverse scored for analysis. Since all the individual items were on 7 point scales, and the OVERALL, POS and NEG variables were constructed as the sum of two items, the maximum possible score on these variables is 14. Similarly, the maximum possible score on TOTAL is 42 (sum of 6 items).

The within subjects independent variable were Information type (Wipe-and-Go; Elastic Fit; Ultra Light Sole); and Information Valence Treatment (positive; negative; mixed). The between subjects independent variables in the analytical models were Self Brand Relationship (High SBR; Low SBR); Valence order conditions; Information order conditions; and interaction of Treatment with Self Brand Relationship. Subjects were nested in $SBR * Valence Order * Information Order$, and this term was included as an independent variable in the analytical model.

We initially conducted an ANOVA analysis with the TOTAL score as the dependent variable, holding initial functional benefits ratings as covariates in the model. The overall model was significant at $p < .0001$. The interaction term $SBR * TRT$ was

significant at $p < .01$ (type III SS). The initial functional benefits covariates were not significant. The least square adjusted means for the TOTAL variable in the negative information condition was 29.87 for SBR schematics and 25.63 non-SBR schematics, significant at $p < .0001$ (maximum possible on this scale is 42). The corresponding means for the mixed information condition were: 29.13 for SBR and 27.29 for non-SBR, significant at $p < .01$. Thus SBR schematics rated the negative and the mixed information presented in the news item, significantly more positively than the non-SBR schematics.

Next, we analyze the three dependent variables OVERALL, POS and NEG in a multivariate analysis of variance, with repeated measures, since these ratings were obtained in a within subjects design. As earlier, the covariates in the model were not significant. The interaction of SBR with Treatment information condition was significant at .01. The analysis of variance table (only significant effects shown here) and the critical contrasts are presented in table 4a and table 4b below:

TABLE 4a: REPEATED MEASURE ANALYSIS OF VARIANCE

Source	df	Type III SS	Pr > F
SBR	1	147	.0001
TRT	2	573	.0001
SBR*TRT	2	73	.0055
INFO	2	614	.0001
SUB(SBR*ORD1*ORD2)	145	1742	.0001

TABLE 4b. CONTRASTS (Least Square Adjusted Means)

Negative Information Condition:

	OVERALL	POS	NEG
SBR	10.43	10.90	8.53
NON SBR	8.61	9.46	7.56
(p value - one tail)	.00005	.00005	.0025

Mixed Information Condition:

	OVERALL	POS	NEG
SBR	9.97	10.52	8.64
NON SBR	9.27	10.07	7.95
(p value - one tail)	.04	.07	.024

Positive Information Condition:

	OVERALL	POS	NEG
SBR	11.07	11.77	9.78
non-SBR	11.32	11.38	9.03
(p value - one tail)	.26	.11	.01

The results show that in the negative information condition, SBR schematics evaluated the information significantly more positively than non-SBR schematics on all the three measures (OVERALL, POS, NEG). Thus, we obtain strong support for Hypothesis 1a.

In the mixed information condition (mixed *Consumer Reports* review, presenting

both the positive and the negative benefits), the SBR schematics evaluated the negative benefit information (NEG) significantly more positively than the non-SBR schematics (8.64 Vs. 7.95; $p=.02$). The overall evaluation (OVERALL) for the innovation was also higher (9.97 Vs. 9.27; $p=.04$). We have shown earlier that the TOTAL score for the SBR group was significantly higher ($p<.01$) than the non-SBR group for the mixed information condition. Thus, taking all these results together, we conclude that there is strong support for Hypothesis 1b also.

Though we did not hypothesize any effect for the positive information condition, the results are very insightful. First, the evaluation in the positive information condition is the same in both the groups on the OVERALL and the POS item measures. In the mixed information condition, however, the positive information is evaluated more positively (POS measure), though the difference is only marginally significant (10.52 Vs. 10.07; $p=.07$). The results in the positive information condition are, however, significantly different ($p=.01$) on the negative (NEG) item measure. Recall that in the positive information condition, the news stimuli *does not mention the negative benefits!* The higher positive rating by the SBR group on negative benefits, *not mentioned in the news item*, suggests that the SBR group subjects, in general are more inclined to discount negative perceptions of the brand as compared to the non-SBR group.

