

## Self-brand connections: The role of attitude strength and autobiographical memory primes

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Received 2 March 2007; accepted 17 September 2007

### Abstract

According to the self-brand connection (SBC) construct, brand associations are used to construct one's self or to communicate one's self to others [Escalas JE. Narrative processing: building connections between brands and the self. unpublished dissertation 1996; Duke University.]. Study 1 reveals that: (1) SBCs significantly influence brand evaluations and attitude strength; (2) females exhibit stronger SBCs overall relative to their male counterparts; and (3) higher levels of SBCs impact attitude strength particularly for females in response to the *gendered* brand studied here — a sports organization, the WNBA. Study 2 focused on a non-gendered brand. The results showed that consumer fans who identified with the in-group (the home team) reported higher levels of SBCs than those who identified with the out-group. Finally, when autobiographical memory primes are presented from the perspective of the in-group, SBCs are higher than when these memory primes are presented from the perspective of an out-group. © 2007 Elsevier Inc. All rights reserved.

**Keywords:** Brand connections; Brand attitude; Attitude strength; Memory primes

Keller (2008) emphasizes two fundamental questions marketers face in their attempts to develop a successful brand management strategy: First, what does the brand really mean to consumers? Second, if consumers do possess any knowledge of that brand, how does this brand knowledge influence the way these consumers respond to various influence attempts by marketers? In essence, the ultimate impact of a brand is dependent upon the quality of consumers' experiences with that brand and the extent to which these experiences succeed in creating vivid linkages within the mind of the consumer (Fournier, 1998). Some consumers may form meaningful and personal connections between themselves and a given brand such that the brand itself is somehow closely associated with the individual's self-concept (Escalas and Bettman, 2004). The self-brand connection (SBC) construct measures this relationship (Escalas, 2004). In this paper, we broaden the perspective and application of the SBC construct beyond tangible consumer products (Escalas and

Bettman, 2003) by focusing on attitudes towards branded sports organizations.

In Study 1, we examine the extent to which SBCs influence consumers' attitudes in the context of a 'gendered' brand — a brand that is positioned with a clear female image. This study uses the Women's National Basketball Association (WNBA), a sub-brand of the parent organization, the National Basketball Association (NBA), to determine whether females show stronger SBCs to this type of brand compared to their male counterparts. Study 1 also tests the relationship between SBC and attitude strength (Krosnick, 1988; Krosnick et al., 1993; Priester et al., 2004). Attitude strength incorporates characteristics such as the intensity of one's feelings about the attitude object, the degree to which one is confident that one's attitude toward the attitude object or issue is correct, and the extent to which an individual cares deeply about the issue or the organization (Krosnick, 1988). Since meaningful brand connections measure the extent to which the brand is important enough to be linked to the consumer's self-concept and psychological needs, then individuals with strong SBCs should exhibit higher levels of attitude strength: i.e., their attitudes will be enduring and held with greater confidence.

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One objective of Study 2 is to determine how gender relates to SBCs when the target is not a ‘gendered’ brand like the WNBA, but is popularly supported by both males and females alike (American college football). More importantly, Study 2 also explores new opportunities for strengthening SBCs for brands not typically classified as gender specific. This study utilizes a context where consumer fans express sentiments about their home team in contrast to reactions against an arch rival (i.e., ‘enemy’ team) and thus, tendencies to bond with the in-group (the supporters of the home team) can be very high (Hogg and Abrams, 1990; Tajfel and Turner, 1986). Under these circumstances, two questions arise: what strategies are likely to strengthen the SBCs of the in-group, and how do these SBCs influence attitudes? We test the extent to which SBCs are bolstered by autobiographical memory primes (Baumgartner et al., 1992; Escalas, 2004; Sujan et al., 1993), which we believe help to bond group members even closer to the in-group by creating stronger feelings of brand attachment and engagement (Fournier, 1998; Keller, 2008).

In the following section, we take a look at two constructs: SBCs (Escalas, 2004) and attitude strength (Krosnick, 1988; Krosnick et al., 1993; Priester et al., 2004). The relevant literature about social identity theory and autobiographical memory are discussed later with Study 2.

## 1. Key Constructs and hypotheses

### 1.1. The self-brand connection construct

The personal meaning associated with a brand can be derived from: (a) the image or “personality” of the brand that develops over time from the advertising programs and the dynamics of popular culture in society (Keller, 2008), and (b) the individual’s personal experiences with the brand (Escalas, 2004). The fundamental premise of the SBC construct is that when brand associations (meanings) are used to construct one’s self or to communicate one’s self to others, a strong connection is formed between the brand and the consumer’s self identity (Escalas, 2004). The creation of a strong and meaningful SBC is more likely to occur when the consumer’s personal experience with the brand is closely tied to the image of the brand, and when the brand itself satisfies an identified psychological need: e.g., a consumer may drive a *BMW* to fit in with his or her peers, or to differentiate him or herself from an out-group (Escalas, 2004). SBC captures the strength of the “connection” between perceived brand meaning (including image and brand personality), and the consumer’s self-concept. SBC is distinct from brand personality — “the set of human characteristics associated with a brand” (Aaker, 1997, p. 347), in that, it measures the extent to which the consumer connects that personality to his or her self-concept.

