

# The Many-Faced Consumer: Consumption Consequences of Balancing Multiple Identities

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Cues in the environment can prime consumer identities, increasing adoption of behaviors consistent with the primed identity and avoidance of behaviors consistent with alternate (nonprimed) 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 for both student- and friend-related activities), participants approach alternate identities that are associated with the primed identity following a cognitive process of spreading activation. However, when identities are difficult to balance, participants approach alternate identities that are *dissociated* from the primed identity. We argue that this reversal occurs owing to a switch from a cognitive process to a motivational process akin to that seen in multiple-goal management. Under the motivational process, priming a focal identity inhibits (activates) associated (dissociated) identities because the two are seen as (non-)substitutable with each other. The motivational process under high balance difficulty relaxes when participants can self-affirm, causing response to instead mimic the cognitive process. The resulting integrative framework introduces identity-balance difficulty and its interaction with association into identity research, uniquely highlighting the importance of multiple-identity management with implications for research and practice.

**Keywords:** identity, priming, self, multiple-identity management, identity regulation

Identity priming has been shown to consistently predispose consumers to products and brands that are targeted toward their activated identity (Forehand and Deshpandé 2001; Forehand, Deshpandé, and Reed 2002; Grier and

Deshpandé 2001; Reed 2004; 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 more favorably evaluate 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, Ringberg, and Peracchio 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 (work/employee). In three studies, we show that whether consumers approach or avoid alternate-identity-targeted products depends on

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both the degree of association between the two identities and the level of difficulty balancing the two identities.

It has been suggested that consumers cognitively organize multiple identities within an associative network where identities may vary on their degree of association, ranging from fully dissociated to fully associated (Amiot et al. 2007; Greenwald et al. 2002; Luna et al. 2008). Thus, spreading activation suggests that priming one identity should facilitate activation of the primed identity and inhibit activation of dissociated identities (Hugenberg and Bodenhausen 2004). When two identities are relatively dissociated, one would therefore expect the standard priming effect where individuals avoid the alternate identity. However, when two identities are relatively more associated, it is possible that activation of one identity will also facilitate activation of the second identity because of the cognitive link between the two. Thus, when two identities are relatively associated, individuals should *approach* the alternate identity (e.g., prime parent; approach work-oriented products). Stated differently, we can predict a positive effect of association on preference toward an alternate identity. This approach effect is not predicted by extant identity priming literature, where alternate-identity avoidance is the standard finding (Zhang and Khare 2009).

We further argue that the influence of association on preference for an alternate identity depends on a second variable that has largely been ignored: the ease with which an individual can balance the two identities. Imagine a working parent who, due to difficulty balancing the demands of work and family, simultaneously feels he or she is being neither a “good employee” nor a “good parent.” We argue that when consumers are faced with such identity-balance difficulty, they are motivated to enhance self-associations with the identities (e.g., reinforce that they are a good employee and a good parent). This motivational process active under high identity-balance difficulty is similar to the effort exerted when one manages multiple goals. As a result, we argue that the effect of association between difficult-to-balance identities should be similar to the effect of substitutability within goal management research (Fishbach, Friedman, and Kruglanski 2003; Shah, Friedman, and Kruglanski 2002). Specifically, when two identities are difficult to balance, activating one identity should inhibit the second identity if the two identities are associated/substitutable and activate the second identity if the two identities are dissociated/nonsubstitutable. Stated differently, we can predict a *negative* effect of association on preference for an alternate identity following a motivational process. This pattern of predicted effects is in stark contrast to the positive effect we derive from the cognitive process, which we predicted to occur under low balance difficulty.

In sum, the present research explores how interrelationships between consumer identities influence the effects of identity-activating cues on behavior toward alternate

identities. We uniquely introduce the concept of identity-balance difficulty and its interaction with association on response to identity priming and demonstrate boundary conditions. In doing so, we synthesize cognitive and motivational theories and integrate divergent findings in prior literature. 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, expanding on the growing literature exploring multiple-identity management (Reed and Forehand 2016). The findings have important implications for identity theory in general, showing when extant theory holds and when it is violated, as well as identifying unintended consequences of targeted marketing campaigns and identity-driven branding. We discuss these implications further in the general discussion.

## CONCEPTUAL DEVELOPMENT

Consumers possess numerous identities that vary in their momentary activation, and generally demonstrate preferences and behaviors consistent with the primed identity while the identity is active (Forehand and Deshpandé 2001; Forehand et al. 2002; Grier and Deshpandé 2001; Reed 2004; Reed et al. 2012; 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; Coleman and Williams 2013; Hirsh and Kang 2016; Hong et al. 2000; Hugenberg and Bodenhausen 2004; LeBoeuf, Shafir, and Bayuk 2010; Luna et al. 2008; Rydell, McConnell, and Beilock 2009; Shih, Pittinsky, and Ambady 1999). For example, LeBoeuf et al. (2010) primed Chinese-Americans with their American identity and observed participants avoiding helping behavior in accordance with enhanced individualism, a behavior contrary to the Chinese component of their identity.

Although the aforementioned effect is consistent with a drive for prime congruency, a commonly held proposition is that an additional 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 empirical 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 priming one identity may also ironically lead consumers to approach an alternate identity—a consequence that violates the expectations of extant identity priming theory. We propose that two critical determinants of when alternate-identity approach or avoidance is likely are 1) the degree of inter-identity association and 2) the level of inter-identity-balance difficulty.

## 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, other identities, and the self (Luna et al. 2008; Oyserman 2009). In general, models of identity structure agree that consumers hold multiple identities and seek to maintain harmony among their identities (Amiot et al. 2007; 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) and Amiot et al. (2007) 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 associated and dissociated identity 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.

Inter-identity association is increased by numerous factors, including overlapping content, repeated coactivation, and perceived substitutability. First, overlapping identity content encourages inter-identity association by increasing the perceived similarity of the identities (Amiot and Blanchard 2005; Amiot et al. 2007; Greenwald et al. 2002; Roccas and Brewer 2002). For example, “teacher” and “researcher” are both related to “knowledge,” and this may foster association between the two identities. Figure 1 illustrates potential cognitive structures for lower or higher association given perceived overlap in identity content. Second, repeated coactivation of two identities may prompt inter-identity association even when the identity content overlap is limited (for a similar contention, see Cunha, Forehand, and Angle 2015; Janiszewski and van Osselaer 2000; Sternberg and McClelland 2012; van Osselaer and Janiszewski 2001). As a case in point, consider an individual who regularly participates in a women’s recreational sports league. The repeated coactivation of her gender

identity and her athlete identity may automatically increase the association between the two identities. Third, the extent to which two identities are viewed as substitutes for each other may increase their association. For example, an individual in a competitive work environment may begin to view his or her athlete and work identities as substitutable or interchangeable. Although each of these antecedents may be sufficient to increase inter-identity association, none should be deemed a necessary condition for it.

Following the tenets of spreading activation (Collins and Loftus 1975), the aforementioned differences in degree of association should lead to different responses to identity priming. Specifically, priming one identity should inhibit the activation of dissociated identities (Hugenberg and Bodenhausen 2004; Rydell et al. 2009) and facilitate the activation of associated identities.<sup>1</sup> Consider a working parent shopping for a coffee mug. If she dissociates her work and parent identities (e.g., the former identity is aggressive, the latter is nurturing), priming the concept of employee should activate her work identity and inhibit her parent identity. This should produce avoidance of behaviors associated with the alternate parent identity, such as purchasing a coffee mug that reads “World’s Best Mom.” This is a standard identity priming effect.

Whereas a dissociation structure separates two identities, an association structure links the identities together (Amiot et al. 2007; Roccas and Brewer 2002). When two identities are associated, priming one identity may activate the alternate identity and thereby encourage behaviors linked to the alternate identity. Returning to our working-parent example, an individual may associate her work and parent identity to the extent she associates both identities with leadership and responsibility. In this situation, priming the concept of employee should lead to *approach* toward both work and family-oriented products. Thus, she would be receptive to a coffee mug that reads “World’s Best Mom.” Although the logic behind this process is relatively easy to follow, it should be noted that this effect is relatively uncommon within the identity priming literature. We argue that this effect of association on alternate identity behavior depends on another, generally unstudied variable: how easily the consumer can balance the two identities.

