Examining the effect of group prototypes and divergent strength of identification on the effectiveness of identity appeals
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DOI: 10.1108/EJM-04-2020-0260

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Document Version
Peer reviewed version

Citation for published version (Harvard):

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Examining the effect of group prototypes and divergent strength of identification on the effectiveness of identity appeals

Purpose - Past research argues that identity-linking messages must utilise established descriptors of the social group (i.e. prototypical identity appeals) to be effective. We show that less established descriptors (i.e. identity-linking messages low in prototypicality) can be optimal for an important customer segment, namely for those that affectively identify with the social group. This is due to the distinct self-motives underlying the cognitive and affective social identity dimensions.

Design/methodology/approach – A pilot and two experimental studies were conducted, using gender and nationality as the target identities.

Findings – Consumers feel more hopeful and have higher purchase intention for products advertised using identity depictions that fit with their predominant (uncertainty-reduction or self-enhancement) self-motive. Consumers predominantly high in affective/cognitive social identity prefer identity-linking messages that are low/high in prototypicality. An abstract mindset reverses these effects by encouraging a similarity focus.

Practical implications – Adverts utilising established descriptors of a brand’s target social group may no longer fit the brand’s positioning. Understanding when, and when not, to use less established group descriptors to market brands is important for practitioners.

Originality/value - This is the first research to explore the conditions under which priming consumers’ identity using less/more established (i.e. low/high in prototypicality) descriptors has a beneficial, or detrimental, effect on consumers’ purchase intention. In understanding these effects, we draw on consumers’ self-motives underlying cognitive and affective identification, a distinction not yet made in the identity-linking communications literature.
We also explore the mediating role of hope – a central motivating emotion – in identity marketing.

**Keywords:** prototypicality, affective social identity, cognitive social identity, self-motives, hope, emotion, construal level theory, identity-linking messages
Examining the effect of group prototypes and divergent strength of identification on the effectiveness of identity appeals

1. Introduction

Identity-linking strategies are commonly used in marketing communications to connect with consumers and break through the clutter (e.g., Coleman and Williams, 2015). Brands using this strategy link themselves or their product to consumers’ social identity (hereafter SI; e.g., British, vegetarians). For example, brands may suggest that their core customers hold a specific identity (e.g., Patagonia might portray their core customers as environmentalists). Traditionally, brands taking an identity-linking communications strategy would focus on portraying the identity by using well-established descriptions (e.g., Patagonia might link their brand to consumers’ concern regarding climate change). However, recent trends in advertising show brands moving away from established descriptors of consumers’ identities (Grau and Zotos, 2016). In a recent example, Under Armour has intentionally stirred online debate with its ‘I will what I want’ campaign, showing Gisele Bündchen, a former Victoria’s Secret model, engaging in a strenuous workout. The campaign aims to reassure women that they do not have to embody well-established female descriptors to succeed. In this example, women are celebrated as athletic and tough, rather than merely beautiful.

The aim of the current research is to test whether this novel use of less well-established group descriptors is an effective identity-linking strategy. In the current research, we define highly prototypical descriptors as those that conform to well-established perceptions about the social group (e.g., caring women); whereas descriptors that are low in prototypicality represent less well-established perceptions about the social group (e.g., rebellious women). Recent campaigns, such as by Under Armour, suggest that managers believe group descriptors that are low (as opposed to high) in prototypicality to be equally – if not better – able to boost sales. However, research has yet to establish if such an identity-
linking strategy is indeed effective, or to shed light on when and why such a strategy might work.

Overall, there is a paucity of research on when and why identity-linking messages are not effective. In particular, the current research contributes to identity literature by challenging the assumption that highly prototypical group descriptors always evoke desirable responses in consumers. It also challenges practitioners’ assumption that group descriptors low in prototypicality represent a desirable identity-linking communication strategy in today’s marketplace. Specifically, our findings show that the degree (high vs. low) of prototypicality is important, because it induces different levels of hopefulness felt by consumers when they respond to the group descriptor. Critically, these divergent effects depend on consumers’ level of cognitive and affective SI which are associated with different underlying self-motives, uncertainty-reduction and self-enhancement respectively. Cognitive SI refers to consumers’ perception of the connection between their self-definition and that of the group, whereas affective SI captures consumers’ (positive) feelings about their oneness with the group (Johnson et al., 2012; Wolter and Cronin, 2016). Our research shows that only when a message is congruent with consumers’ self-motive, will it evoke hope. In particular, consumers who rate predominantly high on affective SI report greater hope and higher purchase intention for messages that are low (vs. high) in prototypicality. However, consumers who rate predominantly high on cognitive SI report lower hope and purchase intention for messages that are low (vs. high) in prototypicality. Drawing on construal level theory (CLT), we further show that an abstract mindset reverses these effects by encouraging a similarity focus. Our findings therefore build on and extend McGowan et al.’s (2019) work, which has previously linked identity research and CLT.