Hypotheses 2a and 2b: Memory Hypotheses. These two hypotheses state that the recall of negative information will be less, and the recall of positive information will be more, in the SBR group as compared to the non-SBR group. The news item stimuli had a total of 81 idea units, out of which 27 idea units (9 per innovation) pertained to the

information manipulations. The subjects engaged in a written free recall task after reading the news item for 2.5 minutes, and doing a free recall task to clear working memory. The free recall data was coded by a coder who was blind to the subjects' SBR group classification (SBR or non-SBR). The coding categories were the same as the original 81 idea units in the news stimuli. The recall data was summarized into the following variables: Total recall; False recall; Recall of Positive (POS) valenced information; Recall of Negative valenced information (NEG); Recall of Positive information in the Mixed (MPOS) information condition; Recall of Negative information in the Mixed (MNEG) information condition. The total recall between the two groups was not significantly different (16.99 SBR; 14.92 non-SBR; $p=.28$), but was held as a covariate in the analytical ANOVA models. The following results were obtained with ANOVA models (formulated using SAS GLM procedure) with the dependent variables POS, MPOS, MNEG and NEG taken one at a time; and with SBR and Treatment Groups (9) as the independent variables. Since the total number of SBR and non-SBR responses was different, the means were calculated as least square means. The results are as follows:

TABLE 5: MEMORY RECALL

	<u>SBR Lsmeans</u>	<u>non-SBR Lsmeans</u>	<u>p value</u>
TOTAL RECALL	16.94	14.92	ns
<u>Information Condition</u>			
POSITIVE	1.36	1.39	ns
MIXED - POSITIVE INFO	.72	.76	ns
MIXED - NEGATIVE INFO	.56	.71	.08 (one tail)
NEGATIVE	.65	.92	.015 (one tail)

The least square means (.65 SBR vs. .92 non-SBR) for the negative information condition are significantly lower ($p=.015$) for the SBR group. The results are repeated for negative information in the mixed information condition (.56 SBR vs. .71 non-SBR), though the difference is marginal by conventional standards ($p < .1$). Thus, hypothesis 2a, that suggests SBR group actively suppresses negative information, is supported.

Both the SBR and the non-SBR group recalled almost exactly the same number of positive statements in both the positive and the mixed positive information condition, invalidating hypothesis 2b (higher recall of positive information by SBR schematics). Though we failed to find support for hypothesis 2b, the results are consistent with prior findings. As we noticed earlier, in the discussions pertaining to hypotheses 1, both the SBR and the non-SBR groups evaluated the positive information on overall measure (11.07 SBR and 11.32 non-SBR) and on positive measure (11.77 SBR and 11.38 non-SBR) in almost in the same way. Thus, taking the results of hypotheses 1 and 2 together, it appears that the two groups process the positive information about the brand similarly, but show marked differences in the way they handle negative information about the brand. SBR schematics suppress negative information about the brand in their long term memory, and evaluate the brand more positively on the negative aspects of the brand than the non-SBR schematics. This process then could be at the heart of higher brand insularity for the SBR schematics. The next two hypotheses will determine if it is really so.

Hypothesis 3: Change in Brand Attitude. This hypothesis suggests that after receiving the ambivalent information in the news story, the SBR schematics will show a smaller change in brand attitude (Post - Pre Exposure Brand Attitude) than non-SBR

schematics. Pre and Post exposure brand attitude were obtained on 3 item 7 point semantic differential scales (very unfavorable - very favorable; very good - very bad; like very much - dislike very much). We expected the post exposure brand attitude to decrease for both the groups since the news item presented an ambivalent story (positive, negative and mixed) about an unfamiliar new product category extension. The pre and post exposure brand attitude ratings for both the groups are presented below:

TABLE 5: PRE AND POST EXPOSURE BRAND ATTITUDE

	Initial Brand Attitude	Final Brand Attitude	Change (Final - Initial)
SBR	6.48	5.61	-.87
non-SBR	6.28	4.94	-1.34
p value	.11	.0001	.01

The results show that the post exposure brand attitude decreased in both the groups, but the change in brand attitude for the SBR group was only .87, whereas the change in brand attitude for non-SBR group was 1.34. The net change in brand attitude between the two groups was significantly different at $p < .01$. Interestingly, the initial brand attitude in both the group were about the same, but post exposure, the differences between the two group in final brand attitude (5.61 SBR Vs. 4.94 non-SBR) become substantial and highly significant at $p < .0001$. These results clearly show that in the SBR group brand attitudes are more strongly held, and are more resistant to ambivalent and negative information about the brand, as compared to the non-SBR group. Thus hypothesis 3 was also supported.