Escalas (2004) reports that SBCs have a positive relationship with attitudes toward the brand as well as behavioral intentions. Similarly, we propose that SBCs influence attitudes toward an organization to which respondents are attached or “connected”.

**H1.** SBCs are positively related to brand attitude.

### 1.2. Extending the scope of brand connections: the case for attitude strength

One of the arguments supporting the relevance of the SBC construct is that consumers with highly developed SBCs should exhibit stronger and more confident brand attitudes than those with less developed brand connections. If this argument holds, high SBCs should predict attitude strength (“a latent psychological construct that is presumably represented in memory by various attributes of the attitude” (Krosnick and Petty, 1995, p. 3)). Strong attitudes tend to be: (a) persistent over time, (b) resistant to change, and (c) likely to have a strong impact on consumer information processing and behavior (e.g., Krosnick, 1988; Krosnick and Petty, 1995). To measure attitude strength, researchers have used a range of dimensions. For example: (1) *Attitude Intensity* — the strength of the emotional reaction evoked by an attitude object (Krosnick et al., 1993); (2) *Attitude Certainty* — the extent to which an individual is certain or confident that his or her attitude toward an object is correct (Krosnick et al., 1993); (3) *Attitude Importance* — the degree to which an individual cares deeply about and is personally invested in an attitude (Tourangeau and Rasinski, 1988); and (4) *Interest in Relevant Information* — the extent to which an individual is motivated to gather information about an attitude object (Krosnick et al., 1993).

Basically, we are arguing that people for whom a given brand is sufficiently important to be linked to their self-concept and to their psychological needs should not only develop more favorable brand attitudes (H1), but will exhibit higher levels of attitude strength as well.

**H2.** SBCs are positively related to attitude strength.

### 1.3. Self-brand connections for a ‘gendered’ brand

The SBC scale (Escalas, 2004) has been subjected to tests of validity in contexts involving brands like *BMW* and *Nike* that represent tangible products targeted to general populations as well as to specific demographic consumer groups. However, (to our knowledge) the SBC construct has never been tested in a context where the target brand represents an intangible product or service. The WNBA has been strategically crafted as a *gendered* brand whose positioning strategy is clearly aimed at developing lasting bonds with women, offering hope and encouragement to become active in sports and wholesome living. In other words, the WNBA is seeking to build meaningful SBCs with its target constituency (females) in hopes of developing and maintaining strong positive attitudes toward the WNBA brand.

What we are suggesting here is a “match” or “gender fit” much like that found in research on the matching requirements for celebrity effectiveness (e.g., Kahle and Homer, 1985; Kamins, 1990). This past research supports the idea that endorsers are most effective at persuading consumers when the endorsers’ image “matches” the message about the product and is consistent with the aspired-to self-image of the target audience (Kahle and Homer, 1985). Some studies include

moderating factors such as gender (Kahle and Homer, 1985), but not in the way applied here. We utilize gender as both an individual characteristic and product or target characteristic, claiming that males and females will exhibit stronger SBCs towards products that match their own gender. Thus, women, compared to their male counterparts, should report higher SBCs as well as stronger brand attitudes towards a female-gendered brand such as the WNBA.

**H3.** Females exhibit higher SBCs relative to their male counterparts for female-oriented brands.

**H4.** Higher SBCs enhance brand attitudes and attitude strength more strongly for females vs. males when evaluating a female-gendered brand.

## 2. Method — Study 1

### 2.1. Subjects and procedure

In Study 1 ( $N=261$ ), undergraduate subjects were given academic credit for participating in a survey of their attitudes about recently organized national professional sports organizations. Subjects were asked to rate their overall attitudes toward the WNBA along with measures of SBC (Escalas, 2004) and attitude strength (Krosnick, 1988).

### 2.2. Measures

Using a close adaptation of the Escalas (1996) SBC scale, subjects indicated their level of agreement with the following seven statements: “I feel as though I can relate to the WNBA”, “I can identify with the WNBA”, “I feel affection to the WNBA”, “I would wear a WNBA t-shirt to communicate who I am to other people”, “I think the WNBA helps me become the type of person I want to be”, “I have strong positive feelings about the WNBA”, and “I have an interest in developing a relationship with the WNBA” ( $\alpha=.95$ ). Brand attitudes are captured via four indicators (unfavorable/favorable, bad/good, negative/positive, and dislike/like;  $\alpha=.97$ ) and the attitude strength scale summed the following items: “How much do you personally care about the WNBA?” “How knowledgeable about the WNBA do you consider yourself?” “Compared to other sports, how important is the WNBA to you?” “How much does the WNBA really mean to you?” “How certain are you that the WNBA will one day become a major professional sport?” “How sure are you that the opinion you have just expressed is correct?” “In general, how strong are your feelings about the WNBA?” and “How interested are you in obtaining information about the WNBA?” ( $\alpha=.93$ ).