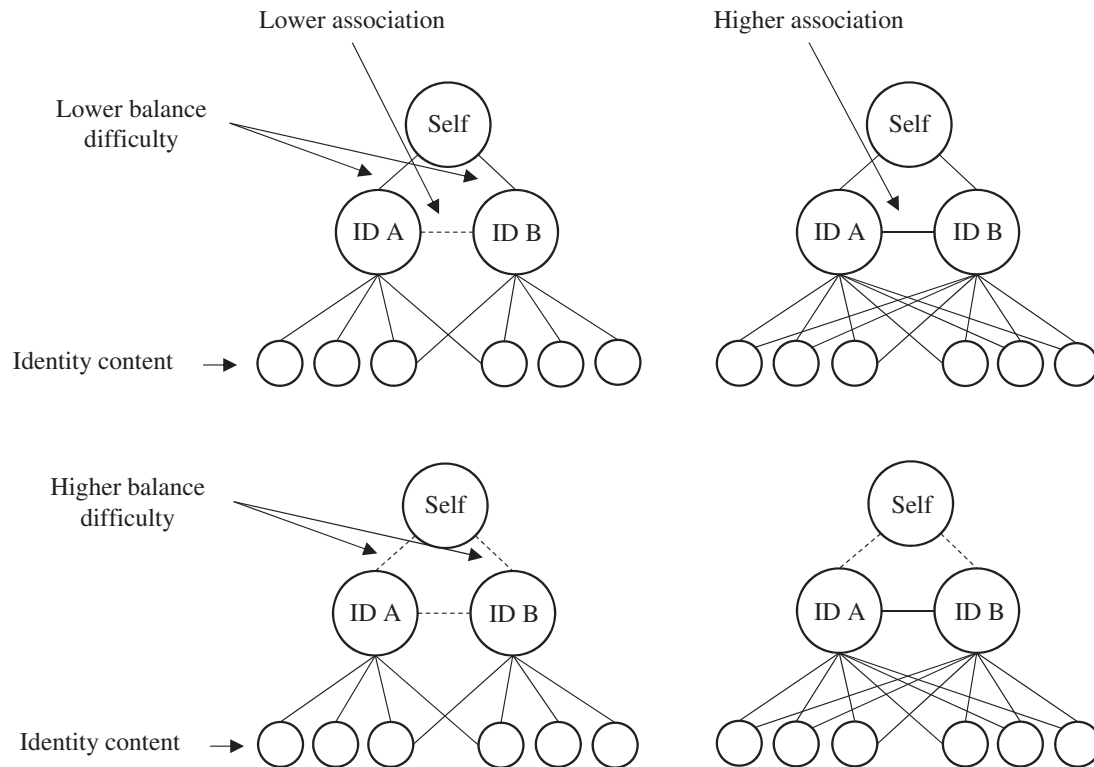
## Balance Difficulty

As stated earlier, models of multiple-identity management suggest that consumers are motivated to maintain balance among identities within their associative network

<sup>1</sup> We use the term “dissociation” in keeping with prior literature (White et al. 2012) to include inhibitory cognitive relationships (e.g., hot vs. cold are dissociated; Greenwald et al. 2002). It is unclear, and perhaps unlikely, that two identities can realistically be “unrelated” in the cognitive sense, as they share a first-order link to the consumer’s self-concept by definition of being identities (Greenwald et al. 2002; Reed et al. 2012). A weakly associated identity should be captured by the midpoint of the four-item association measure we utilize.

FIGURE 1

## ASSOCIATIVE NETWORK OF MULTIPLE IDENTITIES (IDENTITIES A AND B)



NOTE.—Dashed lines indicate weaker cognitive links.

(Amiot et al. 2007; Benet-Martinez et al. 2002; Greenwald et al. 2002; Lane and Scott 2007; McConnell 2011; Roccas and Brewer 2002). Balancing identities may be difficult if the identities compete for consumers' limited resources (time, attention, effort, energy, etc.). Recall the working parent who finds it challenging to be both a good parent and a good employee. For this individual, identity-balance difficulty exists whenever maintaining sufficient self-association with both identities simultaneously is challenging. To be clear, balance difficulty refers to the difficulty maintaining association between the self and the respective identities, while inter-identity association refers to the link between the identities themselves (see figure 1).

**Association versus Balance Difficulty.** The relationship between association and balance difficulty bears consideration. Given the above definition, the difficulty one faces balancing a pair of identities is not necessarily determined by the degree of association between the identities. Rather, the level of balance difficulty should be dependent upon both the resources available to pursue identity-relevant

behaviors (e.g., time, money), as well as the nature of the available identity-relevant behaviors themselves.

Even if an individual strongly associates her work and parent identities (since both require leadership and responsibility), she may nonetheless find it difficult to balance the two identities if different behaviors are required to support each identity. For example, if important work and family events coincide on the calendar, a working parent may experience high inter-identity balance difficulty despite the high baseline association between her work and parent identities.

Alternatively, an individual who dissociates his work and parent identities (because one is nurturing and the other aggressive) may have no difficulty balancing his identities. These dissociated identities may be easy to balance if the individual has ample time or if there are actions that allow him to simultaneously reinforce both identities (e.g., if the individual can bring his children to a work-sponsored picnic). Moreover, fully dissociated identities may be easier to balance if the lack of connection between them more clearly delineates when an activity is reinforcing one or the other. As the reader will find in the studies,



association and balance difficulty may be influenced orthogonally by situational primes.

In general, the experience of identity-balance difficulty is aversive given that consumers are motivated to maintain balance within their network of identities (Greenwald et al. 2002). Indeed, insufficient self-association with a desired identity can increase anxiety and activate a “hot” motivational drive to achieve balance (Bond and Cheung 1984; Dalton and Huang 2014; Gutiérrez and Saint Clair 2018; Han, Duhachek, and Rucker 2015; Lee, Kim, and Vohs 2011; Petriglieri 2011; Yang and Bond 1980). Absent this anxiety, a “cold” cognitive process (e.g., semantic processing, spreading activation) should dominate (Sela and Shiv 2009). Thus, we argue that both cognitive and motivational processes are necessary to explain the full pattern of consumer response. Below, we describe the predicted pattern of effects under the motivational process.

*Motivated Identity Consumption under High Balance Difficulty.* When two identities are difficult to balance, the activation of one identity triggers a motivation to achieve balance, a motivation that typically requires effort to complete. Such effort is generally not needed under low balance difficulty, as identity activation simply spreads to associated identities and inhibits activation of dissociated identities. We propose that the motivational process that occurs under high balance difficulty may mimic other effortful processes such as goal management. Goal systems theories contend that contextual activation of a focal goal may either facilitate or inhibit activation of alternate goals (Fishbach et al. 2003; Kruglanski et al. 2002; Shah et al. 2002; Shah and Kruglanski 2002; Zhang, Huang, and Broniarczyk 2010). Shah et al. (2002) demonstrate that when two interrelated goals are substitutes for each other, priming one goal may inhibit the alternate goal to more efficiently focus effort allocation. In contrast, when goals are nonsubstitutable (i.e., mutually exclusive), priming one goal threatens the alternate goal. This prompts inhibition of the primed goal and pursuit of the alternate goal (Fishbach et al. 2003; Fishbach and Shah 2006; Zhang et al. 2010). For example, a tempting indulgence goal may threaten a dieting goal, increasing pursuit of the dieting goal (Zhang et al. 2010).<sup>2</sup>

A similar process may occur with identities under high balance difficulty. The transitive properties of associations (e.g., Greenwald et al. 2002’s balance-congruity principle) suggest that reinforcing one identity should also reinforce an associated alternate identity. This is similar to the transitive properties of substitutable goals described above. Taken together, this suggests that greater association goes hand-in-hand with greater substitutability. This relationship

should persist regardless of the antecedent that leads to inter-identity association, because the mechanism driving the action (in this case, transitive reinforcement) needs only the presence of an association between the two (Greenwald et al. 2002). Indeed, once the association exists, transitive associational transfer persists even in the presence of interfering information (Rehder 2018; von Sydow, Hagmayer, and Meder 2016). Given this substitutability of associated identities, if working parents find it difficult to balance their work and parent identities, priming their work identity should reduce their need to reinforce their parent identity, provided the two identities are associated (akin to Shah et al. 2002).

For a consumption example, consider a coffee mug sold at an office supply store that reads “Cause I’m the Boss.” If the consumer’s work and parent identities are associated through shared leadership qualities, buying and using this mug should reinforce both identities, regardless of the fact that the office-supply store positions the mug as targeting managers (i.e., work identity). One would not expect the consumer to buy two mugs to separately reinforce the two identities—that would be a waste of resources. The effort allocation process active under the “hot” motivational account is averse to wasted resources.