Hypothesis 4: Intention to Try. One final measure in the study was to find out how the two groups differ in their intention to try the new product. This measure could be the closest predictor of insular behavior in the market place. The 'intention to try' was 5.75 for the SBR group and 4.58 for the non-SBR group (1: definitely would not try; 7: definitely would try). While both the groups show a positive intention to try the new brand extension, the difference in ratings for both the group was substantial and highly significant (difference = 1.17; $p < .0001$). Thus, this hypothesis was also supported.

In sum, all the hypotheses, except hypothesis 2b, that stated that SBR schematics will recall more positive information than the non-SBR schematics, were supported.

Limitations of the Study. This study does not compare the two strong group of consumers with a comparatively weaker group. We would have liked to have another group of relatively weaker consumers, but decided against it since the study design would have become very unwieldy and difficult to manage. Recall that even with two strong group of consumers, we required 18 different news item manipulations.

The other limitation could be the use of student subjects for this study. The use of student subjects was, however, considered appropriate - given the choice of the product category. Students are primary market segment for sneakers.

Ideally the free recall task should have been administered after a longer time delay. We pretested memory recall on 28 subjects after 48 hours, and found abysmally low recall in both the groups, suggesting floor effects. Since the news stimuli was a 450 word item and the subjects were given enough time to read the story only once, we feel the recall task following a distracter task was an adequate measure of long term memory.

GENERAL DISCUSSIONS

In this study we compared two groups of equally strong consumers, who were identified based on their current usage and stated first preference for the focal brand. Both these groups had very strong initial brand attitude and brand preference scores that were statistically comparable. Despite such strong and statistically equal initial disposition to the focal brands, the two groups of consumers showed marked differences in brand insularity. The strong consumers who were high on self-brand relationship were prone to discount the negative information about the brand and recalled less of the negative information post exposure to the ambiguous and negative news story, as compared to the low-SBR group. These processes resulted in the high-SBR group showing higher post exposure brand attitude as well as 'intention to try' the new brand extension. Thus, these results underscore the importance of self-brand relationship in promoting brand insularity.

These results also vindicate the theory of self-brand relationship schema. The suppression of negative information in the memory is very suggestive of schematic processing. These results cannot be directly explained by self-referencing theory, particularly given the fact that the news item manipulations were on functional attributes and not on self relevant image attributes. There is no reason to believe that functional attribute information could have triggered self referencing phenomenon. We can also rule out affect as a possible explanation for these results since both the SBR and the non-SBR group had rated the brands equally strongly on initial brand attitude that measured affective disposition to the brands (like very much - dislike very much; very favorable - very unfavorable; very good - very bad).

Sneakers as a product category can be viewed as both utilitarian as well as value expressive product category. Will these results hold for primarily utilitarian products? In a qualitative exploratory research done earlier, we found that consumers have strong functional relationship patterns with utilitarian products also. Some utilitarian products like Tide strike a very strong chord in the self-concept of some users. Brand personalization processes can also happen with utilitarian products. Based on these qualitative findings, we feel that the results obtained in this study with sneakers product category, would be replicated with other primarily utilitarian product categories too.

Directions for Future Research. An extension of this research to utilitarian products is clearly indicated in the above discussions. Two other possible extensions could be finding out the memory effects over several long term intervals, and studying the response of SBR and non-SBR schematics to competitive information.

The memory studies could be conducted in matched samples in 2 hours, 24 hours, and 48 hours recall intervals. To ensure that we do not have floor effects, the stimuli could be reinforced by having a longer news item where the critical information elements are repeated several times.

The competitive information study could be designed simply by adding competitive positive and negative information to the news stimuli. The study design could focus on obtaining the evaluation and attitude ratings of the competitive brands as well as the focal brand.