## 3. Results — Study 1

To test the primary hypotheses, we estimate a series of OLS regression equations adding the SBC predictor, the gender dummy variable, and the accompanying interaction term to measure their relative contribution to explaining brand attitudes and attitude strength. [The data for the independent variables are

mean-centered because the interpretation of interaction terms may become problematic (Yi, 1990).]

H1 proposes a positive relationship between SBC and brand attitude. Findings indicate that SBC impacts attitude ( $\beta=.67$ ,  $t=9.05$ ,  $p<.001$ ). H2, that high SBCs are positively related to attitude strength, is confirmed in that high SBCs are linked to attitude strength ( $\beta=.75$ ,  $t=13.80$ ,  $p<.001$ ). H3 predicts that since the WNBA is presumed to be perceived as a brand closely linked to the interests and aspirations of female sports’ fans, women should manifest higher levels of SBCs than their male counterparts. Results indicate that women ( $M=3.45$ ,  $N=122$ ) score higher SBCs than men ( $M=2.24$ ,  $N=140$ ,  $t(260)=6.75$ ,  $p<.001$ ). Thus, H3 is confirmed.

A SBC  $\times$  Gender interaction for attitude strength ( $\beta=.13$ ,  $t=2.41$ ,  $p<.02$ ) confirms that higher levels of SBCs are more influential in enhancing attitude strength among females compared to their male counterparts (H4). However, no similar SBC  $\times$  Gender interaction emerges for brand attitude, indicating only partial support for H4. Furthermore, examination of the relative size of the beta coefficients suggests that SBC is more important than gender in explaining brand attitude ( $\beta=.67$  vs.  $.11$ ) and attitude strength ( $\beta=.75$  vs.  $-.01$ ).

## 4. Discussion — Study 1

Findings for attitude strength are consistent with the notion of a match or “gender fit” reported in previous research on the matching requirements for celebrity effectiveness (e.g., Kahle and Homer, 1985; Kamins, 1990). The interesting interaction between SBCs and gender for attitude strength has several implications for researchers and marketing practitioners. Accordingly, it may be assumed that gender can play an important role in enhancing SBCs and attitude strength. In Study 1, SBCs are strongly related to brand attitude and attitude strength, and females reported significantly higher SBCs than their male counterparts. Presumably, these results reflect that this gendered brand (the WNBA) is more effective at connecting with a female audience than with a male audience, and higher levels of SBCs result in increased attitude strength. Therefore, attitudes toward the target brand should be persistent rather than fickle, and resistant to change rather than susceptible to persuasive attempts launched by competitors — all of which should be appealing to practitioners seeking to build brand loyalty and long-term attachments with consumers.

## 5. Study 2

Study 2 examines two issues not addressed by the preceding study: First, to what extent are SBCs affected when the target is equally supported by both males and females alike? To pursue this question requires using a brand from the same product class — that is, sport organizations. The logic here is that if females show higher SBCs when the target brand is female-oriented, then gender effects will be eliminated when the target brand is popular with both male and female sports fans.

Secondly, Study 2 explores how advertisers can play an active role in designing communications to enhance the SBCs

of consumers who are part of a vibrant in-group. In this context, we investigate the extent to which SBCs are strengthened when consumer fans are exposed to narratives that activate positive memories associated with the traditions of the game consumption experience. These positive experiences, typically shared by members of the in-group, are identified in this study as autobiographical memories (Baumgartner et al., 1992). While previous research has examined how fond memories associated with the use of consumer products influence consumer processing of advertising appeals (Baumgartner et al., 1992; Sujan et al., 1993), little attention has been devoted to understanding how autobiographical memories can strengthen and reinforce fan “connections” to a branded sports organization.

To gain an understanding of the way in-group vs. out-group behavior can influence SBCs and the impact of autobiographical memories, the following section reviews the relevant literature on social identity theory (e.g., Hogg and Abrams, 1990; Tajfel and Turner, 1986). This is followed by a brief review of the marketing literature on autobiographical memories to lay the theoretical foundation for predicting their influence on SBCs.

### 5.1. Social identity theory

Social identity theory is based on the notion that people will be motivated to attach themselves to those who are perceived to be similar in values, preferences or various shared group characteristics (Jacobson, 2003). The fundamental premise is that group membership is crucial to the formation of specific identities developed by the individual (Hogg and Abrams, 1990). Social identity is developed through the value and emotional attachment that an individual derives from membership in a particular group (Tajfel and Turner, 1986). Groups are particularly likely to engage in strategies to maintain their identity when (a) there is a strong attachment or identification with the group, and (b) there is an imminent threat to the dominant status of the in-group mounted by a rival group (e.g., just before a major game encounter) (Hogg and Abrams, 1990; Tajfel and Turner, 1986).

In this study, we propose that the processes associated with building strong group identity and cohesion are ultimately reflected in stronger identification with the in-group, as well as an enhancement of positive social and self-concept benefits (Branscombe and Wann, 1991; Tajfel and Turner, 1986). For example, every year the most renowned rivalries in college football in the USA are played out between certain teams. A high degree of group cohesiveness, team loyalty, and social bonding may be manifested by the home team against the rival team. Under these conditions, marketing strategists may have an opportunity to strengthen the SBCs to the organization by priming the audience with autobiographical memories.