If working parents find it difficult to balance their work and parent identities and these identities are dissociated, priming their work identity should threaten their parent identity, leading to inhibition of their work identity and pursuit of their parent identity (akin to Fishbach et al. 2003; Fishbach and Shah 2006). In this case, a cue that activates their work identity may cause the consumer to feel their parent identity is at risk of being diminished, leading them to try to reassert their parent identity. Receiving the “Cause I’m the Boss” mug effectively threatens the parent identity, prompting the consumer to look for products or behaviors that might reestablish the parent identity.

In summary, when a pair of identities is easy to balance, activating one identity should influence the second identity via an automatic cognitive process similar to spreading activation. Specifically, activating the first identity should encourage pursuit of an associated alternate identity and avoidance of a dissociated alternate identity. In contrast, when a pair of identities is difficult to balance, activating one identity should influence the second identity via a motivational process focused on maintaining sufficient association with both identities. In this situation, activating the first identity should encourage pursuit of a dissociated alternate identity and avoidance of associated alternate identity. Both cognitive and motivational processes are necessary to describe this consumption phenomenon. Stated formally, we hypothesize:

**H1:** Identity-balance difficulty moderates the effect of association on preference for alternate (nonprimed) identities: as

2 The prior work cited in this context focuses on the area of self-control, examining how short-term temptations threaten long-term goals. It is unclear whether the reverse is true—that a long-term goal could threaten a short-term temptation.

TABLE 1

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

Inter-identity balance difficulty	Low		High	
Inter-identity association	Dissociated	Associated	Dissociated	Associated
Effect on alternate identity	Avoid	Approach	Approach	Avoid

balance difficulty increases, the effect of inter-identity association on response to the alternate identity shifts from positive to negative.

We test our predictions (summarized in [table 1](#)) in three studies using multiple measures and multiple methods. Across the studies, we measure or manipulate association and balance difficulty, prime a given identity, and assess approach and avoidance of alternate identities by measuring preferences for identity-targeted products. Study 1 measures the two key variables in the context of ideal and ought identities and demonstrates the interactive effect of association and balance difficulty on preference for an alternate identity targeted product, supporting hypothesis 1. Study 2 expands the generalizability of study 1 in the context of work and leisure identities and provides initial evidence for a dual-process account by incorporating substitutability. Study 3 establishes robustness by manipulating (rather than measuring) the key variables in the context of work and leisure identities and using an incentive-compatible dependent measure. Study 3 also adds a moderating variable. Specifically, study 3 shows that a self-affirmation intervention leads participants' choices in the high-balance-difficulty condition to mimic those of participants in the low-balance-difficulty condition, providing further evidence for a switch between cognitive and motivational processes. Implications of the results for theories related to multiple-identity management as well as practical applications are discussed.

## STUDY 1

### Overview

Study 1 was designed to assess whether inter-identity association and identity-balance difficulty jointly influence the effect of an identity prime in response to a product linked to an alternate identity that was not primed (hypothesis 1). In this study, we measured the two key variables and focused exclusively on ratings of a product targeted toward an alternate identity, as this is where the influence of association on evaluation should be moderated by balance difficulty.

The two identities selected for study 1 are ideal identity and ought identity ([Higgins 1987](#)). These are abstract representations of identities to which consumers aspire (ideal identity) or 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 the case (e.g., one may aspire to be fit and feel obligated to exercise). Thus, there should be sufficient variation in their perceived association to allow a test of the interaction between association and balance difficulty. Additionally, a number of product categories map to ideal and ought identities ([Avnet and Higgins 2006](#); [Sela and Shiv 2009](#)), making practical implications for consumer behavior readily applicable.

It is hypothesized that association between ideal and ought identities should positively predict attitude toward an ought-targeted product (e.g., a salad) after ideal identity priming—but only under relatively low identity-balance difficulty. Under high balance difficulty, we expect a negative effect of association on attitude toward an ought-targeted product when primed with ideal identity. In short, study 1 tests for an interactive effect of association and balance difficulty on identity prime response.

### Method

**Participants.** One hundred ninety-one undergraduates (61% female, average age 19.9) 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, and 3) product evaluation. In the first phase, participants read instructions stating that they would be engaging in two unrelated tasks. Instructions for the first task, an “identity experiences task,” stated that the researchers were “interested in how individuals manage their various identities” and to “please answer the questions below related to your own identities.” To clarify the notion of both ideal and ought identities, all 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 it is 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. All participants then listed three attributes of their ideal identity and three attributes of their ought identity. This procedure is adapted from the Selves Questionnaire ([Avnet and Higgins 2006](#)) and was intended to clarify the meaning of ideal and ought identity.

Next, participants completed two measures of association and one measure of balance difficulty between their

ideal and ought identities, presented in a randomized order. The first measure of association asked participants how much overlap they see between their ideal identity and their ought identity on a 101-point sliding scale (measure adapted from Agnew et al. 1998; Roccas and Brewer 2002). Above the sliding scale was a series of five Venn diagrams that provided a visual depiction of low versus high association (see appendix A). The second measure of association consisted of four seven-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); and “My Ideal identity is very much associated with my Ought identity.” Lastly, the measure of identity-balance difficulty included four seven-point Likert items presented in random order: “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); and “Resolving competition between my Ideal and Ought identities is easy” (R).

In the second phase of the study, all participants completed a writing task designed to episodically activate their ideal identity. Specifically, instructions read, “Imagine what it would be like to have your 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 (LeBoeuf et al. 2010).

In the third and final phase of the study, participants read instructions stating that they were now engaging in a “product pretest” in which they would rate their interest in various products. These products included the focal product, a Subway Chopped Salad (see appendix B), which was chosen because it was more associated with an ought identity (as verified by a pretest discussed below). To assess product attitude, participants rated how favorable, positive, unpleasant (R), and unattractive (R) the salad was again on nine-point Likert scales. Following these measures, participants completed demographics items and funnel debriefing procedures, which revealed that no participants suspected that the first two tasks had influenced the final task. The dependent measures in the main study were collected on nine-point scales rather than the seven-point scales used in the independent measures to make the two tasks seem more distinct and unrelated.

## Results

*Preliminary Analysis.* We conducted a preliminary analysis to examine the relationships between association

and balance difficulty. We entered all individual items from the two association measures and the balance difficulty measure into a factor analysis with Varimax rotation and this revealed two distinct factors. All four items of the four-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 balance-difficulty measure positively loaded on a second factor with all coefficients at or above .64. Only a single item crossloaded with a coefficient whose absolute value was above .30. This item from the balance-difficulty 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).

We also conducted correlational analyses. We collapsed responses across the four-item association measure (Cronbach’s  $\alpha = .88$ ;  $M = 5.13$ ,  $SD = 1.25$ ), the four-item balance-difficulty measure (Cronbach’s  $\alpha = .79$ ;  $M = 3.12$ ,  $SD = 1.13$ ), and the four-item product attitude rating (Cronbach’s  $\alpha = .83$ ;  $M = 6.57$ ,  $SD = 1.59$ ). The four-item association and the single-item association measure ( $M = 60.77$ ,  $SD = 22.86$ ) were significantly positively correlated with each other ( $r(189) = .73$ ,  $p < .0001$ ) and both the four-item and single-item association measure were significantly negatively correlated with the balance-difficulty measure ( $r(189) = -.50$  and  $-.38$  respectively, both  $p < .0001$ ). The only measure that significantly correlated with the product attitude measure was the four-item association measure ( $r(189) = .20$ ,  $p = .005$ ; all correlations reported in table 2).

Finally, we used the factor loadings and correlations to assess discriminant validity using the AVE-SV method (Fornell and Larcker 1981). The average variance extracted (AVE) was .67 for the four-item association measure and .57 for the four-item balance-difficulty measure. These are both greater than their shared variance (SV) of .50, which is an indication of discriminant validity (Pieters 2017; Voorhees et al. 2016).

In sum, this preliminary analysis suggests that association and balance difficulty are two distinct, yet negatively related constructs. This is consistent with our conceptualization of association and balance difficulty, where relative dissociation between identities may increase the vulnerability of identities to balance difficulty caused by limited resources (e.g., time, energy). This correlation also makes for a stringent test of the hypotheses, as it decreases the likelihood of attaining statistical significance.