Extant literature provides a good understanding of consumers who overall identify strongly (vs. weakly) with their identity. However, it does not explore consumers who
predominantly rate highly on only one SI dimension, which is the focus of the current research. Furthermore, extant literature does not account for how the distinct self-motives associated with cognitive SI and affective SI differentially influence consumers’ response to identity-linking messages that depict group descriptors high, or low, in prototypicality. Our research is the first to explicate and account for the differential effects of cognitive SI and affective SI on consumers’ response to identity-linking messages across high and low levels of prototypicality. Our findings show that it is not enough to simply distinguish between consumers who overall identify strongly versus weakly with the target identity in identity-linking messages. Our findings thus suggest that, for example, the campaign by Under Armour discussed above would have been effective in eliciting hope, and increased purchase intentions, for consumers predominantly high in affective SI, but less effective for consumers high in cognitive SI, unless a similarity focus was primed.

We further contribute to identity literature by introducing hope as an important mediator, through which identity-linking messages impact purchase intention. According to Reed and Forehand (2016, p. 97), “(t)here has been very little work specifically linking emotions to identity”, and hope in particular, has not yet been examined as an emotional response to identity-linking messages. This is surprising as both the use of consumers’ identity, and eliciting emotions such as hope, are common and highly effective in advertising. In particular, Rossiter and Percy (1991, p. 103) asserted that “all ads make a ‘promise’ and thereby invoke hope” with emotions playing a central role in advertising (Poels and Dewitte, 2019) where hope is commonly evoked (e.g., by suggesting products help achieve a desired outcome; MacInnis and de Mello, 2005). The underlying rationale is that consumers who feel hope believe that a desirable outcome is feasible and consequently are willing to invest effort to achieve the desired outcome (MacInnis and de Mello, 2005). In sum, hope motivates behavioural outcomes, such as purchase intention. Yet, little is known about when and how
identity-linking messages trigger hope (Reed and Forehand, 2016). We contribute to this literature by evidencing the important mediating role of hope that leads to positive outcomes such as purchase intention.

We now discuss our theoretical framework before outlining our pilot and two experimental studies. Finally, we provide a discussion of the overall findings across the studies, including an overview of the implications and limitations arising from this research.

2. Theoretical background and hypotheses development

2.1. Dimensions of identification and their underlying self-motives

The two theories of identification, social identity theory and self-categorization theory, suggest that two core self-motives underpin social identification; namely, self-uncertainty (i.e. subjective uncertainty regarding one’s place in the social environment) and self-enhancement (e.g., Hogg, 2000). Across the organisational psychology field, the uncertainty-reduction motive and self-enhancement motive have been associated with cognitive SI and affective SI respectively (Johnson et al., 2012; Reid and Hogg, 2005; Wolter and Cronin, 2016). Further, these SI dimensions are meaningfully distinct and provide incremental predictions over the most commonly used unidimensional measure of identification (Johnson et al., 2012).

We argue that consumers predominantly high in cognitive SI regarding a particular social group identify with the group as a means to reduce self-uncertainty, whereas consumers predominantly high in affective SI identify with the group to self-enhance. The distinct self-motives associated with cognitive/affective SI help explain why the two SI dimensions may predict divergent consumer behaviours (Wolter and Cronin, 2016). In particular, we propose that these self-motives can lead to diverse appraisals of identity-
linking messages, making such messages more or less effective in evoking hope. McGowan et al. (2017) provided a critique of past conceptualisations of the SI construct and confirmed the need to take account of the distinctive roles of the cognitive and affective SI dimensions. Although not in a communications context, McGowan et al. (2017) found the processes underlying the effects of these two SI dimensions on purchase intention to differ, highlighting the need to model these two SI dimensions separately. For the purpose of our current research, we distinguish between uncertainty-reducers and self-enhancers.