### 5.2. Priming autobiographical memories

Autobiographical memories represent the individual’s recollection of a specific episode from the past that is related to the self, and closely linked to memory for events from one’s own life (Baumgartner et al., 1992; Sujan et al., 1993). Marketing

researchers describe it as a “reliving of the individual’s phenomenal experience during that earlier moment” (Baumgartner et al., 1992, p. 54). These memories are typically rich in visual images, and in the case of sports consumption experiences, autobiographical memories would include the colorful and memorable rituals that characterize the game experience. Baumgartner et al. (1992) find that print ads designed to evoke autobiographical memories influence information processing, ad evaluations, and the generation of feelings of empathy for the characters featured in the ad.

The current study proposes that since autobiographical memory primes represent recollections of vivid memories related to the self, these memories should have a direct and positive influence on SBCs. Consistent with this perspective, Escalas (2004) demonstrates that advertisements that tell a story encourage higher levels of narrative processing, thereby enhancing the formation of strong SBCs. It is therefore reasonable to conclude that when message recipients are presented with an autobiographical memory prime that includes episodes, events, and characteristic rituals of the game consumption experience, this type of narrative evokes memories of positive experiences with the brand. Memory primes of this nature may also serve as sensory inputs that initiate a spreading activation process (Collins and Loftus, 1975).

In the context of consumer sport consumption experiences, an autobiographical memory prime that includes recollections of familiar details of the game experience (e.g., the tailgate activities, smelling the aroma of hot dogs, the sound of the marching band playing the university fight song, etc.) automatically activates a very strong network of associations and memories (e.g., Collins and Loftus, 1975). We argue that when an autobiographical memory prime is presented from the perspective of the in-group (i.e., highlighting experiences associated with the home team game experience), it promotes a close relationship to the brand and hence stimulates strong SBCs. However, when the autobiographical memory prime is presented from the perspective of the out-group (the opposing team), SBCs are weaker because the memory prime is less able to activate the stored images and experiences of the message recipient. That is:

**H5.** Autobiographical memory primes presented from the perspective of the in-group stimulate stronger SBCs than memory primes presented from the perspective of the out-group.

### 5.3. SBCs and emotions as mediators of the impact of autobiographical memory primes on attitude

If autobiographical memories foster and strengthen SBCs, researchers and practitioners may also be interested in whether such memory primes have a direct relationship to attitude, or whether this relationship is mediated by SBCs (i.e., Autobiographical Memory Prime → SBC → Attitude). It is also possible that emotions may serve as the primary mediator of the influence of the memory prime on brand attitude. Smith (1993) argues that emotions play an important role in intergroup attitudes and relations. In an attempt to explain the linkage

between emotions and intergroup social identity, Smith (1999) proposes that “appraisals refer to the position of the out-group in relation to the in-group, just as, in emotion theories, the appraisals that trigger emotion by definition refer to an object’s or situation’s implication for the self” (p. 187). Therefore, when individuals assert their social identity with a given group, events or other out-groups are appraised in terms of the consequences for the in-group, and this process helps elicit intergroup emotions (Yzerbyt, 2004). In-group members often display a strong sense of social identity and a corresponding range of (favorable) emotions (e.g., Smith, 1999; Yzerbyt, 2004). This experience is expected to be accompanied by higher levels of SBCs (Escalas, 2004).

When in-group members are exposed to an autobiographical memory prime, do SBCs and/or emotions serve as the mechanism through which the memory prime influences attitudes? Above, we argue that memory primes impact SBCs and emotions, and that SBCs impact attitude. In the marketing and the advertising literature, advertising-induced emotions are known to influence consumer responses such as brand attitudes (e.g., Edell and Burke, 1987). Thus, exploratory hypotheses are tested:

**H6A.** SBCs mediate the influence of autobiographical memory primes on attitude (i.e., Autobiographical Memory Prime → SBCs → Attitude).

**H6B.** Emotions mediate the influence of autobiographical memory primes on attitude (i.e., Autobiographical Memory Prime → Emotion → Attitude).

## 6. Method — Study 2

### 6.1. Pretest: men's college football

One goal of Study 2 is to determine whether consumer fans differ in the extent to which they relate to a “gendered” brand like the WNBA vs. a brand in the same sports category that is equally popular among both male and female fans. A panel of three expert judges, after evaluating a number of sports, determined that college football represents a brand that is likely to be popular among both genders. A pretest was then performed to determine how male and female fans relate to college football.