EXHIBIT 1

New generation of sneakers

Sneaker war heats up again

By Jayne O'Donnell
USA TODAY

So you thought you had heard it all and seen it all in sneakers. School students, college folks, even people who rarely venture out for any kind of outdoor activities - all wear sneakers. Currently there are several brands out there with features you may not have heard of before. But now there is a whole new generation of high performance sneakers ready to hit the market this fall.

Manufacturers say that sneakers have evolved into everyday footwear of choice for millions of people - mostly teens and college age consumers. It is no longer something you wear only when you go out running or playing basketball. A new market is emerging for what manufacturers call the 'All Purpose Sneakers' segment.

This fall should see several manufacturers introducing new models of 'All Purpose Sneakers'. Leading the pack are the industry heavyweights Nike, Reebok, Asics and Adidas. These new models will have features never seen before. For instance, Nike has a new patented process to treat the shoe upper fabrics that make them virtually maintenance free. Its 'wipe-and-go' ease that keeps these shoes spotless and new looking. Does it work? Consumer Reports ran several lab tests and tested these sneakers on a panel of users. Their verdict - its amazing! "No matter how much dust and grime you collect, it just goes away with one easy swipe".

Nike also has another innovation in these sneakers. Noting that consumers look for comfortable fit - particularly when these sneakers are going to get really used - as much as 12 hours a day - they have developed what they call elastic fit technology. The shoe upper actually molds itself to the

contours of your feet, gently hugging the feet. The panelists in the Consumer Report test however had mixed feelings. Some felt that it really makes the sneakers very comfortable to wear - others complained that it traps moisture.

How about the weight of these sneakers? They have ultra light soles that really helps when you have to be on your feet for long hours. The sole is made of a new ultra light weight but very tough 'polyoxylene' compound. It's a new Dupont invention that found a use in sneakers! However, the Consumer Report panelists were less than enthusiastic about this. They felt that the shoes do not bounce as much. It has poor shock absorption and that may not be something many users will live with.

Industry sources reveal that several leading brands have unique and innovative features to offer this fall. But who will win this new round of battle in the 'All Purpose Sneakers' market is anybody's guess.

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APPENDIX D
QUESTIONNAIRE FOR ESSAY II

PROJECT SMR/3/1/1: Brand Usage Profile

PLEASE WRITE YOUR NAME HERE _____

This information is needed to collate all parts of the questionnaire and will not be used for any research analysis.

1. Please tell us something about yourself:

a) Sex: Male [] Female [] b) Age: _____ c) Year: _____

2. Pl. mention all the **BRAND NAMES OF SNEAKERS YOU ARE AWARE OF:**

1.	2.	3.
4.	5.	6.

3. Please mention the **SNEAKER BRANDS YOU HAVE USED IN THE PAST:**

1.	2.	3.
4.	5.	6.

4. Please mention the **SNEAKER BRANDS YOU ARE CURRENTLY USING AND FOR HOW LONG YOU HAVE BEEN USING THEM.**

CURRENTLY USING	NO. OF YEARS	CURRENTLY USING	NO. OF YEARS

5. Please check the number that best describes your opinion about the following brands:

REEBOK

[1]	[2]	[3]	[4]	[5]	[6]	[7]
This brand is the best that is available	I like this brand very much - but there's another that is available that is just as good	I like this brand - but others are better	This brand is acceptable - but most other brands are better	I neither like or dislike this brand - it doesn't have any particular merits	I don't like this brand very much - although it is not as bad as some	I don't like this brand at all - it is one of the worst available

NIKE

[1]	[2]	[3]	[4]	[5]	[6]	[7]
This brand is the best that is available	I like this brand very much - but there's another that is available that is just as good	I like this brand - but others are better	This brand is acceptable - but most other brands are better	I neither like or dislike this brand - it doesn't have any particular merits	I don't like this brand very much - although it is not as bad as some	I don't like this brand at all - it is one of the worst available

6. **What is your overall opinion of Nike sneakers?**

NIKE

- | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|-------------------|
| a. Very Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Bad |
| b. Like Very Much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dislike Very Much |
| c. Very Unfavorable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Favorable |

6. **What is your overall opinion of Reebok sneakers?**

REEBOK

- | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|-------------------|
| a. Very Unfavorable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Favorable |
| b. Very Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Bad |
| c. Like Very Much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dislike Very Much |

8. Please mention the brand of sneakers you wear most often in the box below. Please check the cell that best describes what you feel is applicable to this brand. In this scale the end positions are very descriptive of the brand. The center position (4) is neutral. The intermediate positions are somewhat descriptive of the brand.

