Identity Regulation: Theory and Implications of Multiple-Identity Management

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The present work provides a unified framework for identity research by synthesizing growing but isolated literature streams. Four themes arise from this synthesis. First, identities are collections of self-associated concepts that are stored in associative networks. Second, consumers seek to maintain cognitive consistency within their network of self-associations (i.e., regulate identities), where salient inconsistencies lead to identity dissonance. Third, consumers may employ a number of identity regulation strategies in response to identity dissonance. Lastly, several relatively stable cognitive structures may be utilized to organize identities, referred to as identity regulation structures. The author integrates literature from several subfields of information processing and self-concept to identify sources of identity dissonance as well as identity regulation strategies and structures. Practical and theoretical implications for the study of identity are discussed.
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ABSTRACT

The present review provides a unified framework for identity research by synthesizing growing but isolated literature streams. Four themes arise from the review. First, identities are collections of self-associated concepts that are stored in associative networks. Second, consumers seek to maintain cognitive consistency within their network of self-associations (i.e., regulate identities), where salient inconsistencies lead to identity dissonance. Third, consumers may employ a number of identity regulation strategies in response to identity dissonance. Lastly, several relatively stable cognitive structures may be utilized to organize identities, which may be referred to as identity regulation structures. The authors integrate literature from several subfields of information processing and self-concept to identify sources of identity dissonance as well as identity regulation strategies and structures. Practical and theoretical implications for the study of identity are discussed.
Identity, and more generally the study of consumer self-concept, is a growing area of research in consumer psychology (Oyserman, 2009; Reed, Forehand, Puntoni, & Warlop, 2012). In fact, the number of articles published on self and identity in mainstream consumer research journals as a percentage of total articles published more than doubled within the past decade (Reed et al. 2012). Identity has largely been studied in isolated streams of research (Oyserman 2009, Reed et al. 2012). These include research on self-esteem, self-construal, self-threat, mortality salience, coping, stereotypes, intergroup processes, impression management, and various subdomains of identity including social identity, cultural identity, and moral identity. Given their isolation, the literature would benefit from an integration of these streams to provide a clear path for future investigation.

Further, although originally conceptualized some thirty-five years ago (Ziller, Martell, & Morrison, 1977), a growing body of work has relatively recently highlighted the interplay of multiple identities within individual consumers (Benet-Martinez, Leu, Lee, & Morris, 2002; Greenwald, et al., 2002; Hugenberg & Bodenhausen, 2004; Luna, Ringberg, & Peracchio, 2008; Oyserman, 2009; Rafaeli-Mor & Steinberg, 2002; Roccas & Brewer, 2002; Zhang & Khare, 2009). However, relatively little attention has been given to how consumers are able to cognitively manage and maintain this multitude of identities, and implications of such management processes for consumer behavior are unclear.

In the present review, we address the need for integration and synthesis in the context of multiple identities. We build on the notion of identities as conceptual representations stored in memory (Greenwald, et al., 2002; Linville, 1985, 1987;
McConnell, 2011; Reed, et al., 2012; Ziller, et al., 1977) and use this proposition to integrate the various streams of identity research with literature on information processing. In so doing, we describe how consumers cognitively represent self-associated concepts such as identities and how consumers maintain consistency among these associations. We expand on the work of Greenwald and colleagues (2002) to provide a unified framework for future research with far reaching implications for consumer behavior.

IDENTITIES, FORMATION, AND STORAGE

Identity Defined

What is an identity? Reed et al. (2012) recently suggested a definition of identity that is sufficiently accurate to distinguish an identity from other concepts such as a simple self-view or a self-association, but also inclusive enough to consolidate streams of literature conducted in different domains. They define identity as “any category label to which a consumer self-associates, either by choice or endowment” (Reed et al. 2012, p312).

Reed and colleagues go on to say that a category label invokes a clear mental representation of the prototypical category member: their appearance, attitudes, behaviors, etc. Thus, each self-associated category label, or identity, has its own subset of associations that includes behaviors, attitudes, beliefs, norms, goals, and other associated
concepts (Oyserman 2009). Following this, one can say that at its fundamental level, identities are collections of self-associated concepts (McConnell 2011; Reed et al. 2012).

For the present discussion we focus on this more granular level of analysis, where an identity is defined as a collection of self-associated concepts, and each collection of self-associated concepts is labeled according to the extent that it is consistent with a category prototype. For example, a consumer may self-associate with concepts such as flirtatiousness, empathy, and daintiness. This collection of self-associated concepts may be labeled “Female” to the extent that these concepts are collectively consistent with the consumer’s mental representation of a prototypical woman. This would of course be influenced by sociocultural factors, where daintiness may be associated with gender differences in one culture, but may be associated with differences in affluence in another culture. That being said, where a collection of concepts to which a consumer self-associates is termed an identity, we term a collection of concepts not associated with the self simply as a category label (Reed et al. 2012). Focusing on identities as collections of self-associated concepts allows us to more clearly draw comparisons between identities and other notions in the study of social cognition. For clarity, these definitions are listed in table 1.

Identity Formation
Defining identities as labeled collections of self-associated concepts facilitates comparisons between identities and other notions discussed in social cognition literature. One such comparison involves association acquisition, or learning. Much the same way consumers might learn to associate Apple with technology, and further distinguish between Apple’s prototypical product design features and those of Research in Motion’s Blackberry family, it follows that *associative learning and categorical learning are the processes by which identity formation occurs* (Amiot, De La Sablonniere, Terry, & Smith, 2007). Specifically, ceteris paribus, concepts (behaviors, attitudes, goals, traits, etc.) that are salient concurrently with category label (e.g. Female) will begin to form associations with the category label via associative learning (e.g., Females have empathy). Categorical learning then occurs when one relates an associated behavior with a category and then receives corrective feedback, such as when one engages in behavior prototypical of a category label and is subsequently positively or negatively reinforced.

To illustrate, consider the case of a little girl. From birth a little girl may observe the behavior of her mother during childcare and thus begins to form the category label (i.e., collection of concepts) of “mother.” In elementary school, the little girl may engage in prototypical mother behaviors with a doll and the resulting self-association with these behaviors moves “mother” from category label to an identity (Reed et al. 2012). During this time she may receive positive or negative feedback on her behavior from her parents or friends, which help her refine her concept of mother. She may grow out of this by middle school, and mother reverts back to a category label due to a decrease in self-association. If she has a child, perhaps in her twenties, she will again engage in prototypical mother behaviors, and mother moves from category label to identity by
endowment. At this time, the number of concepts associated with mother likely expands exponentially as the consumer becomes more educated and more experienced regarding childcare and the role of a mother. Importantly, the concept of “mother” was formed from associative learning before it became an identity, and long before the consumer actually became a parent.

This process of associative and categorical learning for identity formation is one that is likely heavily influenced by exposure to information from policy makers and managers alike, where a commercial for a doll may depict a child pushing it in a stroller or an ad for baby food may depict a mother feeding a child with a small spoon; both of which imply certain behavioral norms associated with the concept of mother. Additionally, this learning process does not preclude the ability of the consumer to learn and form mental representations of a multitude of identities and category labels, which we discuss further below.

Associative Networks

Defining identities as collections of self-associated concepts facilitates another relationship with the study of social cognition: like other concepts (or collections of concepts) that are cognitively stored in associative networks, it follows that *identities are cognitively stored within an associative network* (Greenwald et al. 2002; McConnell 2011). Following a basic tenet of associative network theory, within these networks identities may be associated or disassociated with one another, or with other category labels with which one does not self-associate. For example, a consumer’s identity as a
female may be associated with her identity as a mother because both are associated with being a woman and with being caring. Due to these common connections, these two identities may also be associated with the category label of sister, even though the consumer does not have any siblings and does not self-associate with “sister.”

This proposition that identities are nested within associative networks, illustrated in figure 1, is important in that it implies that activation of a given identity within the associative network, as by stimuli in the environment, may have downstream consequences for other identities linked to the focal identity as well as other cognitive relationships beyond identities. Moreover, it allows us to make inferences about how cognitive relationships between identities might influence consumer behavior, as discussed below.

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Insert figure 1 about here
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IDENTITY REGULATION

Identity Dissonance

One important inference we can make about relationships between identities within an associative network is that there may be inconsistencies among self-associations. As we allude to above, the multitude of identities within the associative network may have some degree of similarity, where a consumer’s identity as an athlete
may be associated with aggressive behavior as is her identity as a video gamer. Additionally, these collections of self-associations may also be contradictory, where the athlete identity is aggressive but the female identity is caring. By defining identities as collections of self-associated concepts, we can clearly see that this represents a consumer simultaneously holding two inconsistent associations, a phenomenon better known as cognitive dissonance (Festinger, 1957). This relates to the notion of balance theory (Greenwald, et al., 2002; Heider, 1958), where the self-aggressive association, self-caring association, and aggressive-caring dissociation are an imbalanced triad of relationships.

In sum, simultaneously holding two salient identities that have inconsistent subsets of associations, or that are directly disassociated (i.e., identity dissociation), is a source of dissonance.

A different body of literature, stereotype threat (Steele, 1997), explores a similar phenomenon. Stereotype threat occurs when a negative stereotype exists about an identity (e.g., women are bad at math), and stimuli in the environment enhance the salience of this stereotype. This makes salient a dissociation between two identities, such as female and mathematician. For a female mathematician, self-female association, self-mathematician association, and female-mathematician dissociation creates imbalance. Stereotype threat is thus another source of dissonance.

Relatedly, a consumer with an athlete identity will hold a self-athlete association. Imagine that in an athletic competition a competitor tells our consumer that she is a poor excuse for an athlete. This type of interpersonal interaction is known as an identity threat (Rudman, Dohn, & Fairchild, 2007; Tajfel & Turner, 1979), and represents external input supporting a self-athlete dissociation. Simultaneously having salient association and
dissociation between self and athlete causes dissonance. Therefore, identity threat is another source of dissonance.

The above scenario could also be argued to create a discrepancy between the consumer’s actual level of self-association with athlete and her ideal level of self-association with athlete. That is, for a consumer who desires some level of self-athlete association, information that makes salient an insufficient level of self-athlete association would create a self-discrepancy that the consumer is then motivated to restore (Higgins, 1987). Thus, situations that create self-discrepancy, similar to identity threat, are also sources of dissonance. It should be noted that for stereotype threat, identity threat, and self-discrepancy, a consumer may already accept the self-view that they are not skilled in, or not associated with a given domain (e.g., athletics). However, making salient a lack of skill in a given domain, even if the consumer already agrees with that view, may still threaten a consumer’s general sense of self-efficacy or self-positive association. In other words, no one likes being told they are bad at something. This type of threat is known as ego threat.

Literature on self-esteem explores a similar line of work in its exploration of ego threat (Leary, Terry, Allen, & Tate, 2009). Ego threat occurs when consumers receive negative (i.e., unpleasant) evaluations about themselves, such as receiving a below average evaluation on an “intelligence test.” Per Leary and colleagues’ (2009) review, it should be noted that ego threat is sometimes operationalized similarly to identity threat in that unpleasant evaluations may compare the consumer to a peer group (i.e., poor performance relative to other college students), which may be interpreted as information essentially telling the consumer they are a poor student (i.e., identity threat). However,
for the present discussion we refer to ego threat as unpleasant evaluations largely independent of a peer group (i.e., identity) reference, which is consistent with the majority of operationalizations of ego threat (Leary et al., 2009). This unpleasant evaluation makes salient a self-pleasant dissociation that is inconsistent with a previously held self-pleasant association (assuming no pathological chronic self-pleasant dissociation exists). Ego threat is therefore a source of dissonance.

Classic cognitive dissonance literature largely induces dissonance by asking participants to engage in behaviors that are counter to their previously held associations such as writing counter-attitudinal essays (Festinger, 1957). For example, an athlete with a self-aggressive association may write an essay about how aggression is bad. Alternatively, the athlete may write an essay about how they are a caring person. The former case is similar to ego threat (i.e., an unpleasant evaluation), and the latter is similar to identity dissociation (i.e., self-aggressive vs. self-caring). Either case is argued to induce dissonance (Festinger, 1957). Thus, engaging in behaviors that are inconsistent with existing self-associations (i.e., identity-inconsistent behavior) is a source of dissonance. This particular source of dissonance is internally induced behaviorally, unique from the previously mentioned sources that are induced via the processing of external information.

In summary, multiple salient identities with inconsistent subsets of associations (e.g., salient identity dissociation, stereotype threat), processing self-discrepant information about a salient identity (e.g., identity threat), processing unpleasant information about a salient identity (e.g., ego threat), and engaging in behaviors disassociated from a salient identity (e.g., identity-inconsistent behavior) are all sources
of dissonance in that they make salient inconsistent self-associations. Collectively, we term the salience of inconsistent self-associations identity dissonance. These sources of identity dissonance are summarized in table 2.