To disguise the purpose of the pretest, 58 college students (37 male and 21 female) were told that the reason for the questionnaire was to determine how marketing managers price tickets for various types sporting events. Subjects responded to questions about the extent to which they relate to the WNBA (one condition) or the University football team (the other condition). The design was a 2 (Gender: Male vs. Female) × 2 (Type of Sport: College Football vs. WNBA) between-subjects ANOVA design. Results show no significant gender differences between male vs. females’ ability to relate to college football ( $M_{\text{male}}=4.76$  and  $M_{\text{female}}=4.66$ ). However, a significant Gender × Sport interaction indicates that women relate more to the WNBA ( $M_{\text{female}}=2.90$  and  $M_{\text{male}}=1.55$ ,  $F(1,54)=11.64$ ,  $p<.001$ ) than college football. These findings are consistent with the observations of Stuteville (1971) who notes that as

society evolves, the status differences between masculinity and femininity with regard to the use of consumer products tend to grow closer. In particular, it is easier for females to adapt masculine symbols like smoking cigarettes, than it is for men to adopt feminine products (e.g., Elizabeth Arden’s *Eyeshadow for Men*). Females’ identification with college football possibly supports Stuteville’s observations in the sense that there is an equal support for a male-dominated sport by both men and women. Although the rational mind may be ‘bounded’ by the notion that a male-dominated sport should have the support of men, but not women, Gigerenzer and Goldstein (1996) appeal to us to be released from our ‘bounded rationality’ and accept new and emerging trends especially when they are buttressed by empirical evidence and data. We now turn to the details of Study 2.

### 6.2. Subjects and design

University of Michigan (UM) undergraduates ( $N=65$ ; male=36; female=29) were informed that they were participating in a study about their attitudes toward the annual football game against Ohio State University (OSU). The study features a 2 (Gender) × 2 (Autobiographical Memory Prime: In-group vs. Out-group) between-subjects design. [Note: The uneven gender split was unavoidable as subjects were volunteers and questionnaires were randomly distributed to prevent subjects’ thinking that gender effects were of interest.]

### 6.3. Procedure and measures

In the autobiographical memory prime condition, subjects read an enticing narrative written by a UM fan reviewing the highlights of his/her experience while attending the UM vs. OSU football game. The second version (the out-group autobiographical memory prime) maintained the identical structure, but this time it was an OSU fan relating the game experience from the OSU Buckeye perspective (see Appendix A).

After reading the memory prime, subjects rated their level of agreement to questions about their reactions to the game day story. These questions served as manipulation checks to establish that the autobiographical memory prime was effective. Subjects then completed the SBC items and the remaining dependent measures. Attitude ( $\alpha=.98$ ) was measured via four 7-point semantic differential scales: negative/positive; unfavorable/favorable; dislike/like; very bad/very good. Emotion was captured by a composite of two items (adapted from Edell and Burke, 1987): “The Michigan game day account appealed to my emotions” and “The Michigan game day account got me excited for the Wolverine team” (Spearman–Brown reliability coefficient=.69). SBC was measured with the same items used in Study 1 ( $\alpha=.97$ ).

## 7. Results — Study 2

### 7.1. Manipulation checks

The purpose of the first set of manipulation checks was to determine the extent to which the in-group (UM) version of the

autobiographical memory prime is more effective than the out-group version (OSU) in drawing subjects closer to the in-group brand — the UM Wolverine team. As desired, subjects exposed to the UM memory prime report (5-point disagree/agree scales): (a) being more connected to the Wolverines ( $M_{UM}=4.44$  vs.  $M_{OSU}=3.33$ ,  $F(1,65)=16.56$ ,  $p<.001$ ); (b) feeling a greater sense of pride to be a Wolverine ( $M_{UM}=4.34$  vs.  $M_{OSU}=3.62$ ,  $F(1,65)=7.38$ ,  $p<.01$ ); and (c) feeling that the UM memory prime was more effective than the OSU prime ( $M_{UM}=4.01$  vs.  $M_{OSU}=2.65$ ,  $F(1,65)=28.70$ ,  $p<.001$ ).

The second series of manipulation checks sought to confirm that the target brand (UM football) was equally appealing to both men and women. Subjects responded to two measures of brand loyalty adapted from Keller (2008): “I consider myself loyal to the Michigan Wolverines” and “I will go to as many Michigan games as I can”. As expected, there are no significant gender differences in loyalty to the brand ( $M_{males}=2.82$  vs.  $M_{females}=3.07$ ,  $F(1,65)=1.06$ ,  $ns$ ). ANOVA results also confirm that gender shows neither significant main effects nor interaction effects on any dependent measure (i.e., SBC, brand attitude, emotion). Finally, when asked about interest in attending football games, no gender differences emerge ( $M_{males}=7.56$  vs.  $M_{females}=7.23$ ,  $F(1,65)=.52$ ,  $ns$ ). In summary, these findings show that there are no gender differences in feelings and support for college football as applied in this study.

## 7.2. Hypothesis tests

H5 predicts that when memories of the game experience are presented from the perspective of the in-group (UM), respondents report significantly stronger SBCs than when the memory prime is presented from the out-group (OSU) perspective. ANOVA results indicate that SBCs are significantly higher for those exposed to the UM memory prime ( $M_{UM}=4.65$ ) compared to those exposed to the OSU memory prime ( $M_{OSU}=1.33$ ,  $F(1,63)=461.06$ ,  $p<.001$ ). This suggests that when self-directed memories are activated, people recall shared experiences that bring them closer to those within the in-group. Apparently, the bonding and identification create a climate for stronger group affinity and hence the bolstering of SBCs. Presumably, when the memory prime is presented from the perspective of the in-group rather than the out-group, it initiates a neural network of memories/associations that connects the individual to the shared experiences of the in-group, and it is this process that enhances SBCs toward the organization.