Name of the brand you wear most often _____

not comfortable to wear	1	2	3	4	5	6	7	very comfortable to wear
long lasting	1	2	3	4	5	6	7	wears out fast
easy to clean	1	2	3	4	5	6	7	not easy to clean
wide range of styles	1	2	3	4	5	6	7	limited range of style
appealing looks	1	2	3	4	5	6	7	unappealing looks
poor fit	1	2	3	4	5	6	7	excellent fit
breathable fabric	1	2	3	4	5	6	7	not breathable fabric
good shock absorbency	1	2	3	4	5	6	7	poor shock absorbency
poor arch support	1	2	3	4	5	6	7	good arch support

PLEASE WRITE YOUR NAME HERE _____

This information is needed to collate all parts of the questionnaire and will not be used for any research analysis.

PROJECT SMR/3/2/3N

PLEASE DO NOT OPEN THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

Code: _____

Instructions

- 1. This experiment has several sections.**
- 2. Section A involves a reading and comprehension task. You will have 3 minutes to read the section.**
- 3. Please DO NOT go to the other sections, until you are told to do so by the research monitor.**

THANK YOU FOR PARTICIPATING IN THIS RESEARCH.

SECTION A**Time: 3 minutes****PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY:**

Recent press and trade journal reports suggest that the sneaker market is getting more competitive and new market segments are emerging. We want to understand this trend and its impact on the usage and buying behavior of consumers.

The next page has a news article that appeared in the USA Today newspaper, August 22, 1997 issue. It is representative of the kind of news items that are appearing in the business press in recent times.

1. **PLEASE READ THE NEWS ITEM VERY CAREFULLY.**
2. **TRY TO FORM A GENERAL IMPRESSION OF WHAT THE NEWS ITEM MENTIONS ABOUT THE HAPPENINGS IN THE SNEAKER MARKET.**
3. **YOU ARE NOT REQUIRED TO MEMORIZE OR MAKE NOTES.**
4. **YOU HAVE A TOTAL OF THREE MINUTES TO READ THE NEWS ITEM. THE RESEARCH MONITOR WILL COLLECT THE NEWS ITEM AFTER THE THREE MINUTES ARE OVER.**

SECTION B:

Let us talk about Jeans.

1. Please mention all the **BRAND NAMES OF JEANS YOU ARE AWARE OF:**

1.	2.	3.
4.	5.	6.

2. Please mention the **BRAND NAMES OF JEANS YOU HAVE USED IN THE PAST:**

1.	2.	3.
4.	5.	6.

3. Please mention the **BRAND NAMES OF JEANS YOU ARE CURRENTLY USING AND FOR HOW LONG YOU HAVE BEEN USING THEM.**

CURRENTLY USING	NO. OF YEARS	CURRENTLY USING	NO. OF YEARS
1.		2.	
3.		4.	

SECTION C

Time: 7 minutes

PLEASE TRY TO RECALL **EVERYTHING YOU READ** IN THE NEWS ARTICLE AND WRITE IT DOWN IN YOUR OWN WORDS. PLEASE TRY TO BE AS THOROUGH AS POSSIBLE. HOWEVER, DO NOT WRITE ANYTHING THAT REFLECTS YOUR OPINION AND WAS NOT MENTIONED IN THE NEWS ARTICLE.

PLEASE CONTINUE ON THE NEXT PAGE

IS THERE ANYTHING ELSE YOU CAN RECALL - SOMETHING YOU ARE NOT ABSOLUTELY SURE OF, BUT MAY HAVE READ IN THE NEWS ARTICLE?