Insert table 2 about here

Dissonance Reduction

It is well understood that cognitive dissonance may cause discomfort that consumers are motivated to reduce (Festinger, 1957). That is, consumers typically seek to maintain consistency among the salient associations within their associative network (Heider, 1958; Greenwald et al., 2002). Thus, it follows that a basic motivation of consumers is to maintain cognitive consistency among their identities. This is useful because it suggests a number of outcomes that may occur in response to identity dissonance.

Research on cognitive dissonance reveals three primary methods of dissonance reduction: change, bolstering, and trivialization (Denizeau, Gosling, & Oberle, 2009). After engaging in a caring act as a mother, the consumer may become less aggressive as an athlete if she adopts a change strategy. The consumer could also engage in behavior that is more aggressive than usual in an effort to bolster the athlete identity. Should she reduce the importance of both the caring and aggressive self-associations, she would be utilizing a trivialization strategy. The former two types of responses have been shown to
occur as a result of identity threat (Shalev & Morwitz, 2012; White, Argo, & Sengupta, 2012) as well as ego threat (Cheng, White, & Chaplin, 2012; Kim & Rucker, 2012; Leary, et al., 2009), however, the latter response is a novel insight to both literatures.

Balance theory (Greenwald et al., 2002) suggests a fourth type of dissonance reduction technique: *differentiation*. Differentiation occurs when subcategorization is utilized to adopt a new cognitive structure that supports both of the inconsistent associations, which frequently uses an additional factor to differentiate when each of the inconsistent associations is salient and relevant. For example, the consumer may decide that she is only aggressive when she is playing tennis, but she is caring when she is at home. In this case the additional factor is location, which serves as a contextual cue to signal when to activate the appropriate identity. This is related to the concept of frame switching (Luna, et al., 2008), which posits that stimuli in the environment (e.g., a Spanish language ad) may serve as cues that signal to the consumer that a relevant identity (e.g., Hispanic identity) should be salient.

Identity threat and ego threat literatures also identify a number of responses to threat. Some are easy to parallel to cognitive dissonance literature, for example self-affirmation is a form of bolstering. However, one interesting response from identity threat literature is that when one identity is threatened, a consumer may more actively seek out behaviors that reinforce a different, non-threatened identity from a separate domain; when the athlete identity is threatened, a consumer may reinforce her Hispanic identity (Mussweiler, Gabriel, & Bodenhausen, 2000). This type of *cross-identity bolstering* is a novel concept to the cognitive dissonance literature, and may manifest itself as a consumer bolstering an association in a domain different from the one that was
threatened, such as reinforcing an attitude about a topic unrelated to the counter-
attitudinal essay. It has been shown in both identity threat literature (Mussweiler, et al.,
2000) and stereotype threat literature (Rydell & Boucher, 2010; Rydell, McConnell, &
Beilock, 2009).

Relatedly, stereotype threat literature identifies additional threat responses. One
such response, **individuation** serves to reduce dissonance by decreasing the self-relevance
of the inconsistent (threatening) association by separating the consumer from the
threatened identity (e.g., reducing group membership; Ambady, Paik, Steele, Owen-
Smith, & Mitchell, 2004). In this scenario the consumer can distance herself from the
threatened identity while still maintaining the self-association with the particular attribute
or subassociation. Facing a stereotype threat that women are bad at math, the female
mathematician may disassociate with the category label “female” but still associate with
the attribute of “caring.” This is different from a change response, which would suggest
reduction of both the first order identity association and as a consequence the second
order attribute association; individuation suggests maintenance of second-order
associations.

Another distinct response discussed in stereotype threat literature is **bifurcation**
(Pronin, Steele, & Ross, 2004), in which, within the collection of associations that
makeup the identity, consumers self-associate with the subset of associations that is
unrelated to the stereotype threat, but disassociate with the subset related to the threat. A
female mathematician may associate with being caring, but disassociate with being
flirtatious (Pronin, et al., 2004). This allows the consumer to maintain both her gender
Identity and her mathematician identity. Below, we relate these forms of identity dissonance reduction to the framework of an associative network of identities.

Identity Regulation

It is useful to consider the impact of these dissonance reduction methods on the associative network to make them more easily comparable to one another. Change and bolstering both involve enhancing one of the two inconsistent self-associations at the cost of the other. Trivialization involves reducing both of the inconsistent self-associations. Differentiation involves simultaneously enhancing/reducing the inconsistent self-associations depending on a third factor (i.e., frame switching). Individuation reduces the self-association with the category label but maintains self-association with the concepts, and bifurcation maintains self-association with the category label but reduces self-association with a subset of the concepts.

Following this summary, a number of relationships become clear. First, it is reasonable to say that change and bolstering are two sides of the same coin – as are individuation and bifurcation. Differentiation at first seems unique, however it is essentially change/bolstering depending on an external factor. In all cases, consumers are either enhancing or reducing associations. As such it is reasonable to say that, whether deliberately or automatically, consumers are engaging in the regulation of the salience of self-associations, or identity regulation. We refer to the aforementioned dissonance reduction methods as identity regulation strategies.
This is similar the contention made in vanDellen and colleagues’ (vanDellen, Campbell, Hoyle, & Bradfield, 2011) analysis of responses to self-esteem threat, where individuals engage in regulation of state self-esteem. However, whereas the authors examine dissonance solely in terms of unpleasant evaluative information (e.g., ego threat) as it relates to self-esteem (Leary et al., 2009), here we define identity regulation more broadly as the regulation of self-associations in general. Identity regulation is also distinct from self-regulation (Bandura, 1989; Bandura & Wood, 1989; Wood & Bandura, 1989) (Carver & Scheier, 1996), which refers to self-control and is conceptualized as control of impulses and behaviors in pursuit of goals (Shah & Kruglanski, 2000). Additionally, much the same way that mood regulation contends that individuals will seek to maintain existing positive moods (Isen & Patrick, 1983), identity regulation includes consumers maintaining existing self-associations. This is distinct from dissonance reduction in that consumers are not responding to inconsistent cognitions, but rather maintaining existing consistency.

A second relationship made clear from the above summary is that it is also reasonable to say that these identity regulation strategies vary in their complexity. For example, if a consumer with an active athlete identity engages in a “caring” behavior, subsequently enhancing the single self-aggressive association (bolstering) is a simpler response than simultaneously enhancing the self-aggressive association while reducing a self-athlete association (individuation).

In fact, considering the number of associations and prerequisite knowledge involved in each regulation strategy, we can order the responses in terms of complexity. Following a caring behavior, an athlete continuing to engage in caring behavior (change)
is the simplest response as it does not require the consumer to adjust their behavior and only requires maintenance of the already active association. Bolstering is the next simplest response because the consumer need only adjust a single association (e.g., enhance self-aggressive). Trivialization is third, as it involves adjusting two associations. Differentiation is fourth because it involves adjusting two associations after observing a third stimulus, and further requires sufficient knowledge of external cues to adjust associations appropriately for the situation (i.e., learning the stimulus-identity associations). Individuation is fifth: it requires adjusting the identity (group) association whilst maintaining the attribute association, which requires sufficient hierarchical knowledge of the categorical structure of associations to tease apart specific sub-associations from the identity. Bifurcation is the most complex response because it requires not only hierarchical knowledge of the categorical structures of both identities but also sufficient knowledge of the attributes associated with the stereotype (i.e., unpleasant associations or subattribute dissociation) to adjust sub-associations. To summarize, these distinct methods of dissonance reduction are: change, bolster, trivialization, cross-identity bolster, differentiation, individuation, bifurcation. These are depicted in table 3.

Insert table 3 about here

Empirical research clearly delineating when consumers will utilize the different identity regulation strategies is an area in need of research. Specifically, the majority of research exploring identity dissonance response specifically looks at change and
bolstering. This literature can be summarized to say that two primary determinants of change and bolstering responses are relevance of the dissonance (e.g., diagnosticity of the dissonant information, self-construal, level of identification, stereotype knowledge) and coping resources (e.g., attentional resources, self-affirmation, self-esteem, availability of alternate identities). In particular, consumers only respond to dissonance if the dissonance is relevant (Dahl, Argo, & Morales, 2012), and will only engage in bolstering if they have sufficient coping resources, otherwise they engage in change (Rydell & Boucher, 2010). However, a review of the identity literature did reveal one recent meta-analysis that explores the influence of additional factors on dissonance response (vanDellen, et al., 2011).

As might be expected, vanDellen and colleagues findings show that high trait self-esteem (i.e., high coping resource) individuals bolstered regardless of a number of factors, however, low trait self-esteem (i.e., low coping resource) individuals did vary their responses in two instances. Specifically, low trait self-esteem individuals switched from a change response under ego threat induced by social exclusion or mortality salience to a bolster response when the ego threat was behaviorally induced (e.g., counter-attitudinal essays). Low trait self-esteem individuals also switched from a change strategy when responses to threat were directly self-evaluative (e.g., self-report measures) to a bolster strategy when responses were indirectly self-evaluative (e.g., performance measures). Together these highlight source of dissonance and response relevance as two potential determinants of identity regulation strategy. Only literature on identity-inconsistent behavior (e.g., counter-attitudinal essays) has explored trivialization, and mixed findings exist as to whether it requires more or less coping resources relative to
change (Martinie & Larigauderie, 2007; Simon, Greenberg, & Brehm, 1995). Exploring determinants of trivialization is another area for future research.

Different from the strategies outlined above, there are several growing bodies of work that explore how consumers might differ in the cognitive structures used to regulate their multiple identities to maintain consistency and avoid dissonance in the first place. This work suggests that such identity regulation structures may be relatively stable over time, but also subject to situational factors (Margolin & Niedenthal, 2000; Mok & Morris, 2012; Roccas & Brewer, 2002). Below, we integrate this research.

**IDENTITY REGULATION STRUCTURES**

Social Identity Complexity

Several streams of research have explored the implications of multiple identities, the cognitive structures in which they might be stored, and the strategies employed to manage them. The work of Roccas and Brewer (2002) in particular outlines four such identity regulation structures that they argue vary in their level of complexity. Roccas and Brewer focus specifically on social identity and distinctions between ingroups and outgroups. For example, under one structure, *intersection*, consumers maintain a single ingroup representation by defining their ingroup as the intersection of multiple group memberships. “Female-athlete” would be a single ingroup that includes only women who are athletes. Women who are not athletes and athletes who are not women would be considered outgroups. This structure is relatable to a regulation strategy of bifurcation,
where a female athlete may only consider other individuals to be members of her ingroup if they share the same subattributes that are consistent with both female and athlete. However, bifurcation is agnostic as to ingroup-outgroup distinctions, and is identifiable as an identity regulation strategy by the ability of the individual to maintain a self-association with a category label (i.e., identity) whilst disassociating from some subattributes of the category label.

The next structure is termed dominance in which all other group memberships are subordinate to a primary ingroup. A female athlete may define her ingroup as all athletes, and any other group affiliation is merely a source of intragroup variation where female merely describes what type of athlete she is. We can relate this to the strategy of bolstering, where the female athlete will continually enhance her self-athlete association. A third structure, compartmentalization is best described as differentiation or frame switching where multiple groups are considered ingroups and shift with the context; mother is the ingroup at a baby shower and athlete is the ingroup during sports activities. Under the final structure, merger, a consumer’s ingroup includes anyone who shares membership with the consumer’s various groups. Further, “nonconvergent group memberships are simultaneously recognized and embraced in their most inclusive form” (Roccas & Brewer, 2002, p91). For the female athlete, differences and similarities between females and athletes are recognized and included within a single ingroup, and both being female and being an athlete are salient group memberships across situations. The authors grant that some degree of tolerance for ambiguity and openness are required to maintain this cognitive structure. Considering that multiple ingroups are salient across contexts, it is conceivable that individuals using this structure may be relatively more
likely to engage in cross-identity bolstering in response to identity dissonance because the cross-identities are relatively more accessible.

Notably, the authors argue that these structures vary on their degree of complexity, where intersection and dominance are less complex, and compartmentalization and merger are more complex. This notion of complexity is different from the conceptualization of complexity we use to describe identity regulation strategies; Social Identity Complexity (SIC) refers to the elaborateness of the resulting cognitive structure of ingroup/outgroup representations, while identity dissonance response complexity refers to the number of cognitive changes and level of knowledge required for the particular response. Social Identity Complexity is relevant in that coping resources may play a roll in determining when individuals adopt more or less complex cognitive structures (Roccas & Brewer 2002).