Lastly, a pretest from the same population ( $n = 40$ ) described ideal and ought identities, then asked participants to rate the salad. The item asked, “To which identity is this product most closely related?” rated on a 101-point sliding scale anchored by 0 (ideal identity) and 100 (ought identity) with a “neither” midpoint. Participants rated the salad significantly higher than the midpoint ( $M = 64.81$ ,  $SD = 27.76$ ;  $t(39) = 3.37$ ,  $p = .002$ ). This pretest provides

TABLE 2  
STUDY 1 IV AND DV CORRELATIONS

	Association (one-item)	Association (four-item)	Balance difficulty	Alternate-ID attitude
Association (one-item)	1	.734**	-.377**	.125
Association (four-item)	.734**	1	-.495**	.204**
Balance difficulty	-.377**	-.495**	1	-.103
Alternate-ID attitude	.125	.204**	-.103	1

\*\* $p < .01$

evidence that the product was indeed considered an alternate-identity product in the given paradigm.

**Hypothesis Testing.** Our main analysis focused on the single-item measure of association used in prior research. We regressed product attitude on the association measure, the identity-balance-difficulty measure, and the interaction between the two factors. Results showed a significant model ( $F(3, 187) = 3.65, p = .014$ ), significant main effects of association ( $B = .54, SE = .01; t(187) = 2.98, p = .003$ )<sup>3</sup> and balance difficulty ( $B = .37, SE = .25; t(187) = 2.06, p = .041$ ), and a significant interaction term ( $B = -.526, SE = .004; t(187) = -2.67, p = .008$ ). This result supports the hypothesized interactive influence of association and balance difficulty (hypothesis 1).

Decomposing the interaction, an analysis of the effect of association at ranges of values of balance difficulty via the Johnson-Neyman technique ("floodlight analysis"; Spiller et al. 2013) reveals that association significantly increases alternate-identity product attitude for values of balance difficulty below 2.5 ( $B_{J-M} = .01, SE = .006; t(187) = 1.97, p = .05$ ) and marginally significantly decreases attitude for values above 5.25, ( $B_{J-M} = -.02, SE = .01; t(187) = -1.67, p = .096$ ). At the highest observed value of balance difficulty, 6, the negative effect of association was still marginally significant ( $B_{J-M} = -.03, SE = .01; t(187) = -1.93, p = .055$ ). The results are depicted in figure 2 with association and balance difficulty shown at one standard deviation above and below the mean.

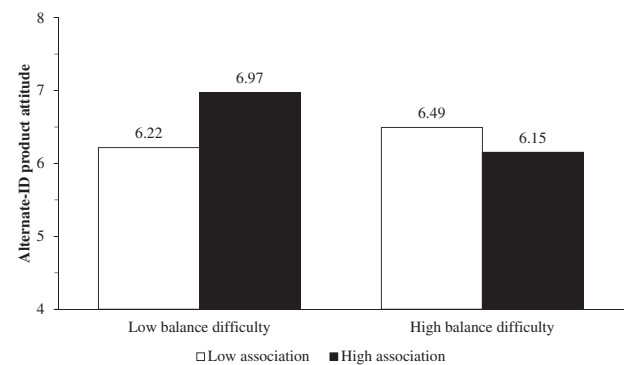
**Ancillary Analysis.** To provide converging evidence, we conducted a second regression identical to the one above using the four-item measure of association rather than the single-item measure. An identical pattern of results emerged (all  $p < .05$ ). The single-item measure was highlighted in the main analysis because it is the measure drawn from previous literature.

## Discussion

Study 1 assessed whether the influence of inter-identity association on alternate-identity approach and avoidance depends on the level of balance difficulty between

FIGURE 2

STUDY 1: ASSOCIATION (+/- 1SD) AND BALANCE DIFFICULTY (+/- 1SD) INFLUENCE ALTERNATE-IDENTITY PRODUCT ATTITUDE



NOTE.—Following the foregoing Johnson-Neyman analysis, the effect of association is statistically significant at  $p < .05$  under low balance difficulty, and marginally significant at  $p < .1$  under high balance difficulty.

identities. Results support the proposed interaction between association and balance difficulty, which provides an important update to identity theory. Specifically, the effect we derived from spreading activation is obtained when balance difficulty 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 after an ideal-identity prime when balance difficulty is relatively high following a motivational process of multiple-identity management. This interaction between association and balance difficulty supports hypothesis 1.

It should be noted that the measures of association and balance difficulty used in study 1, as well as the initial attribute-listing task, may have activated both ideal and ought identities prior to the identity priming phase. If the prime did activate both identities simultaneously, then it would be more difficult to obtain our predicted effects, making it a more stringent test of the hypotheses. Additionally, although the measures of association and balance difficulty did load on two separate factors, providing

3 To ease interpretation, beta coefficients reported in all studies in the main article are standardized.



some support for the notion of distinction between the constructs, the measures nonetheless showed significant correlation. This correlation could increase standard errors in the analyses, again making statistical significance more difficult to obtain and thus creating more stringent hypothesis tests.

Taken together, the results of study 1 highlight the importance of inter-identity relationships in response to identity priming and suggest that priming a given identity can counterintuitively lead to approach toward an alternate identity. Study 2 builds on study 1 by extending generalizability as well as providing evidence supporting the fused cognitive and motivational account.

## STUDY 2

### Overview

As described above, the goals literature demonstrates that increased goal substitutability produces inhibition of secondary goals—a negative effect of substitutability (Shah et al. 2002). Our conceptualization suggests that the more two identities are seen as associated, the more they are likely seen as substitutable owing to the transitive properties of associated concepts. Therefore, hypothesis 1's prediction of a positive effect of association under low balance difficulty also suggests a positive effect of substitutability. A positive effect of substitutability, in turn, is counter to negative effect of substitutability suggested by goals systems theories. Therefore, demonstrating a positive effect of substitutability would be evidence against a purely motivational process, providing support for a dual-process model.

In study 2, we provide data to address this point by incorporating a measure of inter-identity substitutability that we adapted from the literature on goals (Shah and Kruglanski 2002). The expectation is that substitutability should interact with balance difficulty, mimicking the pattern of effects demonstrated by association: a negative effect under high balance difficulty, and a positive effect under low balance difficulty. Support for this prediction would be inconsistent with a motivation-only account, thus providing evidence for the dual-process account.

Study 2 incorporates a new pair of identities (“work identity” and “leisure identity”) as these identities are arguably more concrete than the relatively more abstract ideal and ought identities. This change also allows us to forego the explanation of ideal and ought identities required in study 1, thereby simplifying the design and reducing any heightened identity salience. Work and leisure identities are also likely to be commonly held in the sample population and, as with study 1, substantial product categories exist that target these identities. Relatedly, study 2 changes the product category from food to technology (a video-streaming app), and also collects inter-identity measures

after the dependent measure rather than before, ruling out alternative explanations based on an influence of the independent measures.

### Method

*Participants.* One hundred forty respondents (50.7% female, average age 41.6) from Amazon Mechanical Turk (MTurk) participated in the study in exchange for compensation. MTurk workers from the US generally tend to be younger and more liberal than alternative (e.g., probabilistic) samples (Berinsky, Huber, and Lenz 2012; Paolacci and Chandler 2014).

*Procedure and Stimuli.* The study was conducted in three phases: 1) identity priming, 2) product evaluation, and 3) inter-identity relationship measures and debriefing. Phase one primed participants' work identity using the same priming procedure we used in study 1.

In the product evaluation phase (phase 2), referred to as a separate “product pretest” task in the instructions, participants evaluated a product targeted toward their leisure identity. The leisure-targeted product was a fictitious “New Video Streaming App” with the description, “Developers are working with cable companies on a new video streaming app. The app takes the content the cable company normally delivers via pre-set television time slots and allows cable subscribers to stream the content on-demand anytime via various devices including smart TVs, computers, laptops, tablets, and mobile devices.” We then assessed participants' alternate-identity product preference using the same attitude measure from study 1. A pretest, discussed below, shows that participants perceive this product as targeting their leisure identity.

The third phase of the study was identical to the inter-identity relationship measures and debriefing phases from study 1 with the adaptation for work/leisure identities and the addition of an inter-identity substitutability measure. Drawing on the conceptualization of Shah et al. (2002), the four item substitutability measure included: “Embodying the attributes of either my Work Identity or my Leisure Identity could substitute for embodying the attributes of the other”; “Embodying the attributes of either my Work Identity or my Leisure Identity could make up for not fully embodying the attributes of the other”; “Embodying the attributes of either my Work Identity or my Leisure Identity would be the same as embodying the attributes of the other”; and “My Work Identity and my Leisure Identity are relatively interchangeable.” The four items were presented in random order and rated on a seven-point Likert scale.