SECTION D:

We would like to know your opinion about the NIKE ALL PURPOSE SNEAKERS on the following statements. Please circle the number that best describes your agreement or disagreement with the statement:

1. In my opinion elastic fit is a very useful new feature.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. The wipe-and-go feature is hardly going to make any difference to the user.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. In my view the new ultra light sole is a very useful new feature.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. I feel that the elastic fit technology will create serious problems by trapping moisture in the sneakers.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5. The new ultra light sole feature is hardly going to make any difference to the user.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6. I feel wipe-and-go would make these sneakers virtually maintenance free.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7. I feel the elastic fit technology is hardly going to make any difference to the user.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

8. In my view the ultra light sole would greatly increase foot comfort when on your feet for long hours.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

9. In my opinion, the wipe-and-go is a very useful new feature.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

10. I think that the new ultra light sole would cause serious foot injury.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

11. I feel that the elastic fit technology will dramatically enhance the comfort and fit of these sneakers.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

12. I think that the wipe-and-go sneakers will have a very unappealing plastic look.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

13. The news article was easy to read and understand.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14. The information in the news article didn't seem real.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

SECTION E:

We are interested to know your opinion about the **NEW NIKE ALL PURPOSE SNEAKERS**. Please check the cell that best describes what you feel is applicable to the brand name mentioned. In this scale the end positions are very descriptive of the brand. The center position is neutral. The intermediate positions are somewhat descriptive of the brand.

NIKE ALL PURPOSE SNEAKERS:

not comfortable to wear for long hours	1	2	3	4	5	6	7	very comfortable to wear for long hours
easy to clean	1	2	3	4	5	6	7	not easy to clean
appealing looks	1	2	3	4	5	6	7	unappealing looks
poor fit	1	2	3	4	5	6	7	excellent fit
will trap moisture	1	2	3	4	5	6	7	will not trap moisture
will cause foot injury	1	2	3	4	5	6	7	will not cause foot injury

SECTION F:

1. What would be your overall opinion of NIKE ALL PURPOSE SNEAKERS?

- | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|-------------------|
| a. Very Unfavorable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Favorable |
| b. Very Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Bad |
| c. Like Very Much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dislike Very Much |

2. If Nike All Purpose Sneakers was available in the market, how likely are you to try this brand?

NIKE ALL PURPOSE SNEAKERS

- | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|----------------------------|
| DEFINITELY
WOULD
NOT TRY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | DEFINITELY
WOULD
TRY |
|--------------------------------|---|---|---|---|---|---|---|----------------------------|

SECTION G:

As you know, NIKE makes several kinds of sneakers and other related products. In this section we are interested to know your opinion of the NIKE brand. Please respond to the statements in this section based on what you know and feel about the NIKE brand in general.



The following statements help us to understand your feelings towards NIKE. Please circle the number that best describes how well the statement applies to you.

1. Nike is a brand for people like me.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. Nike is a reputed brand.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. I remember several occasions when I have enjoyed wearing Nikes.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. If I had to buy other brands of sneakers, I would feel disloyal to Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5. I feel affection towards Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

6. I love Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

7. Nike reflects who I am.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

8. I remember almost everything about the first time I bought a pair of Nikes.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

9. I can trust Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

10. If Nike was a 'person', he/she would be a very special friend to me.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

11. Wearing Nikes could say a lot about who I am to other people.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

12. I would get upset if people said bad things about Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

13. The Nike image agrees with my self image.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14. I can tell you a lot about my personal experiences as a Nike user.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

15. I feel a personal connection to Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

16. I have strong positive feelings about Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

17. I associate a lot of personal memories with this brand (Nike).

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

18. Nike suits me well.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

19. I have a favorable image of Nike.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

20. I am so happy with Nike that I see no reason to check out other brands.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

21. Nike has a consistent quality.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

22. Nike has a good image.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

SECTION H:

WHAT WOULD BE YOUR REACTION IF THE FOLLOWING ADVANTAGES AND DISADVANTAGES WERE TRUE FOR ANY KIND OF SNEAKERS?

	EXTREMELY NEGATIVE				EXTREMELY POSITIVE		
	1	2	3	4	5	6	7
Traps Moisture	1	2	3	4	5	6	7
Fits Very Well	1	2	3	4	5	6	7
Very easy to clean	1	2	3	4	5	6	7
Shoe upper looks like plastic	1	2	3	4	5	6	7
Comfortable to wear for long hours	1	2	3	4	5	6	7
May cause foot injury	1	2	3	4	5	6	7

Thank you very much for your time and patience. Please fill in the research participation certificates. Please do not leave the room until the Research Monitor tells you do so. If you have any questions about this research, please feel free to ask.