Although Roccas and Brewer (2002) conceptualize four distinct structures, operationally they argue that differences in complexity between these structures will manifest as variation in perceived similarity of ingroups. They argue that less complex structures like intersection and dominance rely on a high degree of perceived similarity between ingroups because multiple identities are reduced to a single ingroup, whereas the more complex compartmentalization and merger structures rely on identification of differences between ingroups (i.e., low similarity). That is to say, Roccas and Brewer argue that one primary distinction between these structures is the degree of perceived similarity between ingroups. Intersection has the highest perceived similarity, followed by dominance, then compartmentalization, and merger has the lowest perceived similarity. These relationships are summarized in table 4.
Self-Complexity

A related body of work directly explores the notion of the cognitive complexity of self-knowledge, or *self-complexity* (SC; Linville, 1985, 1987; Ziller, et al., 1977). Self-complexity is typically defined as both the quantity of different identities (referred to in this literature as “self-aspects,” which are comprised of subattributes), and the perceived overlap (i.e., similarity) between identities. This literature contends that individuals vary in their degree of self-complexity where a greater number of identities and less overlap between them represents greater complexity. Stated differently, complexity is inversely related to similarity, congruent with the conceptualization from SIC. Different from SIC this literature includes the quantity of identities in its conceptualization does not identify distinct structures.

This body of work largely explores the influence of self-complexity on affective coping, under the premise that greater complexity acts as a buffer that facilitates coping and positive well-being (Linville, 1987). This relates directly to the present research in that greater complexity should facilitate identity regulation (i.e., dissonance reduction) in a manner that promotes well-being. Specifically, greater complexity should reduce the relative likelihood of utilizing a change strategy because a change strategy may be maladaptive to well-being (e.g., consumers lower self-pleasant associations in response to unpleasant evaluations such as ego threat). However, although support for the relationship between self-complexity and well-being exists, syntheses of the literature
show that overall findings are mixed (Koch & Shepperd, 2004; Rafaeli-Mor & Steinberg, 2002).

Bicultural Identity Integration

A separate but related body of work on bicultural identity explores how bicultural individuals cognitively manage the existence of two cultural identities (Benet-Martinez, et al., 2002). The authors propose that bicultural individuals vary in the degree to which their two cultural identities are integrated, or *bicultural identity integration (BII)*. This can be restated to say that the identity regulation structures used by bicultural individuals to manage their two cultural identities range from a non-integrated structure to fully integrated structure. This notion of integration is compatible with the conceptualization of similarity in SIC and self-complexity literature, where a non-integrated structure likely has low similarity between identities and a fully integrated structure has a high degree of similarity. This research largely explores the influence of identity integration on response to identity-relevant stimuli, which we discuss later in the review.

Inter-Identity Association

In relating these structures to the notion of an associative network of identities, we can say that one correlate of the identity regulation structure is the degree of association between identities, where similar/integrated identities are associated and dissimilar/non-integrated identities are disassociated. That identity regulation structures differ in
similarity between identities is a commonality across SIC, SC, and BII research. We refer to this relationship between identities as *inter-identity association*, where structures may vary in the degree to which identities are dissociated (i.e., dissimilar) to associated (i.e., similar). This term more accurately describes the relationships between identities within an associative network, where integration or perceived similarity may give rise to association, but association itself does not necessitate any meaningful integration or cognitive processing of overlapping attributes (i.e., perceived similarity). The structures suggested by SIC, SC, and BII are summarized in table 4.

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Insert table 4 about here

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The notion of differences in inter-identity association is immediately useful in explaining how a merger structure is possible. Specifically, two identities may be associated (e.g., athlete-mother) despite the fact that the consumer perceives them to be dissimilar (e.g., athlete-aggressive vs. mother-caring). Again, as suggested by Roccas and Brewer (2002), this structure most likely requires some degree of tolerance for ambiguity. This begs the question of whether the consumer will behave consistently with one identity or the other in a given situation – the answer is that the consumer’s behavior will be motivated not by the need to reduce dissonance but by other motivational factors such as conforming to social norms. We discuss the relationship between identity regulation structures and response to identity-relevant stimuli below.

Structures and Response to Identity Cues
Importantly, Benet-Martinez and colleagues empirically test the influence of individual differences in inter-identity association on response to contextual identity cues (Benet-Martinez et al., 2002). Specifically, they argue that individuals who have associated cultural identities (i.e., high BII) will assimilate to identity cues, where priming a Hispanic-American with Hispanic cultural cues would lead the individual to behave more prototypically Hispanic, and American cues would lead to prototypical American behavior. Conversely, individuals who have dissociated cultural identities (i.e., low BII) will contrast away from identity cues, where priming Hispanic leads to American behavior. This surprising effect has been replicated across several works (Benet-Martinez, et al., 2002; Mok & Morris, 2009, 2010a, 2010b, 2012; Zou, Morris, & Benet-Martinez, 2008). Both of these responses are forms of differentiation (frame switching) where that the latter contrastive effect is an unexpected response (Hugenberg & Bodenhausen, 2004; Luna, et al., 2008; McConnell, 2011; Zhang & Khare, 2009). In sum, BII predicts contrast under dissociation and assimilation under association.

These results are difficult to reconcile with the four structures proposed by Roccas and Brewer (2002). To illustrate let us consider a paradigm in which we examine responses of Hispanic-Americans to Hispanic and American identity cues where Hispanic and American behavior are bipolar opposites so that behaving more Hispanic is behaving less American and vice versa; the same paradigm is utilized in the majority of BII research using Asian-American participants. Individuals with intersection identities only identify with the intersected identity, such as Hispanic-American, and both Hispanic and American are outgroups. As such, individuals should respond contrastively to both
Hispanic and American cues because neither cue matches their identity (contrast effect). Individuals with dominance structures are choosing one identity over the other and would behave consistently with the dominant identity regardless of identity cue (null effect). Individuals with a compartmentalized structure identify with both identities and frame switch in response to context and so should always assimilate to the identity cues (assimilation effect). Individuals with merged identities have both identities salient across situations, so American identity is still salient under Hispanic cues and vice versa. In this case consumers should be equally likely to assimilate as to contrast from the cue (null effect).

In sum there are two null effects (dominance and merger), an assimilation effect (compartmentalization), and a contrast effect (intersection). With sufficient sample size these effects would net out to an assimilation effect (compartmentalization) and a contrast effect (intersection). As mentioned above, compartmentalization matches low perceived similarity (i.e., dissociation/low BII) between identities and intersection matches high perceived similarity (i.e., association/high BII). Thus, SIC and BII make directly opposing predictions. In terms of inter-identity association, SIC predicts assimilation under dissociation (i.e., high SIC) and contrast under association (low SIC).

Drawing on associative network theory, the notion of spreading activation (Collins & Loftus, 1975) suggests yet another set of predictions. Specifically, spreading activation suggests that when one concept in an associative network is activated, associated concepts are also activated as second-order effects. In this case, priming Hispanic should also activate American if the two identities are associated (i.e., high BII) leading individuals to approach both Hispanic and American behaviors. This dual
approach effect is the same as is predicted under a merger structure and is thus a null effect when comparing Hispanic and American behaviors in a bipolar paradigm. Further, spreading activation suggests that when one concept is activated, disassociated concepts are inhibited. In this case, priming Hispanic would activate Hispanic and inhibit American if the two identities are disassociated (i.e., low BII; Hugenberg & Bodenhausen, 2004). This would lead to approach toward Hispanic behaviors and avoidance of American behaviors, or the same assimilation effect predicted under a compartmentalized structure. It is reasonable to say that self-complexity theory agrees with these predictions because self-complexity theory contends that unpleasant evaluative feedback (i.e., dissonance) spreads throughout the structure of identities insofar as the identities share overlapping subattributes (Linville, 1985; McConnell, 2011; McConnell & Brown, 2010). In sum, spreading activation expects assimilation under dissociation and a null effect under association. This full set of relationships is summarized in table 5.

Although a body of empirical work exists that supports the predictions of BII theory, a review of the literature reveals no empirical work that tests the predictions derived from Social Identity Complexity theory or spreading activation regarding the influence of identity regulation structures on response to identity cues. An interesting direction for future research would be to determine when response to identity cues will follow the different patterns expected by the three theories. Below, we discuss further implications of identity regulation and identity regulation structures for identity research.
IMPLICATIONS FOR CONSUMER BEHAVIOR

Relationship with Other Constructs

It is reasonable to say that consumers with more attentional resources should be better equipped to utilize more cognitively complex identity regulation strategies (Beilock, Jellison, Rydell, McConnell, & Carr, 2006; Beilock, Rydell, & McConnell, 2007; Croizet, et al., 2004; Martinie & Larigauderie, 2007), and structures (Conway & White-Dysart, 1999; Roccas & Brewer, 2002). Concepts like cognitive load (Miller, 1956), Need for Cognition (NFC; Cacioppo & Petty, 1982), and other influences on attentional resources should therefore be related to identity regulation strategies and structures. Above, we outline differences in complexity for the various strategies, where change is the simplest and bifurcation is the most complex, and we might expect high cognitive load to predict to the former and high NFC to predict to the latter. Likewise, consumers should be more likely to utilize the simpler identity regulation strategies (e.g., change, bolstering) with low NFC or high cognitive load and more complex strategies under low load and high NFC (e.g., individuation, bifurcation; Lieberman, Ochsner, Gilbert, & Schacter, 2001; Martinie & Larigauderie, 2007).

Affect may also play a role in determining when consumers will utilize different identity regulation strategies or structures. Roccas and Brewer (2002) suggest that stress related mood (e.g., being worried or agitated) may inhibit individuals’ ability to adopt more complex structures and do indeed find a significant positive correlation between
perceived similarity of ingroups (their indirect measure of complexity where higher similarity means less complexity) and stress related mood where higher stress predicts more similarity. However, research from construal level theory suggests that positive affect facilitates the ability to perceive similarity between stimuli and negative affect facilitates perceiving dissimilarities. Supporting this proposed relationship, Benet-Martinez and Haritatos (2005) found a correlation between acculturation stressors and bicultural identity integration such that higher stress predicts less similarity (i.e., lower integration). It may be that different specific emotions (worry/agitation as discussed by Roccas and Brewer, 2002 vs. anger/frustration as discussed by Benet-Martinez and Haritatos, 2005) have different influences on processing styles, however, the influence of affect on cognitive processing is an area beyond the scope of the present discussion. That said, the different predictions both suggest that affect should influence identity regulation structure.

Arguably, the notion of tolerance for ambiguity should be negatively correlated with the need to reduce identity dissonance. However, even consumers with a high tolerance for ambiguity should be motivated to regulate their identities in a manner that balances social conformity with optimal distinctiveness (i.e., autonomy; Chan, Berger, & Van Boven, 2012). For example, being seen as an overly aggressive mother may violate social norms and have negative social consequences. Likewise, tolerance for ambiguity should facilitate the acceptance of dissociation between identities such that compartmentalization and merger are more likely to arise as structures.

Self-concept clarity (Campbell, 1990; Campbell, et al., 1996) refers to the extent to which consumers have clearly defined and confidently held self-beliefs. It is intuitive
to expect that consumers with high self-concept clarity are more likely to bolster their confidently held self-beliefs in response to dissonance while consumers with low self-concept clarity would utilize a change strategy. However, it is less clear how self-concept clarity might influence the identity regulation structure utilized by consumers. Part of the notion of self-concept clarity is self-knowledge (Schlegel, Hicks, Davis, Hirsch, & Smith, 2013). Following this, one possibility is that consumers with low self-concept clarity (i.e., low self-knowledge) are less likely to utilize individuation or bifurcation, both of which require a higher degree of knowledge regarding the relationships between the various identity subassociations. In summary, factors that influence the availability of attentional resources, cognitive processing styles, or self-knowledge may all play a role in determining which identity regulation strategies or structures are utilized by consumers.

Identity Motives

We use the term identity motives to refer to behaviors that are motivated by a desire to attain a certain level of self-association for the sake of the self-association itself. This would include the desire to belong to a group and the need for uniqueness, distinctiveness, or self-expression (to which literature typically refers when discussing identity motives; Vignoles & Moncaster, 2007; Zou, et al., 2008), so long as the ultimate reward is not of extrinsic value to the consumer such as social status or financial gain. This is distinct from impression management goals (Bolino, Kacmar, Tumley, & Gilstrap, 2008; Leary & Kowalski, 1990) such as self-presentation in which the consumer’s goal is for to influence others’ perceptions. Further, this is compatible with
identity regulation as defined above, where identity regulation is the regulation of the salience of self-associations. As such, identity motives, including belonging and distinctiveness, are motivations for identity regulation in addition to the aforementioned motivations of identity dissonance reduction and consistency maintenance.

However, a distinction must be made in the conceptualization of belonging. Specifically, belonging may be conceptualized as the desire for interpersonal connection (i.e., attachment), in which case part of the motivation may derive from an affective component (e.g., mood regulation) independent of a motivation to address a self-discrepancy where a consumer recognizes an insufficient self-association with a group (Higgins 1987). Belonging is also distinct from conformity, which may be motivated by impression management (Chan, et al., 2012), which is not necessarily regulating a self-association so much as it is influencing others’ perception. Therefore, it is the component of belonging that is motivated by the desire to self-associate with a group to which we refer as an identity motive and thus an impetus for identity regulation.