H6A predicts that SBCs mediate the influence of autobiographical memory primes on attitude (i.e., Memory Prime → SBC → Attitude). Using the Baron and Kenny (1986) test of mediation, the following regressions are calculated: First, memory prime, the predictor variable, has a significant effect on the outcome measure, attitude ( $\beta=.84$ ,  $t=12.13$ ,  $p<.001$ ). Second, memory prime also has a significant effect on the mediator variable, SBC ( $\beta=.93$ ,  $t=20.74$ ,  $p<.001$ ). Third, the mediator, SBC, influences attitude ( $\beta=.87$ ,  $t=14.02$ ,  $p<.001$ ). Finally, as an evidence of mediation, when the mediator variable SBC is included in the first equation, the previously significant effect of

memory prime on attitude is eliminated ( $\beta=-.18$ ,  $t=-1.08$ ,  $p=.28$ ). The mediator SBC, however, remains a strong predictor of attitude ( $\beta=.694$ ,  $t=4.0$ ,  $p<.001$ ). The Sobel test of mediation is  $Z=2.87$ ,  $p<.004$  (Baron and Kenny, 1986). These findings demonstrate the important role that SBCs play as a mediating mechanism (H6A).

H6B tests whether emotion shows a similar mediating influence as SBCs. As above, the memory prime, the predictor variable, significantly influences attitude ( $\beta=.84$ ,  $t=12.13$ ,  $p<.001$ ). Second, the memory prime has a significant effect on the mediator variable, emotion ( $\beta=-.62$ ,  $t=-6.30$ ,  $p<.001$ ). Third, the mediator, emotion, impacts the outcome variable, attitude ( $\beta=.62$ ,  $t=6.20$ ,  $p<.001$ ). However, when mediator variable (emotion) is included in the first equation, the predictor variable, memory prime, continues to have a significant effect on attitude ( $\beta=-.74$ ,  $t=-8.55$ ,  $p<.001$ ), while the effect of emotion is only marginally significant ( $\beta=.16$ ,  $t=1.79$ ,  $p<.10$ ). Therefore, emotion does not convincingly mediate the effect of the memory prime on attitude. In conclusion, the data indicate that SBC is a more powerful mediator of the effect of autobiographical memory primes on attitudes than the emotional responses to the memory prime itself.

## 8. Discussion — Study 2

Study 2 tests the extent to which autobiographical memory primes strengthen the influence of SBCs. This study is conducted in the context of a sport consumption experience environment where group attachment, social identity, symbols of loyalty, and attachment are typically very palpable and easy to identify. Using the social identity literature (Jacobson, 2003; Tajfel and Turner, 1986), it is argued that the processes associated with building strong group identity and cohesion are ultimately reflected in stronger identification with the in-group and enhancement of social and self-concept benefits (Bran-scombe and Wann, 1991). In this type of environment, memories of colorfully vivid images and experiences are jointly shared by in-group members. When in-group members are exposed to a narrative that reminds them of these pleasant experiences, a spreading activation process is initiated (Collins and Loftus, 1975) and it is this process that presumably activates and strengthens the SBCs to the group.

This interpretation compares with recent research (e.g., Escalas and Bettman, 2003) on the influence of reference groups on SBCs due to differences that arise from ethno-cultural backgrounds. That study shows that brand associations that are consistent with the values of an in-group have a favorable impact on consumer SBCs. In contrast, brands with images that are inconsistent with an in-group have a negative influence on SBCs. The Escalas and Bettman (2003) study emphasizes the extent to which one's identification with an aspirational reference group creates a specific type of self-concept that strengthens SBCs. The current study, however, does not focus on the role of reference groups, but instead employs social identity theory (Jacobson, 2003; Tajfel and Turner, 1986) to extend the understanding of the SBC construct. Here, we examine the consumers' identification with an organization

where the organization itself becomes the in-group (Bran-scombe and Wann, 1991; Tajfel and Turner, 1986), and also where there is an imminent threat to the dominant status of the in-group mounted by a rival group — that is, the possibility of victory or defeat in a major game encounter. Nevertheless, the findings here are consistent with a prior research in the sense that identification with the in-group significantly influences SBCs (Escalas and Bettman, 2003).

### 8.1. SBCs as a mediator of the influence of autobiographical memory primes on attitudes

An interesting theoretical contribution is the finding that SBCs play a more decisive role than emotion in mediating the effect of autobiographical memory primes on attitude. This suggests that in the process of influencing consumers' attitudes toward the brand itself, marketers should pay more attention to the emotional touch points that strengthen group members' personal connections to the organization or the brand in general. Stimulating an in-group perspective appears to activate a network of memories and experiences which, in turn, stimulate stronger SBCs and more positive attitudes toward a branded organization.

## 9. General discussion

The findings offer both theoretical and managerial contributions to the brand strategy literature. For example, in developing strategies and tactics aimed at building strong and lasting relationships between customers and brands, it may be important to consider the manner in which SBCs are bolstered and reinforced. Recognizing the importance of building such brand connections, one automanufacturer has incorporated this construct into its advertising campaign. Some recent ads for the *Saturn Aura* carry the message: "Your life, your car ... connected". Developing close "connections" with a given brand as well as with the brand community should also solidify strong and lasting relationships between customers and the brand.