PLEASE WRITE YOUR NAME HERE _____

This information is needed to collate all parts of the questionnaire and will not be used for any research analysis.

PROJECT SMR/3/2/3R

PLEASE DO NOT OPEN THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

Code: _____

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SECTION C**Time: 7 minutes**

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PLEASE CONTINUE ON THE NEXT PAGE

SECTION D:

We would like to know your opinion about the REEBOK ALL PURPOSE SNEAKERS on the following statements. Please circle the number that best describes your agreement or disagreement with the statement:

1. In my opinion elastic fit is a very useful new feature.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

2. The wipe-and-go feature is hardly going to make any difference to the user.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

3. In my view the new ultra light sole is a very useful new feature.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

4. I feel that the elastic fit technology will create serious problems by trapping moisture in the sneakers.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

5. The new ultra light sole feature is hardly going to make any difference to the user.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

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Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14. The information in the news article didn't seem real.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

SECTION E:

We are interested to know your opinion about the **NEW REEBOK ALL PURPOSE SNEAKERS**. Please check the cell that best describes what you feel is applicable to the brand name mentioned. In this scale the end positions are very descriptive of the brand. The center position is neutral. The intermediate positions are somewhat descriptive of the brand.

REEBOK ALL PURPOSE SNEAKERS:

not comfortable to wear for long hours	1	2	3	4	5	6	7	very comfortable to wear for long hours
easy to clean	1	2	3	4	5	6	7	not easy to clean
appealing looks	1	2	3	4	5	6	7	unappealing looks
poor fit	1	2	3	4	5	6	7	excellent fit
will trap moisture	1	2	3	4	5	6	7	will not trap moisture
will cause foot injury	1	2	3	4	5	6	7	will not cause foot injury

SECTION F:

1. What would be your overall opinion of REEBOK ALL PURPOSE SNEAKERS?

- | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|-------------------|
| a. Very Unfavorable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Favorable |
| b. Very Good | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very Bad |
| c. Like Very Much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dislike Very Much |

2. If Reebok All Purpose Sneakers was available in the market, how likely are you to try this brand?

REEBOK ALL PURPOSE SNEAKERS

- | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|----------------------------|
| DEFINITELY
WOULD
NOT TRY | 1 | 2 | 3 | 4 | 5 | 6 | 7 | DEFINITELY
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3. I remember several occasions when I have enjoyed wearing Reeboks.

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4. If I had to buy other brands of sneakers, I would feel disloyal to Reebok.

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5. I feel affection towards Reebok.

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6. I love Reebok.

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7. Reebok reflects who I am.

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9. I can trust Reebok.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

10. If Reebok was a 'person', he/she would be a very special friend to me.

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11. Wearing Reeboks could say a lot about who I am to other people.

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12. I would get upset if people said bad things about Reebok.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