Relatedly, along with attributes, values, beliefs, attitudes, and behavioral scripts, identity-relevant goals lie within the collection of associations that comprise identities (Oyserman 2009). For example the athlete identity is likely highly associated with a fitness goal. Being fit may come with some degree of social status, but so long as the consumer is deriving intrinsic value from the self-association itself, it too is considered an identity motive. What is useful about the term identity motives is that it allows us to relate the goal directed behavior associated with identity motives to goal theory but still draw a distinction from the broader conceptualization of goal theory in that progress and attainment are measured solely in terms of self-associations.
One specifically useful comparison with goal theory is the application of multiple goal management to identity motives. Consider the consumer with both an athlete and video gamer identity. How does she decide whether to pursue a fitness goal (athlete) or a relaxation goal (video gamer)? Laran and Janiszewski (2009) suggest a passive goal guidance system that guides the consumer to continue pursuing an active goal until it is achieved and inhibits inconsistent goals during goal pursuit. The system is sensitive to whether a given behavior achieves the goal and, once achieved, the inhibited goal becomes active and the achieved goal becomes inhibited.

Applying this to identity motives, whether the consumer visits the gym or plays video games is a function of the previous goals’ status and, once the previous goal (e.g., relaxation) is sufficiently satisfied, the inhibited goal (e.g., fitness) will rebound. The same interplay of inhibition and rebound may be applied to managing other inconsistent identity motives such as belonging vs. uniqueness, or balancing disassociated cultural identities (Hispanic vs. American), or overcoming negative stereotypes (female vs. mathematician). Other models for multiple goal management exist (Louro, Pieters, & Zeelenberg, 2007), and a growing body of research is exploring the influence of perceived progress on goal pursuit (Fishbach & Dhar, 2005). It would be interesting to see how these findings might parallel to identity motives where the perception of progress is arguably more subjective and thus more susceptible to external influence.

Deeper within the Associative Network
Balance theory (Greenwald et al., 2002; Heider, 1958) conceptualization of balanced triads of associations makes for interesting notions regarding relationships between the self, identities, and other stimuli such as brands. For example, a self-association with a brand may lead consumers to self-associate with other consumers who use the brand and therefore consider them part of their ingroup (i.e., brand communities; Muniz & O'Guinn, 2001). Eggert, Henseler, and Hollmann (2012) use balance theory to describe how association with a brand spills over to the brand’s suppliers and enhances loyalty to those suppliers.

An interesting question is what might happen when a consumer perceives an outgroup member using the brand (Shalev & Morwitz, 2012), or similarly when a consumer views an advertisement for the brand that clearly targets an outgroup, assuming in both scenarios that outgroup represents a category label with which the consumer disassociates. For example, an athlete who identifies with Asics brand, which historically targets serious athletes, may feel betrayed by the brand if she sees an Asics ad campaign targeted toward casual athletes. Considering balance theory, the self-association with serious athletes, self-association with Asics, and the newly salient association of Asics with casual athletes is an imbalanced triad. Determinants of consumer response to such dissonance would be an interesting area for exploration, especially considering the ability of a consumer to engage in brand switching, which is conceivably more difficult than other forms of identity switching.

CONCLUSION
This work provides an integrative framework in which to explore the management of self-associations, which we term identity regulation. This framework draws upon literature from information processing, including cognitive dissonance, implicit cognition, associative learning, and associative network theory and integrates it with research on self-concept, including self-esteem, impression management, identity, threat, and stereotypes. This synthesis of literatures allows us to make several important contributions.

A primary contribution of the present work is to conceptualize identity dissonance as the salience of inconsistent self-associations and identify its sources. We integrate the above literatures to propose that identity dissonance may be caused by salient disassociated identities, identity threat, stereotype threat, self-discrepancy, ego threat, or identity-inconsistent behaviors (table 2).

A second important contribution of the present work is the identification of responses to identity dissonance, or identity regulation strategies. These strategies include change, bolstering, trivialization, cross-identity bolstering, differentiation, individuation, and bifurcation, and each of these strategies has unique implications for the network of self-associations (table 3).

A third important contribution of the present work is the conceptualization and identification of identity regulation structures as cognitive organizations of self-associations that may be stable over time while also being susceptible to situational influences, and that facilitate maintenance of cognitive consistency. These structures may vary in both the number of identities as well as the degree of association between identities. Distinct structures include intersection, dominance, compartmentalization, and
merger. These structures may be related to chronic use of identity regulation strategies, and each structure has unique implications for response to identity dissonance, identity cues, and engagement in identity-relevant behavior (tables 4 and 5).

Perhaps most importantly, the present work contributes by providing a framework for future research. It is difficult to know where to go unless we know where we have been. Here summarize and synthesize findings from several streams of research, relate them to additional theories within consumer research, and suggest directions for future research. Specifically, determinants of when consumers will utilize different identity regulation strategies is an area that is receiving growing attention (Cheng, et al., 2012; Dahl, et al., 2012; Dommer & Swaminathan, 2013; Dunn & Dahl, 2012; Kim & Rucker, 2012; Lee & Shrum, 2012; Lisjak, Lee, & Gardner, 2012; Mead, Baumeister, Stillman, Rawn, & Vohs, 2011; Shalev & Morwitz, 2012; Townsend & Sood, 2012). However, despite this recent explosion in research and the importance of the implications, the two regulation strategies largely explored are change and bolstering and the two determinants may be summarized as dissonance relevance and coping resources. Thus, further exploration of determinants of strategies is needed. Additionally, determinants of both chronically stable and situationally induced identity regulation structures should prove fruitful for future research. Moreover, we outline competing hypotheses as to the impact of identity regulation structures on behavior – hypotheses that have yet to be empirically tested.

In summary, we integrate and synthesize a wide variety of research streams to arrive at inclusive yet accurate definitions of identity, identity dissonance, identity regulation strategies, and identity regulation structures. We delineate several sources of
identity dissonance and several strategies and structures that might be utilized to reduce dissonance, maintain consistency. We identify gaps in the literature, suggest paths for addressing them, and provide a framework in which to advance the body of knowledge going forward. In particular, exploring both the antecedents and consequences of identity regulation strategies and structures are areas with important implications and are ripe for future research.
REFERENCES


TABLE 1
DEFINITION OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Parent Literature(s)</th>
<th>Exemplar Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>A labeled collection of related concepts that are associated with the self (e.g., mother, athlete)</td>
<td>Identity</td>
<td>Reed et al. 2012</td>
</tr>
<tr>
<td>Category Label</td>
<td>A labeled collection of related concepts that are not associated with the self</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Identity Dissonance</td>
<td>Salience of inconsistent self-associations</td>
<td>Implicit Cognition, Identity</td>
<td>Greenwald et al. 2002</td>
</tr>
<tr>
<td>Identity Regulation</td>
<td>Regulation of the salience of self-associations</td>
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<td>&quot;</td>
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</table>

TABLE 2
SOURCES OF IDENTITY DISSONANCE

<table>
<thead>
<tr>
<th>Sources of Identity Dissonance</th>
<th>Description</th>
<th>Parent Literature(s)</th>
<th>Exemplar Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity Dissociation</td>
<td>Salience of identities with inconsistent subsets of associated concepts (e.g., aggressive athlete vs. caring mother)</td>
<td>Implicit Cognition, Identity</td>
<td>Greenwald et al. 2002; LeBoeuf et al. 2010</td>
</tr>
<tr>
<td>Stereotype Threat</td>
<td>Salience of a negative stereotype about an identity (e.g., women are bad at math)</td>
<td>Stereotype Threat</td>
<td>Steele 1997</td>
</tr>
<tr>
<td>Identity Threat</td>
<td>Salience of dissociation between the self and an ingroup (e.g., information that one is not an athlete)</td>
<td>Identity</td>
<td>Tajfel and Turner 1979</td>
</tr>
<tr>
<td>Self-Discrepancy</td>
<td>Salience of dissociation between the self and a desired concept (e.g., information that one is not aggressive)</td>
<td>Regulatory Focus</td>
<td>Higgins 1987</td>
</tr>
<tr>
<td>Ego Threat</td>
<td>Salience of self-unpleasant association (e.g., negative performance evaluations)</td>
<td>Self-Esteem</td>
<td>Leary et al. 2009</td>
</tr>
<tr>
<td>Identity-Inconsistent Behavior</td>
<td>Engaging in behaviors inconsistent with existing self-associations (e.g., writing a counter-attitudinal essay)</td>
<td>Cognitive Dissonance</td>
<td>Festinger 1957</td>
</tr>
</tbody>
</table>
### TABLE 3
IDENTITY REGULATION STRATEGIES

<table>
<thead>
<tr>
<th>Identity Regulation Strategies</th>
<th>Description</th>
<th>Parent Literature(s)</th>
<th>Exemplar Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>Reducing a self-association (e.g., behaving less aggressively)</td>
<td>Cognitive Dissonance, Self-Esteem</td>
<td>Denizeau and Gosling 2009; Leary et al. 2009</td>
</tr>
<tr>
<td>Bolstering</td>
<td>Enhancing a self-association (e.g., behaving more aggressively)</td>
<td></td>
<td>&quot;</td>
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<tr>
<td>Trivialization</td>
<td>Reducing the importance of a self-association (e.g., aggressiveness is unimportant)</td>
<td>Cognitive Dissonance</td>
<td>&quot;</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Enhancing different self-associations depending on contextual cues (e.g., exhibiting aggression or caring depending on location)</td>
<td>Implicit Cognition, Identity</td>
<td>Greenwald et al. 2002; Luna et al. 2008</td>
</tr>
<tr>
<td>Cross-Identity Bolstering</td>
<td>Enhancing a self-association in a domain different from the context (e.g., behaving more &quot;American&quot;)</td>
<td>Stereotype Threat</td>
<td>Mussweiler et al. 2000</td>
</tr>
<tr>
<td>Individuation</td>
<td>Reducing identity association while maintaining self-association with subconcepts (e.g., dissociating from Female but associating with caring)</td>
<td></td>
<td>&quot;</td>
</tr>
<tr>
<td>Bifurcation</td>
<td>Reducing self-association with subconcepts while maintaining identity association (e.g., dissociating from caring but associating with Female)</td>
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</table>

### TABLE 4
IDENTITY REGULATION STRUCTURES

<table>
<thead>
<tr>
<th>Identity Regulation Structures</th>
<th>Description</th>
<th>Parent Literature(s)</th>
<th>Exemplar Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection (Highest Similarity)</td>
<td>Single exclusive crossed-category ingroup (e.g., only Hispanic-Athletes are ingroup members)</td>
<td>Social Identity Complexity (SIC)</td>
<td>Roccas and Brewer 2002</td>
</tr>
<tr>
<td>Dominance (High Similarity)</td>
<td>Single exclusive dominant ingroup (e.g., only Hispanics are ingroup members)</td>
<td></td>
<td>&quot;</td>
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<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Compartmentalization (Low Similarity)</td>
<td>Multiple contextually contingent ingroups (e.g., Hispanics, Athletes, or Females may be ingroup members depending on context)</td>
<td>&quot;&quot;</td>
<td></td>
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<tr>
<td>----------------------------------------</td>
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</tr>
<tr>
<td>Merger (Lowest Similarity)</td>
<td>Single inclusive ingroup where differences are embraced (e.g., Hispanics, Athletes, and Females are all ingroup members)</td>
<td>&quot;&quot;</td>
<td></td>
</tr>
<tr>
<td>Associated (Low SC/High BII)</td>
<td>Multiple, related ingroups (e.g., Hispanics and Athletes are related)</td>
<td>BII, Self-Complexity, SIC</td>
<td></td>
</tr>
<tr>
<td>Dissociated (High SC/Low BII)</td>
<td>Multiple, unrelated ingroups (e.g., Athletes and Females are unrelated)</td>
<td>&quot;&quot;</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 5**

PROPOSED INFLUENCE OF STRUCTURES ON RESPONSE TO IDENTITY CUES IN A BIPOLAR PARADIGM (E.G., HISPANIC VS. AMERICAN)

<table>
<thead>
<tr>
<th>Parent Literature</th>
<th>Effect Under Dissociated Structure</th>
<th>Effect Under Associated Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicultural Identity Integration</td>
<td>Contrast</td>
<td>Assimilation</td>
</tr>
<tr>
<td>Social Identity Complexity</td>
<td>Assimilation</td>
<td>Contrast</td>
</tr>
<tr>
<td>Spreading Activation</td>
<td>Assimilation</td>
<td>Dual Assimilation (null)</td>
</tr>
<tr>
<td>Self-Complexity</td>
<td>Assimilation</td>
<td>Dual Assimilation (null)</td>
</tr>
</tbody>
</table>
FIGURE 1
EXAMPLE ASSOCIATIVE NETWORK OF IDENTITIES
The Many-Faced Consumer: How Association and Competition Between Multiple Identities Jointly Influence Identity Prime Response