### Results

*Preliminary Analysis.* Study 2 uses a different pair of identities, and thus it may be of interest to the reader to

examine the relationships between the measures of interest. We conducted factor and correlational analyses that we report in appendix C and briefly summarize here. In short, the factor analysis identifies the expected three factors of association, balance difficulty, and substitutability, where three of the four substitutability items also load on the association factor. The correlational analysis reveals significant correlations between the two association measures and the substitutability measure (all  $r > .6$ ), and the balance-difficulty measure significantly correlated with the four-item association measure ( $r = -.18$ ), but not the single-item association measure or the four-item substitutability measure.

Using the AVE-SV method reveals that the average variance explained for the four-item association measure (.78) and the four-item balance-difficulty measure (.69) are greater than their shared variance (.18), meeting the criteria for discriminant validity. The same analysis shows that the AVE for the four-item substitutability we adapted from prior literature (.27) is below its shared variance with the four-item association measure (.64), failing to meet the criteria for discriminant validity (Fornell and Larcker 1981; Voorhees et al. 2016). This is consistent with our expectations.

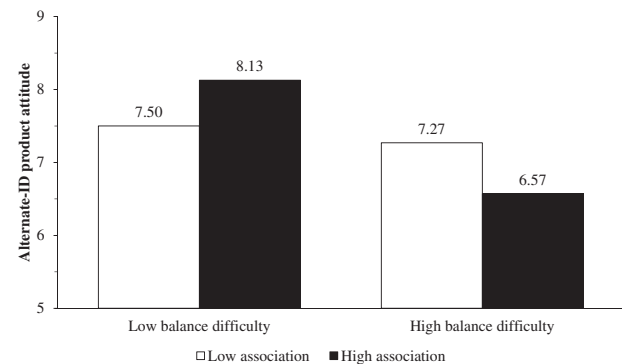
Lastly, a pretest drawn from the same population ( $n = 35$ ) showed that participants viewed the video streaming app as targeting their leisure identity (rather than their work identity) significantly above the midpoint on a 101-point sliding scale ( $M = 81.18$ ,  $SD = 21.52$ ;  $t(34) = 8.30$ ,  $p < .0001$ ).

**Hypothesis Testing.** We regressed product attitude (Cronbach's  $\alpha = .92$ ;  $M = 7.4$ ,  $SD = 1.32$ ) on the single-item association measure ( $M = 39.5$ ,  $SD = 25.9$ ), the balance-difficulty measure (Cronbach's  $\alpha = .85$ ;  $M = 2.85$ ,  $SD = .97$ ), and the interaction between the two factors. Results showed a significant model ( $F(3, 136) = 8.88$ ,  $p < .0001$ ), a significant main effect of association ( $B = .73$ ,  $SE = .01$ ;  $t(136) = 3.17$ ,  $p = .002$ ), and a nonsignificant main effect of balance difficulty ( $B = .04$ ,  $SE = .19$ ;  $t(136) = .31$ ,  $p = .761$ ) qualified by the predicted significant interaction term ( $B = -.78$ ,  $SE = .004$ ;  $t(136) = -3.16$ ,  $p = .002$ ). This result again supports the hypothesized interactive influence of association and balance difficulty (hypothesis 1).

Decomposing the interaction, the Johnson-Neyman technique reveals that association significantly increases attitude toward the alternate-identity-targeted product for values of balance difficulty below 2.12 ( $B_{J-M} = .009$ ,  $SE = .005$ ;  $t(136) = 1.97$ ,  $p = .05$ ) and significantly decreases attitude for values above 3.70 ( $B_{J-M} = -.012$ ,  $SE = .006$ ;  $t(136) = -1.97$ ,  $p = .05$ ) with nonsignificant effects between those two values of balance difficulty. Thus, we obtain both significant positive and negative effects for association. Results are depicted in figure 3 with

FIGURE 3

STUDY 2: ASSOCIATION (+/- 1SD) AND BALANCE DIFFICULTY (+/- 1SD) INFLUENCE ALTERNATE-IDENTITY PRODUCT ATTITUDE



NOTE.—Per study 2's Johnson-Neyman analysis, the effect of association is statistically significant at  $p < .05$  under both low and high balance difficulty.

association and balance difficulty depicted at one standard deviation above and below the mean.

**Ancillary Analysis.** Exchanging the single-item association measure with the four-item association measure in all analyses revealed an identical pattern of effects (all  $p < .05$ ), again providing converging evidence.

We also exchanged the association measure with the four-item substitutability measure. Results showed the predicted significant interaction between substitutability and balance difficulty on attitude ( $B = -1.35$ ,  $SE = .0284$ ;  $t(138) = -4.75$ ,  $p < .0001$ ). Mirroring the effect of association, the Johnson-Neyman technique shows that substitutability did have both a significant positive effect on attitude for values of balance difficulty below 1.94 ( $B_{J-M} = .2$ ,  $SE = .1$ ;  $t(136) = 1.97$ ,  $p = .05$ ), and a significant negative effect on attitude for values of balance difficulty above 2.84 ( $B_{J-M} = -.17$ ,  $SE = .09$ ;  $t(136) = -1.97$ ,  $p = .05$ ). These results support the notion that substitutability is influencing identity-relevant behavior similar to association—consistent with the predicted negative effect we derive from goals literature under high balance difficulty, and consistent with the predicted positive effect we derive from spreading activation under low balance difficulty.

## Discussion

Study 2 builds upon study 1 by increasing the generalizability of the observed interaction between association and balance difficulty. Specifically, after participants had their work identity activated, the association between participants' work and leisure identities positively predicted preferences for a leisure-targeted product, but only when the

two identities were relatively easy to balance. As balance difficulty increased, association between participants' work and leisure identities negatively predicted preference for a leisure-targeted product. This replicates the findings from study 1 with different identities in a different product category, supporting hypothesis 1 and highlighting the importance of inter-identity relationships in approach and avoidance of identity-relevant behaviors.

Additionally, results of study 2 provide evidence that association and substitutability are related and that they have similar effects. Substitutability and association were significantly correlated with each other, and did not meet the AVE-SV criteria for discriminant validity. Substitutability also interacted with balance difficulty in a pattern identical to that of association, including a positive effect under low balance difficulty. This effect is inconsistent with the expectations of goal-systems literature. Taken together, this provides initial evidence for both cognitive and motivational processes.

A key proposition behind the effects observed in studies 1 and 2 is that consumers are switching from a cognitive process under low balance difficulty to a motivational process under high balance difficulty. It would bolster the evidence for dual processes if an intervention can "relax" the motivational process, leading participants to follow the cognitive pattern of preferences even under high balance difficulty (i.e., dual approach; a positive effect of association). This is a key contribution of study 3.

One limitation of studies 1 and 2 is the use of measured inter-identity association and balance difficulty in all analyses. As discussed earlier, association can be increased by myriad factors, including overlapping content, repeated coactivation, and perceived substitutability. In studies 1 and 2, it may be the case that the primary driver of association is substitutability. As a result, the first two studies cannot definitively say whether substitutability-driven association might operate differently from association driven by other factors. To address this question, study 3 introduces a manipulation of association that directs participants to focus on the existence (or lack thereof) of overlapping content between the two identities. Should the effects of association replicate with this content-based manipulation, it will provide evidence that the effects of inter-identity association are robust and not wholly dependent on a particular source of association.

## STUDY 3

### Overview

Prior literature shows that when consumer identities are threatened, consumers are motivated to engage in some form of compensatory behavior that restores the consumers' self-concept (Angle and Forehand 2016; Gao, Wheeler, and Shiv 2009; Rucker and Galinsky 2008).

Further, this identity-based motivation is shown to subside when consumers can engage in self-affirmation (Mandel et al. 2017). Self-affirmation helps address the basic need for a positive self-view, which in turn reduces the motivation to address self-inconsistencies (Gao et al. 2009; Steele and Liu 1983; Wan, Xu, and Ding 2014). Returning to the working parent example, if one feels he is neither a good parent nor a good employee due to inter-identity balance difficulty, he may be reassured that he is still a good person. This provides a buffer that makes the self-inconsistency more tolerable, reducing the motivational drive for self-reinforcement. Thus, if a motivational process is indeed driving the alternate-identity pursuit observed under high balance difficulty, then self-affirmation should attenuate this effect. As a result, self-affirmed individuals under high balance difficulty should respond as if they are under low balance difficulty. Observing this moderation would provide further evidence for the cognitive and motivational framework proposed in the present research. We test this in study 3 in an incentive-compatible paradigm that measures actual choice between products that target the primed identity and products that target the alternate identity.