13. The Reebok image agrees with my self image.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

14. I can tell you a lot about my personal experiences as a Reebok user.

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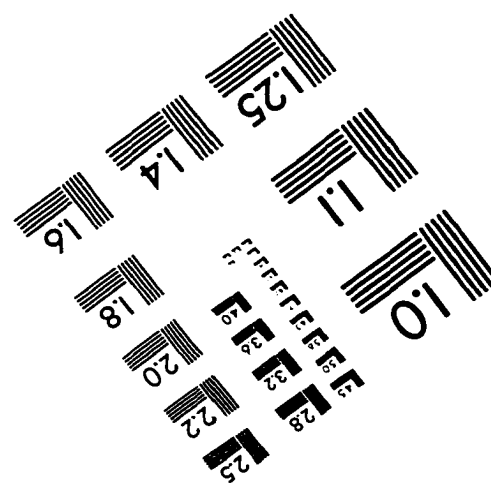
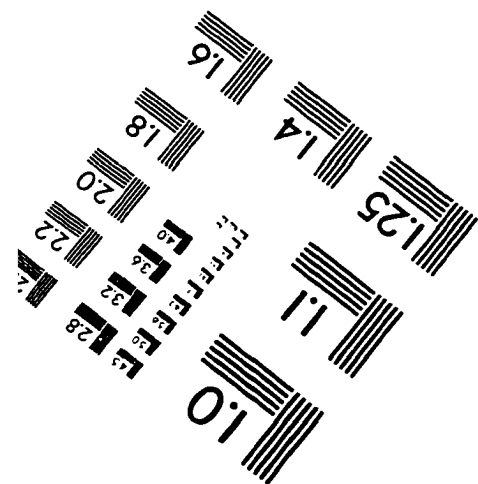
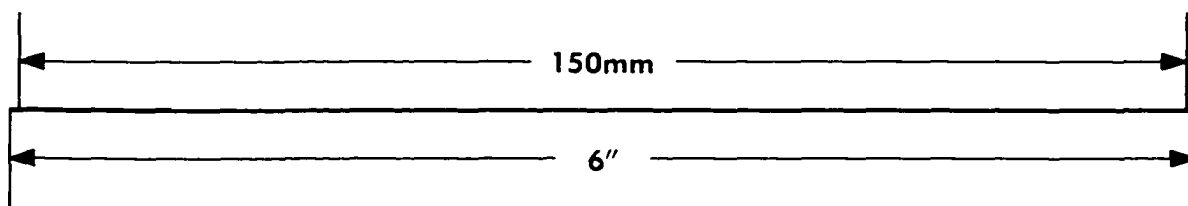
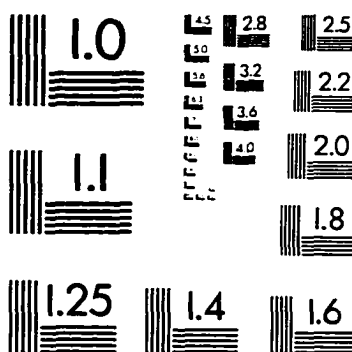
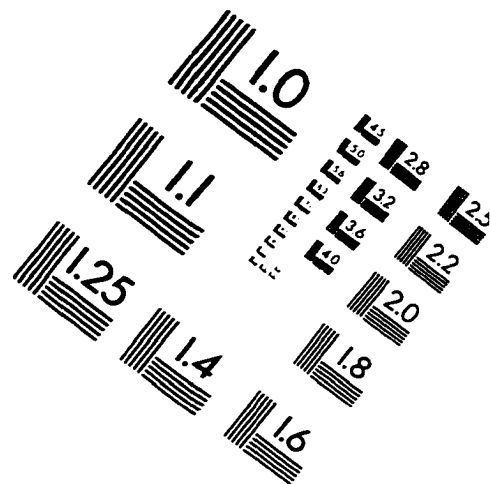
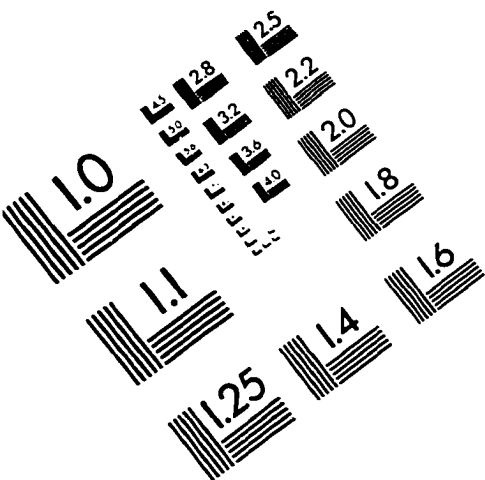
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	EXTREMELY NEGATIVE				EXTREMELY POSITIVE			
Traps Moisture	1	2	3	4	5	6	7	
Fits Very Well	1	2	3	4	5	6	7	
Very easy to clean	1	2	3	4	5	6	7	
Shoe upper looks like plastic	1	2	3	4	5	6	7	
Comfortable to wear for long hours	1	2	3	4	5	6	7	
May cause foot injury	1	2	3	4	5	6	7	

Thank you very much for your time and patience. Please fill in the research participation certificates. Please do not leave the room until the Research Monitor tells you do so. If you have any questions about this research, please feel free to ask.

IMAGE EVALUATION TEST TARGET (QA-3)



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