JULIAN K. SAINT CLAIR

MARK R. FOREHAND
Consumers have multiple identities (e.g., parent, employee, student, friend) that may be momentarily activated by subtle cues in the consumer environment. This identity priming typically leads to approach toward behaviors consistent with the primed identity and avoidance of behaviors consistent with alternate (non-primed) identities. Although alternate identity avoidance is common, three studies show that priming an identity (e.g., student) can also encourage consumers to approach alternate identities (e.g., friend). When two identities are relatively easy to balance (e.g., sufficient time to pursue both student- and friend-related activities), consumers approach the alternate identity to the extent that it is associated with the primed identity. Alternatively, when two identities are relatively difficult to balance, consumers approach the alternate identity to the extent that it is dissociated from the primed identity. This research highlights the influence of inter-identity relationships on identity priming with implications for the broad spectrum of consumer identities.
Identity priming has been shown to consistently predispose consumers to products and brands that are targeted toward their activated identity (Forehand and Deshpande 2001; Forehand, Deshpande, and Reed 2002; Grier and Deshpande 2001; Zhang and Khare 2009). Consider a working-parent who identifies with both “parent” and “employee.” If just one of these two identities is primed (e.g., “parent”), the consumer is likely to evaluate more favorably products that fit, express, or facilitate the primed identity (e.g., family-oriented products). A common assumption that follows from these findings is that preference for products targeted toward alternate identities drops when the focal identity is primed (Hugenberg and Bodenhausen 2004; Luna et al. 2008). Priming “parent,” for example, would lead to avoidance of work-oriented products because those products are a poor fit with the active family-oriented identity. We propose that alternate-identity avoidance is not always the case – that priming a given identity (parent) may also lead consumers to approach an alternate identity (employee). In three studies, we show that whether consumers approach or avoid alternate-identity products depends jointly upon two relationships between the identities: the degree of association and the level of competition.

It has been suggested that consumers cognitively organize multiple identities within an associative network where identities may vary on their degree of association (i.e., overlap) ranging from fully dissociated to fully associated (Amiot, De La Sablonniere, Terry, & Smith, 2007; Greenwald, et al., 2002; Luna, et al., 2008). As such, spreading activation suggests that priming one identity should facilitate activation of the primed identity and inhibit the activation of dissociated identities (e.g., Hugenberg & Bodenhausen, 2004). Thus, when two identities are dissociated (i.e., non-overlapping),
one would expect the standard priming effect where individuals approach the primed identity and avoid the alternate identity. However, when two identities are strongly associated, it is possible that activation of one identity will also facilitate activation of the second identity. Thus, when two identities are associated (i.e., overlapping), individuals should approach both the primed identity and the alternate identity. This latter dual approach effect is not predicted by extant identity priming literature, where alternate identity avoidance is the standard effect (e.g., Zhang and Khare 2009).

Although the aforementioned identity priming effects logically follow from spreading activation theory, research on Bicultural Identity Integration (BII) has observed a pattern of results divergent from these predictions. Specifically, Benet-Martinez and colleagues (2002) have found that when two prominent cultural identities (e.g., Asian and American) are dissociated, priming one of the identities prompts approach toward the dissociated secondary identity and avoidance of the primed identity. Further, whereas spreading activation predicts a dual approach effect to both a primed identity and associated alternate identities, BII research observes that priming one of two associated identities encourages approach to the primed identity and avoidance the alternate identity (Benet-Martinez et al. 2002). Stated differently, when the two focal identities are dissociated, spreading activation predicts a standard identity priming effect and BII suggests a counter-priming effect. When the two focal identities are associated, spreading activation suggests a dual approach effect and BII suggests the standard identity priming effect.

We argue that the divergent predictions suggested by spreading activation and BII theory arise because of a second variable that has largely been ignored: the level of inter-
identity competition. Distinct from the degree of association or overlap between two identities, inter-identity competition refers to the level of difficulty balancing the two identities. Importantly, BII research has almost exclusively examined samples of Asian-Americans. Although the exact mechanism driving the effects found in BII literature is less clear, we argue that there is a relatively higher level of competition (i.e., difficulty balancing) between the Asian and American identities studied in the domain of bicultural identity than in the broader realm of consumer identity. Thus, the results observed in the BII literature should occur whenever the competition between two identities is relatively high. Alternatively, results consistent with spreading activation theory should occur whenever the competition between two identities is relatively low.

In sum, the present research explores how interrelationships between consumer identities influence the effects of priming a single identity on behavior, leading to approach or avoidance of primed and alternate identities. We uniquely introduce the concept of inter-identity competition and its interaction with association on response to identity priming. The key contribution of this research is that it establishes a framework for predicting the influence of identity priming on a broad spectrum of interconnected consumer identities. The findings have important implications for identity theory in general, delineating when extant theory holds and when it is violated, as well as identifying unintended consequences of targeted marketing campaigns. We discuss these implications further in the general discussion.

**CONCEPTUAL DEVELOPMENT**
Consumers possess numerous identities that vary in their momentary activation and consumers generally demonstrate preferences and behaviors consistent with the primed identity while the identity is active (Hong et al. 2000; Forehand and Deshpande 2001; Grier and Deshpande 2001; Zhang and Khare 2009). The effects of identity activation on response are remarkably robust as prime-consistent behaviors are often observed even when the primed individual possesses alternate identities with opposing behavioral associations (Chen and Bond 2010; Hong et al. 2000; Hugenberg and Bodenhausen 2004; LeBoeuf, Shafir, and Bayuk 2010; Luna et al. 2008; Shih, Pittinsky, and Ambady 1999). For example, Shih et al. (1999) primed Asian-American women with their gender identity and observed lower subsequent math performance despite the fact that the participants’ Asian identity is actually associated with strong math performance. Similarly, LeBoeuf et al. (2010) primed Chinese-Americans with their American identity and observed participants avoiding helping behavior in accordance with enhanced individualism, again a behavior contrary to the Chinese component of their identity. Although each of the aforementioned effects is consistent with a drive for prime-congruency, it is commonly assumed that a secondary driver of these behaviors is an avoidance of behaviors linked to the alternate identity. For example, Chinese Americans primed with American may embrace individualistic behaviors due to both a relative increase in American-self activation and relative decrease in Chinese-self activation. Research by Hugenberg and Bodenhausen (2004) provides evidence that identity primes do suppress activation of alternate identities. In their research, members of fraternities and sororities were primed with their socialite “greek” identity, an identity that was normatively dissociated from their academic “student” identity. After prime exposure,
these participants demonstrated inhibited accessibility of concepts related to academics below baseline levels.

Although the literature supports the notion that priming an identity can prompt avoidance of alternate identities, attention to the situations or factors that facilitate such response is sparse. We argue that two critical determinants of when alternate identity approach or avoidance is likely are 1) The underlying structure of inter-identity associations and 2) The level of inter-identity competition.

Inter-Identity Association

Consumer identities are typically organized within an associative network and are linked to a variety of identity-specific needs, preferences, patterns of behavior, and other identities (Greenwald et al. 2002; Luna et al. 2008; Oyserman 2009). In general, models of identity structure agree that consumers maintain multiple identities and seek to maintain harmony amongst their identities (Amiot et al. 2007; Benet-Martinez et al. 2002; Greenwald et al. 2002; Lane and Scott 2007; McConnell 2011; Roccas and Brewer 2002). Although these models propose several structures that might be utilized to manage these multiple identities, we focus on two specific structures. First, Roccas and Brewer (2002), Amiot et al. (2007), and Benet-Martinez et al. (2002) all conceptualize a structure in which two identities are merged or integrated. For simplicity, we refer to this as an “associated” inter-identity structure. Second, the aforementioned authors conceptualize a structure in which two identities are distinct and separated. We refer to this as a “dissociated” inter-identity structure. Although these two structures have often been
treated as distinct, we propose that this inter-identity relationship is best conceptualized as a continuum of association where fully dissociated and fully associated represent the end-points of the continuum. In this way, the current conceptualization is most similar to the notion of low versus high integration as proposed in research on BII (Benet-Martinez et al., 2002). However, unlike research on bicultural identification, we propose that associational covariance need not imply any meaningful integration and dissociation need not imply any meaningful competition.

Following the tenets of spreading activation, the aforementioned dissociation and association structures should be differentially responsive to identity priming. Specifically, priming one identity should inhibit the activation of dissociated identities (Hugenberg and Bodenhausen 2004) and facilitate the activation of associated identities. To illustrate the effect of this prediction we return to our opening example. When a working-parent dissociates her employee and parent identities (e.g., the former identity is aggressive, the latter is nurturing), priming her employee identity should activate her employee identity and inhibit her parent identity. This should produce pursuit of behaviors associated with the employee identity (e.g., purchasing work-oriented products) and avoidance of behaviors associated with the alternate parent identity (e.g., purchasing family-oriented products): the standard identity priming effect.

Whereas a dissociation structure separates two identities, an association structure links the identities together such that consumers can simultaneously identify with the two identities (Roccas and Brewer 2002; Amiot et al. 2007). When two identities are thus associated, priming one identity should also activate the associated alternate identity as a second-order effect and thereby encourage approach to behaviors associated with either
identity. Returning to our working-parent consumer, under an associated structure (e.g., both identities reflect being a “grown up”) priming the employee identity would lead to approach toward both work-oriented products and family-oriented products. Although the logic behind this process is easy to follow, this dual-approach effect, where activating employee identity leads consumers to also approach family identity, is at odds both with marketer intuition and the fundamental assumptions of extant identity priming literature, which expect alternate-identity avoidance.

As mentioned earlier, these spreading activation-based predictions have not been supported in research on bicultural identity integration (Benet-Martinez et al. 2002; Cheng, Lee, and Benet-Martinez 2006; Mok and Morris 2009, 2010; see also Sacharin, Lee, and Gonzalez 2009; Zou et al. 2008). Consistent with the spreading-activation predictions, Benet-Martinez and colleagues (2002) have observed that individuals with high Bicultural Identity Integration (akin to association) pursue behaviors consistent with a primed cultural identity. However, they also observed that these individuals avoided behaviors consistent with alternate cultural identities, an effect contrary to the predictions suggested by spreading activation. Moreover, individuals with low Bicultural Identity Integration (akin to dissociation) were found to avoid behaviors consistent with the primed cultural identity and pursue behaviors linked to the alternate cultural identity: a counter-priming effect which is again contrary to the predictions suggested by spreading activation (Benet-Martinez et al. 2002; Mok and Morris 2009, 2010; Zou et al. 2008). For example, when primed with Asian cultural cues, low (vs. high) BII consumers engage more in prototypically American behaviors: they make more internal attributions (Benet-Martinez et al. 2002; Zou et al. 2008), perceive themselves as more uniqueness-seeking
and more extraverted (Mok and Morris 2009), and produce more novel solutions in a
creative thinking task (Mok and Morris 2010). Although these conflicting predictions are
problematic at first blush, we propose that this divergence can be explained by a
previously unstudied second variable: the level of competition between the two identities.

Inter-Identity Competition

Building on the notion that consumers are motivated to maintain harmony
amongst the identities within their associative networks (Amiot et al. 2007; Greenwald et
al. 2002; Lane and Scott 2007; McConnell 2011; Roccas and Brewer 2002), we define
inter-identity competition as the degree of difficulty consumers have balancing identities.
Revisiting the previous example, a working-parent may experience high level of inter-
identity competition if the demands of work or parenting are such that one must be
sacrificed to pursue the other (i.e., a poor work-life balance). Alternatively, a working-
parent may experience a low level of inter-identity competition if the employee and
parenting environments easily support a healthy work-life balance. Compared to the high-
stress scenario of high inter-identity competition between her parent and employee
identities, the consumer is likely to have more a benign relationship between the
identities in question in the low inter-identity competition scenario. Although competition
and association may be correlated in some instances (e.g., it may be easier for two
identities to be associated if there is a low degree of competition between them and vice
versa), we present evidence that supports the notion that these two constructs are distinct.
The exact mechanism driving the approach and avoidance effects found in BII research is still not entirely clear (both reactance and valence are proposed mechanisms; Benet-Martinez et al. 2002; Cheng et al. 2006; Mok and Morris 2009), however, we argue that a key feature of the Asian-American sample used in BII research is that the Asian and American identities are at a relatively higher level of competition than are most pairs of identities in the broader realm of consumer identity. First, the two cultural identities are battling for dominance within the single self-conception category of cultural identity. Second, high-tension, stress-related experiences may be especially prevalent for minorities adapting to a majority culture (Benet-Martinez and Haritatos 2005; Cheng et al. 2006) as is the case with the Asian-American respondents who participated in prior BII research. Whereas biculturals may experience relatively high direct competition between their focal cultural identities, in the broader realm of consumer identity many pairs of identities may be drawn from entirely different levels of self-conception (e.g., employee, American, student, athlete), and high competition between identities need not necessarily be the case. When relatively less competition is experienced, identities may be more benignly associated or dissociated from one another, thus relieving any potential competition and the pressure to resolve it (Greenwald et al. 2002; Amiot et al. 2007). Following this, we argue that consumer response to identity cues will follow the predictions derived from BII theory when inter-identity competition is relatively high, but will instead follow the predictions we derive from spreading activation when inter-identity competition is relatively low.