Uncertainty-reducers refers to people who perceives a high degree of overlap between themselves and the group definition (i.e. high cognitive SI), but who do not feel positive about their membership in the group (i.e. low affective SI). Self-enhancers refers to people who do not perceive a high degree of overlap between themselves and the group definition (i.e. low cognitive SI), but who feel positive about their membership in the group (i.e. high affective SI).

The uncertainty-reduction motive arises from individuals’ desire to hold correct attitudes and to behave correctly in social situations (Hogg, 2000). Thus, individuals may experience subjective uncertainty in social environments if similar others appear to hold attitudes, emotions, or views different to oneself (Hogg, 2000). For instance, a football fan who thinks the club coach is doing a good job may feel unsure about being a ‘real’ fan if fan groups consistently express strong criticisms of the coach. To reduce the resulting subjective uncertainty, the football fan will likely align themselves with the group’s more negative view of the club coach. In other words, the fan aligns themselves with the group’s prototypes, as subjective uncertainty can be “effectively reduced by self-categorization in terms of a well-defined, consensual, and clearly prescriptive ingroup prototype” (Hogg, 2000, p. 233). Prototypes refer to group descriptors, which describe and prescribe how group members should think, feel, and act (Turner et al., 1987). For instance, amongst Lego consumers there
is a consensus that Lego products help users express their creativity. Individuals who adhere
to ingroup prototypes can be confident that they are behaving correctly or appropriately for
their group. It follows that group prototypes are key to reducing or protecting against self-
related uncertainties (Hogg et al., 2010). Uncertainty-reducers are particularly motivated to
conform to ingroup prototypes to avoid subjective uncertainty. This is because uncertainty-
reducers’ sense of self strongly overlaps with the social group, and they have internalised its
prototypes (Wolter and Cronin, 2016). Consequently, uncertainty-reducers are particularly
sensitive to changes to what their group stands for, i.e. changes to the prototypes associated
with their group (Wolter and Cronin, 2016).

Research also shows that, in general, people identify with groups that offer
opportunities to maintain or enhance their self-esteem (Branscombe et al., 1999). Affective
SI therefore reflects the fact that consumers identify with groups to achieve or maintain a
positive self-evaluation, in other words as a means of self-enhancement (Reid and Hogg,
2005; Wolter and Cronin, 2016). Moreover, research shows that consumers can satisfy self-
enhancement needs without cognitively identifying strongly with the social group. These
consumers do so through feeling positive emotions, such as pride, about a social group,
thereby basking in the group’s reflected glory (Cialdini et al., 1976; Kessler and Hollbach,
2005). Consumers strategically use brands to satisfy their self-enhancement motive, as
desired brand associations can ‘rub off’ on them. For example, carrying a Victoria’s Secret
shopping bag can make female consumers feel more glamorous, good looking, and feminine
(Park and John, 2010).

2.2 Hypotheses development for Study 1

Past research has focused predominantly on cognitive and conative outcomes of identity-
linking messages, such as attitude and purchase intention (e.g., Feiereisen et al., 2009;
McGowan et al., 2019), rather than specific emotions. In contrast, this research focuses on an understudied emotion, that of hope (arising from viewing an advertisement). Hope is a future-oriented and positively valenced emotion, caused by an uncertain but possible future goal-congruent outcome (Frijda et al., 1989; MacInnis and de Mello, 2005). An outcome is appraised as goal-congruent, when it is thought to help achieve a desired end or prevent an undesired end (Lazarus, 1991). Thus, marketing communications signalling that it is possible to achieve goal-congruent outcomes induce hope (MacInnis and de Mello, 2005). In the present context, an identity-linking message is expected to evoke hope if it utilises a group descriptor consistent with consumers’ self-motive.

To illustrate, compare a product advert utilising an identity-linking message with a highly prototypical group descriptor (such as ‘For women who are caring’) or with a group descriptor low in prototypicality (such as ‘For women who are rebellious’). For uncertainty-reducers, the highly prototypical message suggests that the product is aimed at prototypical (i.e. caring) women, thus the product offers an opportunity to signal to others that one is a prototypical woman. By using a product thus advertised, uncertainty-reducers can align themselves with their group’s prototypes, thereby reducing subjective uncertainty regarding their place in the social environment. Uncertainty-reducers should therefore appraise a product advertised with a highly prototypical message as goal congruent, triggering hope. However, a product advertised using a tagline low in prototypicality should not help consumers align themselves with the group’s prototypes. Moreover, use of such a product may suggest that one is no longer a typical group member. As a result, uncertainty-reducers should not appraise products advertised with messages low in prototypicality as goal congruent, which consequently would not evoke high levels of hope.