**H2:** The interactive effect of association and balance difficulty on inter-identity prime response is eliminated by self-affirmation, resulting in a positive effect of association on alternate-identity behavior.

In studies 1 and 2, we primed one of two focal identities, assessed ratings of a product targeted toward the alternate (nonprimed) identity, and measured association and balance difficulty between the two identities (either before or after the identity priming and evaluation phases). Study 3 was designed to explore whether differences in association and balance difficulty function not only as measurable chronic traits, but also as temporary states that might be contextually induced. We retain the paradigm of work/leisure identities from study 2.

### Method

*Participants.* Three hundred forty-five respondents (61% female, average age 41.5) from MTurk participated in the study in exchange for compensation.

*Procedure and Stimuli.* The study was conducted in five phases: 1) association priming, 2) balance-difficulty priming, 3) self-affirmation procedure, 4) identity priming, and 5) prize choice and debriefing.

In the association priming phase, participants read instructions stating that they would be participating in several unrelated tasks. Participants were then randomly assigned to a writing task intended to activate either relatively more dissociation or association. As with study 1, the ostensible "identity exploration" task initially provided instructions that "the researchers are interested in how

individuals manage their various identities. On the following pages please answer the questions related to your own identities.” On the next page the task instructions read, “Consider your Work and Leisure identities. In the space below, please briefly list a couple of ways in which your Work and Leisure identities are different and distinct from each other [related and connected to each other].”

In the balance-difficulty priming phase, participants were randomly assigned to either a relatively low identity-balance-difficulty or a relatively high identity-balance-difficulty writing task. Instructions for the ostensible “self-reflection” task read, “Your Work and Leisure identities may each be associated with several activities that may occupy some of your time. In the space below, briefly write about a time in which you felt good [bad] because you were [un]successfully balancing your Work and Leisure activities.” Pretests, discussed below, provided evidence that these manipulations were successful.

Still ostensibly part of the self-reflection task, the identity priming phase was identical to the identity priming task from study 2 except that participants’ leisure identity was primed rather than their work identity.

In the self-affirmation phase, participants were randomly assigned to either a no-affirmation condition or a self-affirmation condition. We used a self-affirmation procedure adapted from prior literature (Cohen, Aronson, and Steele 2000; Dalton and Huang 2014; Schmeichel and Vohs 2009; Wan et al. 2014). In all conditions, participants saw a list of eight values (creativity, sense of humor, adaptability, business skills, physical attractiveness, athletics skill, aesthetics appreciation, romantic value). In the self-affirmation condition, participants were asked to rank these values in order of personal importance. Participants then wrote briefly about why the first-ranked value is most important to them. In the no-affirmation condition, participants were asked to rank the values in order of importance to the general public. They then wrote briefly about why the last-ranked value might be important to someone else.

In the product choice phase, we utilized an incentive-compatible design. Participants were instructed that the researchers were giving away a prize via random drawing to say thank you for participating in the survey. Instructions read that to be eligible to win the prize, they had to A) enter their MTurk Worker ID into the form, and B) select which prize they would like to receive if they won. Instructions informed them that the winner would be sent a message via the MTurk messaging system to arrange shipment of the prize they selected. Next, participants were asked to select which prize they would like to receive between each of the pairs of prizes displayed. If they won, the prize would be randomly selected from their chosen options. Lastly, instructions informed participants that each pair of prizes had approximately the same monetary value. Two pretested pairs of prizes served as the focal dependent variables: 1) a choice between a tablet with a gaming

software bundle [i.e., leisure-targeted] and a tablet with a productivity software bundle [i.e., work-targeted], and 2) a choice between a Tony Robbins e-book on building interpersonal relationships [i.e., leisure-targeted] and a Tony Robbins e-book on building professional relationships [i.e., work-targeted]. Choice were coded such that a 1 represented choice of the alternate (work-) targeted product and 0 otherwise.

## Results

*Preliminary Analysis.* A pretest drawn from the same population shows that participants have equal preference between the two prize options in each pair. Participants ( $n = 91$ ) were asked to evaluate potential prizes for use in future studies by indicating which prize they would choose. Results show that choice of the tablet with the gaming bundle (0) versus the tablet with productivity bundle (1) did not significantly differ from the midpoint of .5 ( $M = .55$ ,  $SD = .5$ ,  $t(90) = .943$ ,  $p = .348$ ). Choice of the Tony Robbins e-book on building interpersonal relationships (0) versus professional relationships (1) also did not significantly differ from the .5 midpoint ( $M = .49$ ,  $SD = .503$ ,  $t(90) = -.104$ ,  $p = .917$ ). Thus, there was no strong inherent preference between work or leisure targeting for either the tablets or the e-books.

A second pretest ( $n = 175$ ) drawn from the same population was conducted to determine the efficacy of the primes on the two focal constructs. The pretest contained the association and balance-difficulty manipulations followed by measures of the focal constructs. MANOVA reveals that the association prime significantly impacted both the single-item ( $M = 38.19$ ,  $SD = 23.59$  vs.  $M = 52.69$ ,  $SD = 22.38$ ;  $F(1, 171) = 16.92$ ,  $p < .001$ ) and the four-item association measures ( $M = 3.73$ ,  $SD = 1.48$  vs.  $M = 4.89$ ,  $SD = 1.18$ ;  $F(1, 171) = 32.87$ ,  $p < .001$ ), but had no significant effect on the four-item balance-difficulty measure ( $M = 3.22$ ,  $SD = 1.25$  vs.  $M = 3.38$ ,  $SD = 1.46$ ;  $F < 1$ ). The balance-difficulty prime significantly impacted the four-item balance-difficulty measure ( $M = 3.06$ ,  $SD = 1.25$  vs.  $M = 3.54$ ,  $SD = 1.4$ ;  $F(1, 171) = 5.67$ ,  $p = .018$ ) but had no significant effect on either the single-item ( $M = 46.31$ ,  $SD = 25.06$  vs.  $M = 45.6$ ,  $SD = 22.95$ ;  $F < 1$ ) or the four-item association measures ( $M = 4.29$ ,  $SD = 1.46$  vs.  $M = 4.41$ ,  $SD = 1.43$ ;  $F < 1$ ). There were no significant interactions between the two primes on any of the measures (all  $F \leq 1$ ). In short, the primes performed as expected, influencing association and balance difficulty independently.

*Hypothesis Testing.* The two prize choices were combined into a single item for analysis, where higher scores represent greater preference for the alternate identity-targeted product. An ANOVA with the three factors (association, balance difficulty, and self-affirmation) reveals a



significant two-way interaction between self-affirmation and association ( $F(1, 337) = 4.17, p = .042; \eta_p^2 = .012$ ) and the predicted significant three-way interaction between self-affirmation, association, and balance difficulty ( $F(1, 337) = 5.95, p = .015; \eta_p^2 = .017$ ). This provides initial support for hypothesis 2.

Further ANOVAs revealed that the previously observed two-way interaction between association and balance difficulty (i.e., hypothesis 1) was observed in the no-affirmation condition ( $F(1, 166) = 6.479, p = .012; \eta_p^2 = .038$ ). In contrast, only a significant positive main effect of association in the expected direction was observed in the self-affirmation condition ( $F(1, 171) = 4.148, p = .043; \eta_p^2 = .024$ ), and no significant interaction between association and balance difficulty was observed ( $F(1, 171) = .915, p = .34; \eta_p^2 = .005$ ). Stated differently, the effect of association was influenced by balance difficulty as predicted in the no-affirmation condition (hypothesis 1), but balance difficulty had no effect in the self-affirmation condition (hypothesis 2). Instead, all participants in the self-affirmation condition responded as would participants who were experiencing low balance difficulty. This provides support for hypothesis 2.