Insert table 1 about here
In summary, when competition is relatively low, association should positively predict approach toward an alternate identity, consistent with predictions derived from spreading activation. When competition is high, association should negatively predict approach toward an alternate identity, consistent with predictions derived from BII. The key theoretical proposition is the interaction between association and competition, where competition is a novel construct to research on identity priming. A summary of these predictions is presented in table 1. We test these predictions in three studies using multiple measures and multiple methods. Across the studies, we measure or manipulate association and competition, prime a given identity, and assess approach and avoidance alternate identities by measuring preferences for identity targeted products.

STUDY 1

Overview

Study 1 was designed to assess whether inter-identity association and inter-identity competition jointly influence response to identity primes in evaluation of identity-linked products. This study focused exclusively on ratings of a product targeted toward an alternate identity as this is the condition for which the predictions suggested by spreading activation and BII regarding the influence of association are in direct opposition. To test these predictions, we measured the degree of association between two identities as well as the level of competition between the two identities.
The two identities selected for study 1 are Ideal and Ought identities (Higgins 1987). These identities are abstract representations of identities to which consumers aspire (Ideal identity) or which consumers feel it is their duty to be (Ought identity). They are argued to be ubiquitous identities that are generally held by most consumers (Avnet and Higgins 2006) and although they may compete at times (e.g., one may aspire to luxury but feel obligated to be frugal; Sela and Shiv 2009), that is not necessarily always the case (e.g., one may aspire to be fit and feel obligated to exercise). Thus, there should be sufficient variation to test the interactive effect of association and competition. Additionally, a number of product categories map on to Ideal and Ought identities (Avnet and Higgins 2006; Sela and Shiv 2009), making practical implications for consumer behavior readily applicable.

For this study we explore the interactive effect of association and competition as measured variables. We expect that the more participants associate their Ideal and Ought identities, the more positive their attitude toward an Ought-targeted product (e.g., a salad) will be when primed with their Ideal identity – but only under relatively low competition. Under high competition, we expect a negative effect of association on attitude toward an Ought-targeted product when primed with Ideal identity. While the former prediction is consistent with spreading activation, the latter is consistent with bicultural identity integration. In short, study 1 conducts a critical theory test of the interactive effect of association and competition on identity prime response.

Method
Participants. One hundred and ninety-one undergraduates participated in the study in exchange for course credit.

Procedure and Stimuli. Participants completed the study in three phases: 1) Inter-Identity Relationship Measures, 2) Identity Priming, 3) Product Evaluation. In the first phase, participants read instructions stating that they would be engaging in two ostensibly unrelated tasks. Instructions for the first task, an “Identity Experiences Task,” stated that the researchers were interested in how individuals manage their various identities. To clarify the notion of Ideal and Ought identities, participants read instructions that defined the Ideal (Ought) identity as a set of attributes that they ideally would (should or ought to) possess; that ideal (ought) identity is related to their hopes, dreams, and aspirations (duties, obligations, and responsibilities), and typically related to the pursuit of positive outcomes (avoidance of negative outcomes). Being “outgoing” (“hardworking”) was given as an example of an attribute of Ideal (Ought) identity. Participants then listed three attributes of their Ideal identity and three attributes of their Ought identity. This procedure is adapted from the Selves Questionnaire (e.g., Avnet and Higgins 2006), and was intended to make clear to participants what the terms Ideal and Ought identity refer to when completing the remainder of the study.

Next, participants completed two measures of association and one measure of competition between their Ideal and Ought identities, presented in a randomized order. The first measure of association was adapted from prior literature (Roccas and Brewer 2002; Agnew et al. 1998). Specifically, the single-item measure asked participants how much overlap they see between their Ideal identity and their Ought identity. 101-point
sliding scale was anchored by 0 and 100. Above the sliding scale was a series of five
venn diagrams that provided a visual cue to low versus high overlap (see Appendix A).
The second measure of association consisted of four 7-point likert items presented in
random order. The four items included: In general, my Ideal identity is very similar to my
Ought identity; In general, my Ideal identity and my Ought identity do not overlap (R);
My Ideal identity is unrelated to my Ought identity (R); My Ideal identity is very much
associated with my Ought identity. Lastly, the measure of competition consisted of the
following four items (presented in random order) rated on the same 7-point likert scale as
above: My Ideal identity and my Ought identity directly compete with one another; I
have difficulty balancing my Ideal identity and my Ought identity; It is easy to maintain
both my Ideal identity and my Ought identity (R), Resolving competition between my
Ideal and Ought identities is easy (R).

Next, in the second phase of the study, ostensibly still part of the “Identity
Experiences Task,” all participants completed a writing task designed to episodically
activate their Ideal identity. Specifically, instructions read, “Imagine what it would be
like to have their Ideal identity be highly activated. Specifically, imagine what it would
be like to really embody the attributes that make up your ideal identity. It may help to
remember a time in your life when you felt this way. In the space below, write a
paragraph describing this kind of experience.” This type of episodic priming has been
shown in prior literature to manipulate identity salience (e.g., LeBeouf et al. 2010). It
should be noted that the previous measures of association and competition, as well as the
initial attribute-listing task, may have activated both ideal and ought identities prior to the
identity priming phase. If identity activation is heightened such that a ceiling effect
occurs where the identity prime has no effect, then we should expect null effects of association and competition on attitude, making this a more stringent test of the hypotheses. Additionally, study 2 collects inter-identity measures after the dependent measure rather than before, ruling out alternative explanations based on an influence of the independent measures.

Finally, in the third phase of the study participants read instructions stating that they were now engaging in Task 2: “Product Pre-Test” in which the researchers are interested in how individuals view different products. Participants saw a number of products and rated their interest in each. One of the products was the focal product: a Subway Chopped Salad (see appendix B). To assess product attitude, participants rated how favorable, positive, unpleasant, and unattractive the salad was again on 9-point likert scales. Following these measures participants completed demographics items and funnel debriefing procedures that revealed that no participants suspected the first two tasks as having influenced the final task. The dependent measures in the main study were collected in 9-point scales rather than the 7-point scales used in the independent measures to make the two tasks seem more distinct and unrelated.

Results

Preliminary Analysis. We entered all individual items from the two association measures and the competition measure into a factor analysis with varimax rotation and this revealed two distinct factors. All four items of the 4-item association measure and the single-item association measure loaded positively on a single factor with all coefficients
at or above .80. All four items of the competition measure positively loaded on a second factor with all coefficients at or above .64. Only a single item crossloaded with coefficient whose absolute value was above .30. This item from the competition measure read, “My Ideal identity and my Ought identity directly compete with one another,” and loaded negatively on the first factor (-.34) and positively on the second factor (.64). Next, we collapsed responses across the 4-item association measure (Cronbach’s alpha = .88), the 4-item competition measure (Cronbach’s alpha = .79), and the 4-item product attitude rating (Cronbach’s alpha = .83). The 4-item association and the single-item association measure were significantly positively correlated with one another ($r(189) = .73, p < .0001$) and both the 4-item and single-item association measure were significantly negatively correlated with the competition measure ($r(189) = -.50$ and -.38 respectively, both $p < .0001$). The only measure that significantly correlated with the product attitude measure was the 4-item association measure ($r(189) = .20, p = .005$; all correlations reported in table 2). This preliminary analysis suggests that association and competition are indeed two distinct, albeit related constructs.

Additionally, a pre-test from the same population (n = 39) revealed that participants related the salad to their Ought identity significantly higher than the midpoint on a 9-point likert scale anchored by 1-Very Strongly Disagree and 9-Very Strongly Agree ($M = 5.78$ ($t(38) = 1.99, p = .027$ one-tailed). This pre-test provides evidence that the product was indeed considered an alternate-identity product in the given paradigm.

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Insert table 2 about here

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**Hypothesis Testing.** We regressed product attitude on the single-item association measure, the competition measure, and the interaction between the two factors. Results showed a significant model \((F(3, 187) = 3.65, p = .01)\), significant main effects of the single-item association measure \((B^I = .54; t(187) = 2.98, p = .003)\) and competition \((B = .37; t(187) = 2.06, p = .04)\), and a significant interaction term \((B = -5.26; t(187) = -2.67, p = .008)\). This result supports the hypothesized interactive influence of association and competition.

**Ancillary Analysis.** We conducted a second regression identical to the one conducted above except we used the 4-item measure of association rather than the single-item measure; the pattern of results reported above was replicated (all \(p < .05\)). For illustrative purposes, we examined how the influence of association shifts depending on the level of competition by performing a median split on the two independent variables and conducting an ANOVA on product attitude. Results showed a significant interaction between association and competition \((F(1, 187) = 16.85, p < .0001)\), where participants with low competition had higher ratings for the alternate-identity targeted product when their two identities were associated \((M = 7.12)\) than when their two identities were dissociated \((M = 6.15; F(1, 187) = 9.96, p = .001 \text{ one-tailed})\). In comparison, participants with high competition had the opposite pattern \((M = 5.77 \text{ vs. } 6.67; F(1, 187) = 7.15, p = .004 \text{ one-tailed})\). These results are depicted in figure 1.

\[\text{To ease interpretation, coefficients reported in study 1 are standardized betas.}\]
Discussion

Study one conducted a critical theory test to determine whether the influence of association depends on the level of competition between identities. Results support the proposed interaction between association and competition, which provides an important update to identity theory. Specifically, the effect we derive from spreading activation is obtained when competition is relatively low, where association positively predicts attitude toward an Ought-identity targeted product following an Ideal-identity prime. In contrast, association *negatively* predicts attitudes toward an Ought-identity product following an Ideal-identity prime when competition is relatively high; a result consistent with predictions derived from BII. Taken together, these results highlight the importance of inter-identity relationships in response to identity priming and suggest that priming a given identity can counter-intuitively lead to approach toward an alternate identity.

In study 1 we measured association and competition between identities, primed one of the two identities, and assessed ratings of a product targeted toward the alternate identity. We further test the robustness of the interactive effect in study 2. Specifically, we manipulate competition rather than measure it, we use a different pair of identities and a different product domain, and we provide participants with an actual behavioral choice between a product targeting the primed identity and a product targeting the alternate identity. This latter change tests whether consumers actually prefer an alternate-identity targeted product when faced with a second option that matches the primed identity. This
facilitates comparison with prior literature that assesses identity prime response in a bipolar manner where approach of the primed identity is inherently avoidance of the alternate identity (e.g., Luna et al. 2008; Zhang and Khare 2009).

**STUDY 2**

Overview

Study 2 was designed to explore the robustness of the findings from study 1. To this end, several changes were made: first, the pair of identities was changed to “Work Identity” and “Leisure Identity.” These identities are arguably more concrete than the relatively more abstract Ideal and Ought identities. Additionally, these identities are likely to be commonly held in the sample population and, as with study 1, substantial product categories exist that target these identities. Second, rather than measuring competition, we manipulated it using advertising stimuli. This highlights situational influences on inter-identity competition and provides a practical tool to marketing managers. Third, after the dependent measure, association was assessed using an alternative measure adapted from BII (Benet-Martínez and Haritos 2005; Sacharin et al. 2009). This makes the findings more readily comparable to the empirical work conducted within BII literature. Lastly, rather than rating their attitude toward a product, participants responded to an actual behavioral measure. Specifically, they chose between two lottery prizes given out as a reward for participating – a primed identity targeted prize and an alternate identity targeted prize. The resulting design was competition (manipulated) by
association (measured) with choice of an alternate-identity targeted product as the dependent variable. The methods are further described below.

Method

Participants. One hundred fifty-five undergraduates participated in the study in exchange for course credit.

Procedure and Stimuli. The study was conducted in 4 phases: 1) Competition Manipulation, 2) Identity Priming, 3) Behavioral Choice, 4) Association Measure and Debriefing. In the first phase of the study, participants read instructions stating that they would be completing two separate and unrelated tasks. Further, they were informed that the researchers wanted to provide an incentive for full participation. This incentive took the form of a lottery prize where the participant would be allowed to choose their prize after they were done with the study. Should they win the lottery, they would be contacted via email and awarded their chosen prize. After reading these instructions, participants proceeded with the first task, “Ad Evaluation.”