In a sport consumption context, when consumer fans identify with the team (i.e., a branded organization) and rally together in expectation of victory, SBCs tend to increase. Future research might explore what happens when a team (as a brand) has a losing streak. Do fans continue to be engaged and rally behind the team, or does disappointment cause them to lose interest, thus weakening the attachment/connection? Similarly, when a strong consumer brand suffers from a lapse in perceived quality, is there also a reduction in SBCs?

The implications of our findings for corporate brand sponsors of major events are interesting. For example, Cornwell and Coote (2005) find that willingness to purchase the products of the sponsoring firm is linked to consumers' identification with the organization. Corporate sponsors should therefore benefit from identifying the reasons why consumers "connect" to the sponsored brand or organization. Featuring touch points that connect consumers to the brand in promotional messages should enhance corporate sponsors' ability to build a strong link between the sponsor and the event/brand (Cornwell and Coote 2005). Our

data suggest that igniting passion and loyalty to the brand can be achieved via autographical memory priming communications.

An interesting contribution to the literature is that when a consumer shares a common identification with an in-group, autobiographical memories can strengthen the self-connections felt towards the brand. The autobiographical memory prime in Study 2 features familiar and unique experiences that a typical in-group fan would recall. For example, mnemonic cues such as the enticing aroma of hot dogs sizzling on a nearby grill, and the emotionally electrifying sound of the Michigan band playing the team's fight song "Hail to the Conquering Heroes" are sufficiently effective to activate vivid nostalgic memories of the game experience. Apparently, memory primes can create a bond among group members that significantly enhances SBCs towards the organization. Future research in advertising may explore the potential of including visual (e.g., pictures) as well as auditory (e.g., music) elements within autobiographical memory prime as a means of activating more vivid memories of prior experiences. Marketing practitioners should note the importance of evoking special memories and rituals that serve to connect consumers to brands, thereby building emotional linkages which may create impenetrable barriers to competitive efforts (Keller, 2008).

Finally, we show that SBCs foster stronger, more confident, and more persistent attitudes, and that this SBC–attitude strength relationship is significantly higher among women when responding to a female-gendered brand like the WNBA. Thus, when a brand has developed a clear gender image, marketers may be more successful in building strong attitudes toward that brand when the elements that bolster SBCs are featured in advertising campaigns and customer relations programs. In a comprehensive review of gender identity in consumer behavior, Palan (2001) concluded that in a marketing environment where gender is allowed to be very salient, gendered responses are more likely to occur. For example, it is possible that the name used here (Women's National Basketball Association) may have activated a gender schema mode of processing, thus leading to significant differences in responses between men and women. If gender salience can help to reinforce the link between SBCs and attitude strength, consumer attitudes towards the brand may indeed be more persistent and more resistant to competitive attacks (Krosnick et al., 1993; Priester et al., 2004).

## Appendix A

### *Experimental stimuli: autographical memory primes*

#### *A typical game day experience as told by a UM fan*

You wake up on a brisk fall morning and head out the door to meet your friends at a football tailgate party before the Michigan vs. Ohio State football game. Along the way you pass other excited fans singing the fight song and cheering, "Go Blue!" The anticipation of MICHIGAN FOOTBALL engulfs you! Hot dogs sizzle on the grill at the golf course tailgate directly across from "The Big House", as the cheers begin before kickoff. After the tailgate you go to the Michigan Stadium. Walking into Michigan Stadium amid 100,000 strong, you join

the largest crowd in America in an emotional, high intensity journey. “Band, take the field!” shouts the announcer. The band plays the famous Michigan fight song, “Hail to the Victors”. You can feel the excitement charge throughout the stadium. The Michigan football players run out of the tunnel in their distinctive winged helmets and leap to touch the M Club banner at mid-field; your adrenaline shoots sky high! A small red contingent of fans from Columbus is swallowed up by a sea of Maize and Blue shirts chanting “Let’s Go Blue!” Taking in the scene, your thoughts echo the words emblazoned across your t-shirt: “It’s Great To Be A Michigan Wolverine.”

#### *A typical game day experience as told by an OSU fan*

You wake up on a brisk fall morning and head out the door to meet your friends at a football tailgate party before the Ohio State vs. Michigan football game. Along the way you pass other excited fans singing the fight song and cheering, “Go Bucks!” The anticipation of OHIO STATE FOOTBALL engulfs you! Hot dogs sizzle on the grill at the golf course tailgate directly across from ‘The Shoe’, as the cheers begin before kickoff. After the tailgate you go to the Ohio State Stadium. Walking into “The Shoe”, you join the largest crowd in America in an emotional, high intensity journey. “Band, take the field!” shouts the announcer. The band plays the famous Ohio State fight song, “Across the Field”. You can feel the excitement charge throughout the stadium. The Ohio State football players run through the “tunnel of Pride” in their distinctive Buckeye leaved helmets; your adrenaline shoots sky high! A small blue and maize contingent of fans from Ann Arbor is swallowed up by a sea of scarlet shirts chanting “Go Bucks!”. Taking in the scene, your thoughts echo the words emblazoned across your t-shirt: “It’s Great To Be An Ohio State Buckeye.”