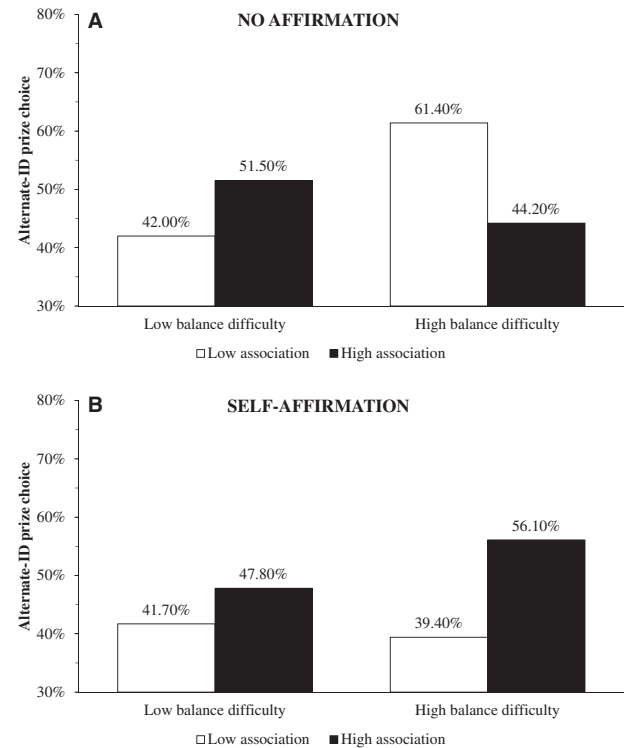
Exploring the significant interaction effect in the no-affirmation condition reveals a nonsignificant positive effect of association under low balance difficulty ( $M = 42\%$ ,  $SE = .047$  vs.  $M = 51.5\%$ ,  $SE = .058$ ;  $F(1, 81) = 1.63, p = .21; \eta_p^2 = .02$ ), and a significant negative effect of association under high balance difficulty ( $M = 61.4\%$ ,  $SE = .052$  vs.  $M = 44.2\%$ ,  $SE = .052$ ;  $F(1, 85) = 5.44, p = .022; \eta_p^2 = .06$ ). Results are displayed in figure 4.

## Discussion

The purpose of study 3 is to provide evidence for a key assertion in the present research: as balance difficulty increases, the process driving consumption behavior changes from a cognitive one to a motivational one. Prior research on identity-based consumption shows that identity-based motivation can subside if the consumer has an opportunity to affirm her identity. Following this, we predicted that the difference between low and high balance difficulty should be eliminated if participants can self-affirm due to a decrease in the motivational drive. That is, high-balance-difficulty participants should behave like low-balance-difficulty participants, where the cognitive process begets a positive effect of association on alternate-identity preference (hypothesis 2). Indeed, study 3 results show that following affirmation, there was no significant difference between the low- and high-balance-difficulty participants on their choice of alternate-identity targeted products. Rather, there remained only the significant positive main effect of association. When there was no affirmation, association and balance difficulty interacted to influence preference as predicted by hypothesis 1.

FIGURE 4

STUDY 3: ASSOCIATION AND BALANCE DIFFICULTY JOINTLY INFLUENCE ALTERNATE-IDENTITY PRODUCT CHOICE UNDER NO AFFIRMATION (FIGURE 4A) BUT NOT UNDER SELF-AFFIRMATION (FIGURE 4B)



Study 3 supports the proposed theory using an incentive-compatible design and a different set of products, bolstering the robustness of the effect. Moreover, the results were shown when both association and balance difficulty were manipulated rather than measured. Not only does this show that the core constructs can function as temporarily primed states, but it also helps to control for noise inherent in measured variables. The content-based manipulation of association was particularly helpful, as it demonstrates that association need not be based explicitly on substitutability to elicit a motivational process under high balance difficulty. As outlined in the conceptual development, this aligns with the notion of persistent transitive properties of associated concepts as shown in other domains (Rehder 2018; von Sydow, Hagmayer, and Meder 2016).

Although the significant interaction between association and balance difficulty shown in the no-affirmation condition is sufficient to support hypothesis 1, the lack of a significant positive effect of association under low balance difficulty (regardless of affirmation condition) warrants discussion. This same pattern was borne out in a separate

association  $\times$  balance-difficulty replication study included in the [web appendix](#). Neither the combination of all three low-balance-difficulty conditions (no-affirmation, self-affirmation, and replicate study) nor any combinations thereof revealed a significant positive effect of association (all  $p > .16$ ). It may be that in the context of the present studies, the low-balance-difficulty manipulation was sufficient to pass a manipulation check and produce an interaction effect but was not strong enough to produce a significant contrast. Indeed, although the mean in the low-balance-difficulty condition (3.06) is significantly below the midpoint of 4 ( $t(87) = 7.062, p < .0001$ ), it is significantly higher than the mean for participants in the lower 50th percentile of study 2 ( $M = 2.06; t(108) = 7.092, p < .0001$ ). The mean balance difficulty for all participants in study 3 (3.294) is significantly higher than the mean for all participants in study 2 (2.848;  $t(319) = 3.416, p = .0008$ ). Finding the point at which the motivational process subsides enough to produce significant cognitive effects may prove an interesting area for future research that probes the boundaries of the theoretical model we conceptualize here.

Overall, study 3's results provide support for the notion that consumers are motivated to maintain balance among their multiple identities. When balance difficulty increases, this motivation drives consumption behavior. When difficulty subsides, a cognitive process drives consumption. These findings have implications for both identity and goal-systems literature, which we expand upon below.

## GENERAL DISCUSSION

This research provides a framework for understanding when and how identity activation influences alternate identities. In particular, we derive competing predictions about the influence of inter-identity association and reconcile them by introducing the notion of inter-identity balance difficulty as a moderating factor.

Three studies using multiple methods and multiple measures provide converging evidence that association and balance difficulty jointly influence response to identity primes. Counter to the robust preference for primed-identity consistency demonstrated by identity priming literature (LeBoeuf et al. 2010; Luna et al. 2008; Zhang and Khare 2009), our results show that priming an identity can also lead consumers to approach an *alternate* (nonprimed) identity. Specifically, the more two identities are associated, the more consumers approach products targeted toward the alternate identity, but only when balance difficulty is relatively low. Under high balance difficulty, the more two identities are *dissociated*, the more consumers approach alternate-identity targeted products. In our studies, this effect persisted across multiple measures of association. Further, the influence of high balance difficulty is shown to subside when consumers have the opportunity

to self-affirm prior to consumption. We argue that this follows from the self-affirmation intervention "relaxing" the motivational drive. This finding provides evidence that the change in behavior from low to high balance difficulty is indeed driven by a switch from a cognitive to a motivational process. The interactive effect between association and balance difficulty provides an important update to extant theory on the processing of identity-relevant stimuli by highlighting the influence of inter-identity relationships.

## Identity Priming, Discrepancy, and Threat

Collectively, these results suggest that the standard identity priming effect observed in previous priming literature where dissociation is assumed (Chen and Bond 2010; Hong et al. 2000; Hugenberg and Bodenhausen 2004; LeBoeuf et al. 2010; Luna et al. 2008; Shih et al. 1999) may have been examined under relatively low balance difficulty, and may be reversed under high balance difficulty. This highlights the theoretical importance of the novel concept of inter-identity balance difficulty. Additionally, our results reveal a tendency for participants to evaluate alternate-identity-targeted products near or above the midpoint of response scales. This runs counter to the existing literature that generally observes avoidance of alternate identities under forced choice. The approach effect observed in the present research suggests that future research should provide participants with a response option that does not inherently assume that approach toward one identity is avoidance of the alternate identity.

Both self-discrepancy theory (Higgins 1987; Higgins et al. 1994; Sela and Shiv 2009) and identity threat theory (Han et al. 2015; Lisjak, Lee, and Gardner 2012; Mead et al. 2011; Petriglieri 2011; Ward and Broniarczyk 2011; White, Argo, and Sengupta 2012) discuss insufficient self-associations with desired identities (see also Mandel et al. 2017; Saint Clair 2018). Balance difficulty adds to the theoretical picture by accounting for the ease or difficulty a consumer faces in addressing potential identity discrepancies or threats. More broadly, the present framework adds to these literatures by considering the identities in question within a network of multiple-identities.

In the present research, we use several situations where inter-identity balance difficulty might occur due to insufficient time or resources to pursue activities related to two identities in question. In addition to time, self-regulatory willpower, cognitive or physical capacity, or financial resources may each also limit consumer ability to balance different identities. For example, an overworked parent may not have the "energy" to help with his child's science project, even though he has the time. Additionally, when consumers *must* engage in distinct activities to maintain dissociated identities, this likely reduces the available resources. Exploring the factors that influence multiple-identity management resources and the resulting balance

difficulty, although beyond the scope of the present work, may be a fruitful area for future identity research.

## Cultural Identity

The findings we report under high balance difficulty have similarities to effects shown in bicultural identity integration research (Benet-Martinez et al. 2002; Cheng, Lee, and Benet-Martinez 2006; Mok and Morris 2009, 2010, 2013; see also Sacharin, Lee, and Gonzalez 2009; Zou et al. 2008). Specifically, when one cultural identity is primed, individuals avoid highly integrated (akin to associated) cultural identities and approach the primed identity. Conversely, individuals with relatively low BII (similar to dissociation) approach the alternate identity. Given the acculturation stress that can arise from determining how one's original cultural identity fits with the new culture (Benet-Martinez and Haritatos 2005; Cheng et al. 2006; Miller et al. 2013; Tadmor, Tetlock, and Peng 2009), the present framework can account for BII findings as following from high balance difficulty.