The Ad Evaluation task represented the first phase of the study in which level of inter-identity competition was manipulated. Participants were presented with one of two print ads along with instructions that they were to view the ads for 30 seconds and respond to questions about the ads on the following page. Both print ads depicted a group of 4 business people gathered around a laptop on the top half of the ad and a group of 4 friends gathered around a laptop on the bottom half of the ad. The words “Work Hard”
were below the top picture (business people) and the words “Play Hard” were below the bottom picture (friends). In the bottom right corner of the ad was a logo for the brand HTC, which makes consumer electronics. On the very top of the ad was ad copy that varied depending on condition. In the low competition condition, the ad copy read, “Now it’s easy to manage being you…” In the high competition condition, the ad copy read, “When it’s difficult to manage your different roles…” Lastly, in both conditions a line separated the top of the ad from the bottom of the ad. In the low competition condition the line was upward sloping with smooth edges; in the high competition condition the line was downward sloping with jagged edges. The differences in slope and edges were intended to differentially activate harmony and conflict (i.e., low/high competition). The print ads are depicted in appendix B. This difference in ad copy was intended to manipulate the level of inter-identity competition between the participants’ Work identity and Leisure identity. After rating the ad on interestingness and favorability, participants moved to the next phase of the study.

Phase 2 of the study, ostensibly an unrelated “Identity Experiences Task,” was an identity prime identical to that used in study 1 except that rather than writing about a time when their Ideal identity was active, participants were randomly assigned to either write about a time when their Work identity was active or to write about a time when their Leisure identity was active. Thus, some participants were primed with their Work identity and others were primed with their Leisure identity.

After completing this task, participants moved on to phase 3 – the behavioral dependent variable where they chose their lottery prize. Prior to selecting their prize, participants read instructions stating that this was not a hypothetical lottery, that they
would indeed be contacted via university email if they won the lottery, and that they would actually receive the prize they chose. Participants then selected “Yes” or “No” to indicate whether they understood the instructions. Participants then chose between a $20 gift card to the university bookstore and a $20 gift card to the iTunes store. The university bookstore prize was targeted toward participants’ Work identity; the iTunes prize was targeted toward their Leisure identity. Although both the university bookstore and iTunes store carry both productivity (i.e., work) and leisure related items, our sample being undergraduates, we expect students to associate the bookstore more strongly with work than with leisure; likewise we expect students to more closely associate the iTunes store with leisure than with work. Because we are interested in when people counter-intuitively approach alternate-identity products, the lottery choices were coded a 0 if the participant chose the prize targeted toward the primed identity and a 1 if they chose the prize targeted toward the alternate identity. This ostensibly marked the end of this study. Participants were then guided by researchers to begin the next study, which was actually phase 4 of this study.

In phase 4, participants responded to items measuring inter-identity association. Specifically, four items were adapted from the original 6-item BII scale (Benet-Martinez and Haritos 2005). The adapted items read, “I keep my Work and Leisure identities separate,” “I am able to combine my Work and Leisure identities,” “I feel caught between my Work identity and my Leisure identity,” “I don’t feel trapped between my Work identity and my Leisure identity,” rated on 7-point agree/disagree likert scales with the first and fourth items reverse scored and presentation order randomized (for a similar adaptation see Sacharin et al. 2009). Participants then completed demographics and
funnel debriefing measures that revealed that no participants suspected any previous tasks as having influenced any responses outside of the task in question. A pretest, discussed below, examined relationships between this measure and the inter-identity measures from study 1.

Results

   Preliminary Analysis. A pretest (n = 41) was conducted to validate the competition manipulation as well as the adapted BII measure of inter-identity association. In the pre-test, participants viewed either the low competition ad stimulus or the high competition ad stimulus, rated the ads on interestingness and favorability, then completed the same competition and association measures as in study 1 with the addition of the adapted BII measure. These two phases were presented as two unrelated tasks and funnel debriefing revealed that no participants suspected the first phase (competition manipulation) as having influenced the second phase (inter-identity measures). We collapsed the four items of the adapted BII scale (Cronbach’s alpha = .64) and found a significant positive correlation with the 4-item association measure used in study 1 (r(39) = .51, p = .001) and a significant positive correlation with the single-item association measure from study 1 (r(39) = .41, p = .008) as well as a significant negative correlation with the competition measure (r(39) = -.49, p = .001). In short, the adapted BII measure had the same pattern of correlations as the other association measures from study 1.

   A MANOVA revealed that the competition manipulation lead to significant differences in work-leisure identity competition as measured with the same competition
scale used in study 1 \( (M_{\text{low comp}} = 3.13, M_{\text{high comp}} = 4.05; F(1, 39) = 4.85, p = .034) \) but no significant difference in work-leisure identity association as measured with the adapted BII scale \( (M_{\text{low comp}} = 4.63, M_{\text{high comp}} = 4.32; F(1, 39) = .964, p = .332) \). Influence of the competition manipulation on the other measures of association was also nonsignificant (both \( p > .33 \)).

**Hypothesis Testing.** We conducted a binary logistic regression with competition condition (low vs. high), association, and the interaction between the two as independent variables where choice of the alternate-identity targeted product was the dependent variable. Choice was coded 0 if the product targeted toward the primed identity was chosen and 1 if the alternate identity targeted product was chosen. Consistent with our predictions, results showed a significant main effect of competition condition \( (B = 3.45; \chi^2(1) = 4.58, p = .032) \), and a significant main effect of association \( (B = .60, \chi^2(1) = 4.14, p = .042) \) qualified by a significant interaction term \( (B = -.77, \chi^2(1) = 4.17, p = .041) \). To illustrate, probability of choosing the alternate identity targeted product as a function of competition and association is depicted in Figure 2 with association shown at one standard deviation above and below the mean.

**Ancillary Analysis.** We conducted two additional logistic regressions where we examined the influence of association at the two different levels of competition. In line with our predictions, in the low competition condition, association significantly predicted the choice of the alternate identity targeted product where higher association lead to an increase in choice probability for the alternate identity targeted prize; \( B = .60; \chi^2(1) = 4.14 \).
4.14, \( p = .042 \). In the high competition condition, association nonsignificantly decreased the probability of choosing the alternate identity targeted prize; \( B = -.17; \chi^2(1) = .54, p = .463 \).

Discussion

Study 2 sought to test the robustness of the interaction between competition and association found in study 1 and to assess preference for an alternate-identity targeted product relative to a primed-identity targeted product. Study 2 used a different pair of identities, a manipulation of competition rather than a measure, an alternative measure of association adapted from prior research (making results more comparable), and a dependent variable in a different domain than study 1 that measured actual behavioral choice rather than attitude.

Results again supported the predicted interactive effect of competition and association. Association positively predicted participants’ likelihood to choose a lottery prize targeted toward an alternate identity over a prize targeted toward the primed identity, but only when competition was low. Specifically, the more participants associated their Work and Leisure identities, the more participants primed with their Leisure identity actually chose a work-oriented product (bookstore prize) and participants primed with their Work identity actually chose a leisure-oriented product (iTunes prize). This pattern of results is again consistent with predictions suggested by spreading
activation. When competition was high, a nonsignificant negative effect of association on choice of the alternate identity targeted prize was observed. This trend is consistent with predictions suggested by BII. The lack of significance observed under high competition may be due to the fact that, per the pre-test, the high competition manipulation did not shift participants’ ratings of identity competition above the midpoint. It may be the case that competition must achieve some threshold before effects predicted by BII are observed with significance. Importantly, the key theoretical link between association and competition was again supported by the significant interaction term in study 2.

Considering that novelty of inter-identity competition, we examine it in more detail in study 3. The examination of competition in study 3 has several differences from the first two studies. Study 1 measured evaluations of a product targeted toward the alternate identity. Study 2 added to the theoretical picture by measuring actual choice between a primed- and an alternate-identity targeted product. In study 3, we assess evaluation of a primed-identity targeted product and evaluation of an alternate-identity targeted product independent from one another. This allows for analysis of influence on primed-identity targeted products independent from any effect that may stem from simultaneous presentation of alternatives. Additionally, study 1 used the abstract Ideal and Ought identities and study 2 used somewhat more concrete Work and Leisure identities. In study 3 we use an even more concrete pair of identities that correspond to two roles frequently engaged in by our sample population: Student and Friend. In addition to the use of a different product category (consumer electronics), this expands the robustness of the finding and provides converging evidence of the theoretical relationships.
Another important difference in study 3 is that association is manipulated such that all participants experience relatively more dissociation between the two focal identities. This change has several advantages. First, it is practically useful to demonstrate that association is subject to situational influences. Second, under dissociation, evaluations of primed- vs. alternate-identity targeted products are in direct opposition in low vs. high competition. Specifically, under low competition (i.e., spreading activation), primed-identity targeted products should be evaluated more positively than alternate-identity targeted products. Under high competition (i.e., BII), consumers should evaluate alternate-identity targeted products more positively than primed-identity targeted products. These opposing predictions make for a stronger theoretical test of the influence of competition. Lastly, research exploring identity priming effects in the context of multiple identities largely conceptualizes multiple identities as distinct, separate identities that are contextually dependent (i.e., dissociation; Chen and Bond 2010; Hong et al. 2000; Hugenberg and Bodenhausen 2004; LeBoeuf, Shafir, and Bayuk 2010; Luna et al. 2008; Shih, Pittinsky, and Ambady 1999). Thus, examining the influence of competition under dissociation makes the results more directly comparable to previous literature in which dissociation is assumed. In short, study 3 is primarily intended to highlight the theoretical importance of the novel concept of inter-identity competition on both primed- and alternate-identity targeted products.

STUDY 3

Overview
In study 3, we primed all participants with dissociation between the two focal identities, manipulated whether participants experienced low or high direct competition between two identities, primed one identity, and then measured preference for either a primed-identity product or an alternate-identity product. This resulted in a 2 (Competition: Low vs. High) by 2 (Product Targeting: Primed Identity vs. Alternate Identity) between-subjects design with all participants experiencing dissociation and product attitude as the dependent variable. Because all participants are primed with dissociation, the prediction is that participants in the low competition condition will exhibit the standard priming effect where the primed identity product is evaluated more favorably than the alternate identity product (i.e., spreading activation). In contrast, participants in the high competition condition should exhibit a counter-priming effect where they evaluate the alternate identity product more favorably than the primed identity product (i.e., BII).

In addition to the changes mentioned above, study 3 has several methodological differences intended to extend the robustness of the finding in order to provide convergent evidence of the proposed theoretical relationships. Competition was again manipulated between subjects, but this time using an episodic prime rather than advertising stimuli. The identity prime used in study 3 was a cognitive task rather than the episodic prime of studies 1 and 2. Lastly, the product evaluated was further controlled such that participants evaluated a single product whose ad copy was manipulated between subjects to either target the primed or alternate identity. These changes are further discussed below.
Method

Participants. Seventy-eight undergraduates participated in the study in exchange for course credit.

Procedure and Stimuli. Study 3 was conducted in 3 phases: 1) Inter-Identity Relationship Manipulation, 2) Identity Prime, 3) Product Evaluation and Debriefing. Upon entering the lab, participants were randomly assigned to one of the four study conditions. In the first phase, participants read instructions stating that they would be participating in several unrelated tasks. The first set of instructions stated that people have multiple roles or “identities” that activate different aspects of themselves, and that the participants would read about a scenario relating to their identity on the next page. On the next page, participants saw a scenario that suggested that “student” and “friend” are dissociated with one another and that further manipulated whether these two identities were in either low or high direct competition with each other. Both scenarios asked participants to imagine that they were taking a class with a friend. In the low direct competition condition, participants saw instructions stating that, “this was bad news because their role as a student and their role as a friend conflict with one another.” This manipulation is intended to induce dissociation between the student and friend identities in all participants and was confirmed to do so in a pretest discussed in the results section. In the high direct competition condition, participants read additional instructions that asked them to imagine that their “student and friend roles directly compete with one
another in such a way that they will have some very unpleasant experiences trying to balance the roles.” Instructions for both scenarios then asked participants to take a moment to imagine themselves in the situation and write about what it would be like to experience it. In the high direct competition condition, instructions additionally asked participants to mention some unpleasant experiences they might face trying to balance the roles. The additions made to the high direct competition condition were intended to create a scenario in which the two identities directly compete with one another in such a way that a high level of difficulty was experienced trying to balance the roles. A second pretest, also discussed below, validated this manipulation. Note that at this point all participants have been induced into a dissociated inter-identity association structure; the only difference between conditions is in the level of inter-identity competition.