#### References

- Aaker JL. Dimensions of brand personality. *J Mark Res* 1997;34:346–56.
- Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *J Pers Soc Psychol* 1986;51(6):1173–82.
- Baumgartner H, Sujan M, Bettman JR. Autobiographical memories, affect, and consumer information processing. *J Consum Psychol* 1992;1(1):53–82.
- Branscombe NR, Wann DL. The positive social and self-concept consequences of sports team identification. *J Sport Soc Issues* 1991;15(2):115–27.
- Collins AM, Loftus EF. A spreading activation theory of semantic processing. *Psychol Rev* 1975;82(6):407–28.
- Cornwell TB, Coote LV. Corporate sponsorship of a cause: the role of identification in purchase intent. *J Bus Res* 2005;58:268–76.
- Edell JA, Burke MC. The power of feelings in understanding advertising effects. *J Consum Res* 1987;14:421–33 (December).
- Escalas JE. Narrative processing: building connections between brands and the self. Unpublished dissertation 1996; Duke University.
- Escalas JE. Narrative processing: building consumer connections to brands. *J Consum Psychol* 2004;14(1):168–80.
- Escalas JE, Bettman JR. You are what they eat: the influence of reference groups on consumers’ connections to brands. *J Consum Psychol* 2003;13(3):339–48.
- Fournier S. Consumers and their brands: developing relationship theory in consumer research. *J Consum Res* 1998;24:343–73.
- Gigerenzer G, Goldstein DG. Reasoning the fast and frugal way: models of bounded rationality. *Psychol Rev* 1996;103(4):650–9.
- Hogg MA, Abrams D. Social motivation, self-esteem, and social identity. In: Abrams D, Hogg MA, editors. *Social Identity Theory: Constructive and Critical Advances*. New York: Harvester Wheatsheaf; 1990. p. 28–47.
- Jacobson B. The social psychology of the creation of a sports fan identity: a theoretical review of the literature. *Athl Insight* 2003;5(2):1–12.
- Kahle LR, Homer PM. Physical attractiveness of the celebrity endorser: a social adaptation perspective. *J Consum Res* 1985;11:954–61 (March).
- Kamins MA. An investigation into the ‘match-up’ hypothesis in celebrity advertising: when beauty may be only skin deep. *J Advert* 1990;19(1):4–13.
- Keller KL. *Strategic brand management: building, measuring, and managing brand equity*. 3rd edition. Upper Saddle River, NJ: Prentice Hall; 2008.
- Krosnick JA. The role of attitude importance in social evaluation: a study of policy preferences, presidential candidate evaluations, and voting behavior. *J Pers Soc Psychol* 1988;55:196–210.
- Krosnick JA, Petty RE. Attitude strength: an overview. In: Petty RE, Krosnick JA, editors. *Attitude strength: antecedents and consequences*. Hillsdale, NJ: Erlbaum; 1995.
- Krosnick JA, Boninger DS, Chuang YC, Berent MK, Carnot CG. Attitude strength: one construct or many related constructs? *J Pers Soc Psychol* 1993;65:1132–51.
- Palan K. Gender identity in consumer behavior research: a literature review and research agenda. *Am Mark Sci Rev* 2001;2001:1–24.
- Priester JR, Nayakankuppam D, Flemming MA, Godek J. The A2SC2 model: the influence of attitudes and attitude strength on consideration and choice. *J Consum Res* 2004;30:574–87 (March).
- Smith ER. Social identity and social emotions: toward new conceptualizations of prejudice. In: Mackie DM, Hamilton DL, editors. *Affect, cognition, and stereotyping: interactive processes in group perception*. San Diego, CA: Academic Press; 1993. p. 297–315.
- Smith ER. Affective and cognitive implications of a group becoming part of the self: new models of prejudice and of the self-concept. In: Abrams D, Hogg MA, editors. *Social identity and social cognition*. Oxford, England: Basil Blackwell; 1999. p. 183–96.
- Stuteville JR. Sexually polarized products and advertising strategy. *J Retail* 1971;47(2):2–13.
- Sujan M, Bettman JR, Baumgartner H. Influencing consumer judgments using autographical memories: a self-referencing perspective. *J Mark Res* 1993;30:422–36 (November).
- Tajfel H, Turner JC. The social identity theory of intergroup behavior. In: Worchel S, Austin W, editors. *Psychology of intergroup relations*. Second Edition. Chicago: Nelson-Hall; 1986. p. 7–24.
- Tourangeau R, Rasinski KA. Cognitive processes underlying context effects in attitude measurement. *Psychol Bull* 1988;103:299–314.
- Yzerbyt V. Emotions and social identity: toward an integrated view of intergroup conflict. *European collaborative research network*; 2004. p. 1–10.
- Yi Y. On the evaluation of main effects in multiplicative regression models. *J Mark Res Soc* 1990;31(1):133–8.