Further, some BII research has suggested that the response of low BII participants to identity priming is driven by an exclusion threat mechanism, analogous to that proposed within the goals literature (Mok and Morris 2013; Zou et al. 2008). Notably, while exclusion threat offers insight into the process driving behavior in low BII (dissociation), it is insufficient to explain the tendency under high BII (association) to approach the primed identity and avoid the alternate given the foregoing dual-approach effect derived from spreading activation. Our integration of inter-identity substitutability helps explain the full set of effects.

## Goal Systems

The current results also have implications for our understanding of goal-systems research. Although the notion of goal interrelatedness (i.e., association) has been a topic of discussion in goals literature (Shah et al. 2002), the notion of balance difficulty is an area in need of research. Consider a consumer ordering breakfast at a restaurant. If the consumer knows she has time for a vigorous workout later in the day, this may give her license to order a high-calorie, indulgent breakfast. Alternatively, if there is very little time for a workout, she may select only a small indulgence for breakfast. In the former case, there is greater opportunity for pursuit of the multiple goals—there is lower inter-goal balance difficulty. As a result, the consumer may engage in more extreme goal-relevant behaviors. In the latter case, balance difficulty is higher and the goal-relevant behaviors may be less extreme. Thus, the notion of balance difficulty in the present research may inform goals literature as a new factor that impacts the nature and degree of goal pursuit behavior. The idea that consumers may engage in an assessment of balance difficulty adds to goals

literature that examines how consumers choose to allocate effort to multiple goals in dynamic environments (Schmidt, Dolis, and Tolli 2009). Given that goals research is inherently the exploration of effortful processes, it is unlikely that relative ease balancing between two goals will fully relax the motivational processes and instead lead to cognitive processes. However, it begs the question: when might cognitive processes take place with goal-relevant behaviors?

Considering the above question, goal achievement and release is another area of goal-systems literature that can be informed by the present work. Our findings suggest that when balance difficulty is low, motivation subsides and consumption follows a pattern dictated by a cognitive process. The potential for a switch between motivational and cognitive processes is an area in need of research within goal-systems literature (Janiszewski and Wyer 2014). Given our results, it may be the case that motivation for a goal dyad (e.g., health vs. indulgence) subsides following achievement of both goals. Thus, a cognitive process may describe consumption behavior. For instance, under a motivational process, seeing an indulgent item on the menu may inspire the consumer to pursue the dissociated health goal as shown in prior work (Fishbach et al. 2003). However, if both goals are already achieved and motivation has subsided, a cognitive process dictates that the indulgent item would inspire only indulgence. This is a complete reversal of what is expected under a purely motivational account. Similarly, based on the effects of self-affirmation observed in study 3, interventions that reduce anxiety may mitigate the effects of the tension between competing goals. This could promote greater reliance on cognitive processes during goal evaluation. In sum, the current research suggests that exploring the impact of goal achievement and the role of cognitive processes in a multi-goal contexts may be a fruitful area for future work in goal-systems research.

## Targeted Marketing

The results reported herein have implications for targeted marketing campaigns and the nontarget market effect (Aaker, Brumbaugh, and Grier 2000). The identity 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 (Forehand and Deshpandé 2001; Forehand et al. 2002; Grier and Deshpandé 2001; LeBoeuf et al. 2010; Zhang and Khare 2009). Intuitively, consumers exposed to a marketing campaign targeted toward an alternate identity 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 an unfavorable nontarget market effect that was amplified for members of nondistinctive (i.e., majority) groups such as Caucasian or heterosexual consumers. Building on this

research, our findings suggest that marketers may improve efficiency, conserve resources, and avoid unfavorable non-target market responses by creating a single marketing campaign that simultaneously activates low balance difficulty and association between identities of interest. This type of advertising campaign should lead consumers to approach the marketed product even if it is targeted toward an alternate identity. Alternatively, marketers may be able to position a single product as serving multiple identities, and therefore sidestep potential issues involved with narrow identity targeting (Lau-Gesk 2003).

## Conclusion

In summary, this research contributes to our understanding of identity-based processing by explicating the underlying roles of inter-identity association and inter-identity balance difficulty. We derive and reconcile alternative sets of predictions and provide a model for further explorations of consumer behavior within a multiple-identity framework. Although this research investigated the interactive effect of association and balance difficulty between identities based on dimensions of the self (ought vs. ideal) and on identities based on roles (work vs. leisure), it is possible that the pattern could amplify with more central identities. For example, many consumers may find it more difficult to balance divergent moral or political identities, and the motivational processes revealed here may therefore be more prominent in those contexts. Those two domains in particular are important for charitable and political marketing

with broad implications for general consumer welfare. Additionally, we derive our competing predictions from cognitive and motivational theories and provide evidence for a switch between cognitive and motivational processes. However, future research might more directly explore the nature of the two mechanisms, perhaps using reaction-time measures of cognitive association and thought-listing measures to help assess self-relevant cognitions. Lastly, although we assume that differences in association exist based on past literature (Amiot et al. 2007; Benet-Martinez et al. 2002; Roccas and Brewer 2002), we do not explicitly explore the influence of different antecedents to these structures; this may provide yet another avenue for future research.

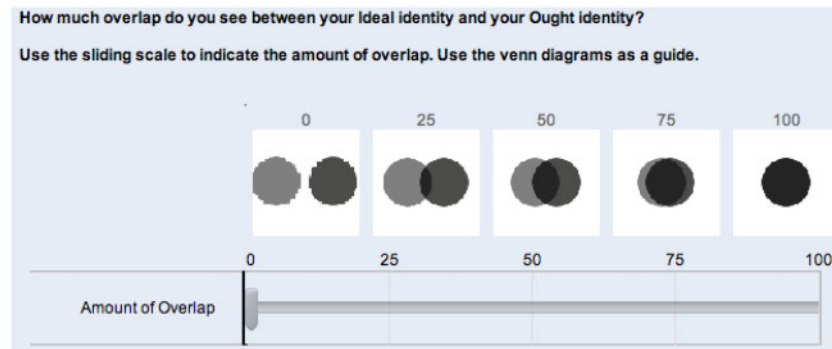
## DATA COLLECTION INFORMATION

Both authors supervised collection of data for the first study by research assistants at the University of Washington in fall of 2012. Data for study 2 was collected in winter and spring of 2016 by the first author via Amazon Mechanical Turk as described in the methods section. Data for study 3 was collected from MTurk in the fall of 2017 by the first author. All data were analyzed by the first author and discussed by both authors. The second author provided input and consultation on all data collection and analysis. An external research consultant reviewed all data analyses.



## APPENDIX A

### Study 1: Adapted Single-Item Association Measure



## APPENDIX B

### Study 1: Alternate (Ought)-Identity 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: Factor and Correlational Analyses

A factor analysis with Varimax rotation containing all items from the association, balance-difficulty, and substitutability measures revealed a three-factor structure. The four-item and single-item association measure loaded on the first factor at values above .84. The four-item substitutability measure also loaded on this factor at values above .68 except for the item that read “Embodying the attributes of either my Work identity or my Leisure identity would make up for not fully embodying the attributes of the other,” which did not load on this factor above a .3. All four items of the balance-difficulty measure loaded on the second factor at values above .73. The third factor included all four items of the substitutability measure at loadings above .37, and one item from the balance-difficulty measure crossloaded on this factor at a value of .32. The cross-loading balance-difficulty item read, “My Ideal identity and my Ought identity directly compete with one another.” In summary, the factor analysis identifies association, balance difficulty, and substitutability as explanatory factors, where three of the four substitutability items also load on the association factor. This is consistent with the proposed conceptualization.

The correlational analysis revealed that the four- and single-item association measure were significantly positively correlated with each other ( $r(140) = .78, p < .0001$ ), and both association measures significantly correlated with the four-item substitutability measure (both  $r(140) = .68, p < .0001$ ). The four-item balance-difficulty measure significantly correlated only with the four-item association measure ( $r(140) = -.18, p = .039$ ) and the four-item attitude measure ( $r(140) = -.32, p < .0001$ ). In sum, the relationship between association and balance difficulty is weaker than was found in study 1, and substitutability is related to association as expected.

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