After level of direct competition between friend and student was manipulated, participants proceeded to phase 2 which was a word search task that activated their “friend” identity. In this task, participants viewed an 11 x 11 matrix of letters and were instructed to search for 8 words hidden within the matrix. The words the participants searched for were friend-related words (friend, friendly, companion, pal, caring, fun, relaxed, social). These words were selected based on a pretest in which a separate sample of participants drawn from the same population listed the aspects that make up their Friend identity. The eight words that most frequently appeared in these lists were incorporated into the word search.

After having their Friend identity activated, participants moved to phase 3 where they viewed advertisements for a series of products and reported their interest in each. One of these products, the ViewSonic e-Reader, was either promoted around its socially
oriented features and benefits (i.e., primed-identity/Friend-targeted) or its academically oriented features and benefits (i.e., alternate-identity/Student-targeted). In the primed-identity (i.e., Friend) targeted condition, the ad copy stated that ViewSonic was partnering with publishers to provide New York Times best sellers in digital format, access to social networking websites, and promotional discounts for book club members and Facebook users. In the alternate-identity (i.e., Student) targeted condition, the ad stated that ViewSonic was partnering with academic publishers to provide textbooks in digital format, access to library websites, and promotional discounts for students. These two stimuli are depicted in appendix C. After viewing one of these two ads, participants rated how favorable, positive, unpleasant, and unattractive the product was on 9-point likert scales anchored by 1-Very Strongly Disagree and 9-Very Strongly Agree.

Following these measures participants completed demographics items and funnel debriefing procedures that revealed that no participants suspected the first two tasks as having influenced the final task.

Results

_Preliminary Analysis._ Two separate pretests were conducted to a) validate that all participants were primed with a dissociated structure and b) validate the competition manipulation. The pretests were conducted separately due to the timing of the availability of participants. The first pretest (n = 39) was conducted to ensure the participants were indeed experiencing dissociation. Recall that all participants in the main study were asked to imagine that they were taking a class with a friend and that it was bad news because
their role as a student and their role as a friend conflicted with one another; this is the dissociation condition. Participants in the pretest were randomly assigned to either this dissociation condition or to an *association* condition in which they were asked to imagine taking a class with a friend and that this was good news because their role as a student and their role as a friend compliment one another. In line with our prediction, results showed that the participants in the dissociated condition reported less inter-identity association (\(M = 3.99\)) than did participants in the associated condition (\(M = 4.91\); \(F(1, 37) = 7.59, p < .01\)) as measured by the adapted BII scale used in study 2. A second pretest (\(n = 40\)) was conducted to validate the competition manipulation. The pretest consisted of two phases in which participants first completed the manipulation and then inter-identity relationship measures – specifically the adapted BII scale to measure association and the 4-item competition measure. Consistent with predictions, results showed a significant influence on 4-item competition measure (\(M_{\text{low comp}} = 4.51, M_{\text{high comp}} = 5.29\); \(F(1, 38) = 6.69, p = .014\)).

**Hypothesis Testing.** Product attitude ratings were collapsed across the four items with the “unattractive” and “unpleasant” items reverse-scored (Cronbach’s alpha = .80). The data were analyzed in an ANOVA with inter-identity competition (low vs. high) and product targeting (primed identity vs. alternate identity) as between-subjects factors and product attitude as the dependent variable. The hypothesized interaction of inter-identity competition level and product targeting was observed (\(F(1, 74) = 7.92, p = .006\)). A planned contrast revealed the predicted effect derived from spreading activation under low competition, where the primed identity product was evaluated more positively than
the alternate identity product \((M = 5.93 \text{ vs. } 5.03; F(1, 74) = 3.99, p = .025 \text{ one-tailed})\). In contrast, when competition between the identities was high, the opposite effect was obtained, where attitude ratings were lower for the primed identity product than for the alternate identity product \((M = 4.92 \text{ vs. } 5.78; F(1, 74) = 3.92, p = .026 \text{ one-tailed})\). These results are depicted in Figure 3 and discussed further below.

**Ancillary Analysis.** Further supporting our predictions, planned contrasts revealed that participants in the high inter-identity competition rated the primed identity product significantly lower \((F(1, 74) = 5.89, p = .009 \text{ one-tailed})\) and rated the alternate identity product marginally significantly higher \((F(1, 74) = 2.57, p = .056 \text{ one-tailed})\) than did participants in the low inter-identity competition condition.

Discussion

Studies 1 and 2 explored the interactive effect of inter-identity association and competition on consumer evaluation of a product targeted toward an alternate identity (S1) and choice of a primed identity targeted product relative to an alternate identity product (S2). Study 3 more closely examined the influence of competition and compared isolated evaluations of a primed identity product to isolated evaluations of an alternate identity product.
Results again supported the proposition that predictions derived from spreading activation hold under low competition while predictions derived from BII hold under high competition. Specifically, all participants in study 3 were primed with dissociation and, under low competition, participants primed with their Friend identity evaluated a Friend targeted product more positively than a Student targeted product. Under high competition, a counter-priming effect was observed where Friend identity priming lead to more positive evaluations of a Student targeted product compared to a Friend targeted product. This again supports our primary contention that inter-identity competition is an important determinant of when response to identity priming follows the different patterns suggested by the two literatures.

Further, ancillary analysis revealed that competition simultaneously lowered evaluations of primed identity products and increased evaluations of alternate identity products, suggesting that relative avoidance of the primed identity and approach toward the alternate identity jointly influence evaluations. Collectively, these results suggest that the standard priming effect consistent with spreading activation observed in previous literature (Chen and Bond 2010; Hong et al. 2000; Hugenberg and Bodenhausen 2004; LeBoeuf, Shafir, and Bayuk 2010; Luna et al. 2008; Shih, Pittinsky, and Ambady 1999) was examined under relatively low competition, and would be reversed under high competition. This highlights the theoretical importance of the novel concept of inter-identity competition.

**GENERAL DISCUSSION**
This research contributes by providing a framework for exploring the influence of relationships between multiple identities on identity-driven behavior across the broad spectrum of consumer identities. In particular, we derive competing predictions about the influence of inter-identity association and reconcile them by introducing the notion of inter-identity competition as a moderating factor. Three studies using multiple methods and multiple measures provide converging evidence that association and competition jointly influence response to identity primes. Counter to the robust preference for primed-identity-consistency demonstrated by identity priming literature (e.g., LeBoeuf et al. 2010; Luna et al. 2008; Zhang and Khare 2009), results show that priming an identity can counter-intuitively lead consumers to approach an alternate identity depending on both association and competition. Specifically, the more two identities are associated, the more consumers approach products targeted toward the alternate identity, but only when competition is low. Under high competition, the more two identities are dissociated, the more consumers approach the alternate-identity targeted product. This interactive effect provides an important update to extant theory on the processing of identity-relevant stimuli by highlighting the influence of inter-identity relationships.

The effect of association observed under low competition follows logically from spreading activation; the more two concepts are associated in memory, the more activating one also activates the other. However, the process driving the effects observed under high competition is less clear. Research on bicultural identity integration has alternatively suggested reactance and valence as possible mechanisms (Benet-Martinez et al. 2002; Cheng et al. 2006; Mok and Morris 2009). Interestingly, Cheng et al. (2006) were able to reverse the effects by altering the valence of the identity primes. Where
individuals with high BII (i.e., associated identities) usually assimilate toward a positive identity prime, individuals with low BII (i.e., dissociated identities) usually contrast and instead approach the alternate identity. When identity cues were instead negatively valenced, the effect of BII reversed, where high BII (association) lead to to contrast and low BII (dissociation) lead to assimilation. However, it is not entirely clear that valence is actually the driver of the effect observed in BII literature or merely another moderator. Further work exploring the underlying mechanism is needed.

The results reported herein have implications for targeted marketing campaigns and the non-target market effect (e.g., Aaker, Brumbaugh, and Grier 2000). Identity priming literature suggests that marketers should tailor advertising to activate identities that are consistent with targeted products, leading consumers to approach the products due to enhanced product fit (e.g., Forehand and Deshpande 2001; Forehand et al. 2002; Grier and Deshpande 2001; LeBoeuf et al. 2010; Zhang and Khare 2009). Intuitively, consumers exposed to a marketing campaign targeted toward an alternate group should be more likely to avoid the marketed product because it is inconsistent (i.e., a poor fit) with their active identity. Indeed, Aaker et al. (2000) found that this unfavorable non-target market effect was amplified for members of nondistinctive (i.e., majority) groups such as Caucasian or heterosexual consumers. Considering that the broader realm of identity may be likely to have relatively low inter-identity competition, our findings contribute to this literature by suggesting that marketers may improve efficiency, conserve resources, and avoid unfavorable non-target market responses by creating a single marketing campaign that activates an associated inter-identity association
structure. This type of advertising campaign should lead consumers to approach the marketed product even if it is targeted toward an alternate-identity.

In summary, this research contributes by introducing inter-identity association and inter-identity competition as factors influencing consumer response to identity priming and targeted marketing. While this research explored the interactive effect of association and competition on several pairs of identities, future research should assess the effect with additional types of identities to further explore the boundary conditions. It is likely that some types of identities, such as moral identity or political identity, are more difficult to balance without a higher degree of inter-identity competition, in which case results may trend toward the effects predicted by BII theory. Those two domains in particular are important for charitable and political marketing with broad implications for general consumer welfare. Additionally, while we assumed that differences in association exist based on past literature (e.g., Amiot et al. 2007; Benet-Martinez et al. 2002; Roccas and Brewer 2002), we did not identify the antecedents to these structures. While such explorations are beyond the scope of the present investigation, they should prove fruitful areas of future research.
APPENDIX A

STUDY 1: ADAPTED SINGLE-ITEM ASSOCIATION MEASURE

How much overlap do you see between your ideal identity and your Ought identity?
Use the sliding scale to indicate the amount of overlap. Use the venn diagrams as a guide.

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<th>25</th>
<th>50</th>
<th>75</th>
<th>100</th>
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<td><img src="image" alt="Venn Diagrams" /></td>
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</table>

Amount of Overlap

APPENDIX B

STUDY 1: ALTERNATE-IDENTITY (OUGHT) TARGETED PRODUCT

The new SUBWAY Chopped Salad!

- Subway introduces their new Chopped Salad - turn ANY Sub into a chopped salad!-
- Low Calorie, Low Carb, Low Fat, Low Price!-
- The nutrition you need at a price you can afford!
APPENDIX C

STUDY 2: LOW AND HIGH COMPETITION MANIPULATION STIMULI
APPENDIX C

STUDY 3 PRIMED (FRIEND) AND ALTERNATE (STUDENT) IDENTITY
TARGETED PRODUCTS

The new VIEWSONIC E-Reader!
- ViewSonic is partnering with publishers to provide virtually all popular best sellers in digital format for leisure reading-
- Now with access to social networking websites-
- Promotional Discounts available for book club members and Facebook users! Visit ViewSonic’s website for more info-

The new VIEWSONIC E-Reader!
- ViewSonic is partnering with Academic publishers to provide virtually all textbooks in digital format-
- Now with access to library websites-
- Promotional Discounts available for students! Visit ViewSonic’s website for more info-
REFERENCES


### TABLE 1

PREDICTED INFLUENCE OF INTER-IDENTITY RELATIONSHIPS ON APPROACH/AVOIDANCE OF ALTERNATE IDENTITY

<table>
<thead>
<tr>
<th>Inter-Identity Competition</th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>Inter-Identity Association</td>
<td>Dissociated</td>
<td>Associated</td>
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<tr>
<td>Effect on Alternate Identity</td>
<td>Avoid</td>
<td>Approach</td>
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<td>Parent Literature</td>
<td>Spreading Activation</td>
<td>Bicultural Identity Integration</td>
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### TABLE 2

STUDY 1 IV AND DV CORRELATIONS

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<th>Assoc (1-item)</th>
<th>Assoc (4-item)</th>
<th>Comp</th>
<th>Attitude</th>
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</thead>
<tbody>
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<td>.125</td>
</tr>
<tr>
<td>Assoc (4-item)</td>
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<tr>
<td>Comp</td>
<td>-.377**</td>
<td>-.495**</td>
<td>1</td>
</tr>
<tr>
<td>Attitude</td>
<td>.125</td>
<td>.204**</td>
<td>.157</td>
</tr>
</tbody>
</table>
FIGURE 1
STUDY 1: ASSOCIATION (MEDIAN SPLIT) AND COMPETITION (MEDIAN SPLIT) INFLUENCE ALTERNATE-IDENTITY PRODUCT ATTITUDE

FIGURE 2
STUDY 2: ASSOCIATION (+/- 1 SD) AND COMPETITION INFLUENCE CHOICE PROBABILITY FOR ALTERNATE (VS. PRIMED) IDENTITY PRODUCT
FIGURE 3

STUDY 3: COMPETITION INFLUENCES PRIMED AND ALTERNATE IDENTITY
PRODUCT ATTITUDES WHEN ALL PARTICIPANTS PRIMED WITH
DISSOCIATION