In contrast, self-enhancers are primarily driven by the need for self-enhancement. We expect messages using group descriptors low (vs. high) in prototypicality to evoke higher
levels of hope in self-enhancers. This is because self-enhancers are more likely to feel that such a message is more aligned with their self-motive. Our reasoning is that self-enhancers’ sense of self does not overlap greatly with the group in question, as denoted by the fact that they are low in cognitive SI. As a result, they do not view ingroup prototypes as descriptive of themselves (Spears et al., 1997). If highly prototypical group descriptors are viewed as less descriptive of, and less relevant to, self-enhancers, such descriptors have little utility in increasing their self-esteem. In contrast, a descriptor low in prototypicality likely signals that the group norms are becoming more flexible, attainable and relevant to the self, thus offering the potential to raise self-enhancers’ self-esteem. In support, weakly identified consumers have been found to experience an increase in self-esteem after learning that group norms are becoming more flexible (Jetten et al., 2002). Specifically, Jetten et al. (2002) find that merely anticipating that the group’s prototypes are becoming more flexible, and therefore may become more descriptive of oneself, can raise consumers’ collective self-esteem. We would therefore expect messages utilising group descriptors low in prototypicality to evoke higher levels of hope for self-enhancers as they are more goal congruent.

Consumers are not motivated to attend to or elaborate on marketing communications that have little relevance to them. In particular, consumers are unlikely to feel hope if the outcome is not important to them (MacInnis and Chun, 2007). This means that for consumers low on both SI dimensions, product adverts utilising an identity-linking message should not evoke hope, regardless of prototypicality, because such a message is irrelevant to their self-concept. Thus, we would not expect these consumers to report different levels of hope in response to messages high (vs. low) in prototypicality. Lastly, there are mixed findings on whether one self-motive is motivationally primary. While Reid and Hogg (2005) argue that uncertainty-reduction is motivationally primary to self-enhancement, Aguirre-Rodriguez et al. (2012) found the opposite to be true. On balance, we do not expect consumers high on
both SI dimensions to report different levels of hope in response to messages high (vs. low) in prototypicality.

In conclusion, we propose a moderation model, whereby cognitive SI and affective SI are independent moderators of the relationship between level of (low vs. moderate vs. high) prototypicality of the group descriptor and hope. There is no evidence in literature that the two SI dimensions interact, and they are often modelled within a hierarchical, cause-effect, structure (e.g., Bagozzi and Dholakia, 2006) thus suggesting that they are independent but related dimensions of SI. Drawing together the discussion above, we posit the following:

**H1:** Cognitive SI and affective SI independently moderate the effect of prototypicality onto hope.

**H1a:** Uncertainty-reducers will feel more (less) hopeful following an identity-linking message with a group descriptor high (low) in prototypicality.

**H1b:** Self-enhancers will feel less (more) hopeful following an identity-linking message with a group descriptor high (low) in prototypicality.

### 2.2.1 Mediating role of hope

Emotions carry within them action tendencies, which denote the readiness to engage in “specific actions to affirm or cope with the emotion” (Bagozzi et al., 1999, p. 184). In particular, higher order emotions such as hope, caused by cognitive appraisals of situations, lead people to act in ways that are beneficial to their well-being (Frijda et al., 1989). As a positive emotion evoked by a goal-congruent outcome, hope is goal directed and associated with an approach action tendency (MacInnis et al., 2004). Specifically, hope provides the motivational energy for consumers to continuously work towards a desired outcome (Ellsworth and Smith 1988; MacInnis et al., 2004). For example, consumers may engage in motivational reasoning (MacInnis and de Mello, 2005) or pathway thinking, whereby consumers plan out particular ways to
meet their goals (Lazarus, 2006). Lastly, hope has also been shown to play an important role in the adoption of new products, if consumers hope that innovative offerings will help achieve goal-congruent outcomes (Lin et al., 2020). We therefore expect consumers feeling more/less hope from viewing the advertisement to report higher/lower intentions to purchase the advertised product.

Taken the discussions above together, we hypothesize that hope mediates the relationship between identity-linking messages and purchase intention (see Figure 1). In other words, we expect uncertainty-reducers will, as a consequence of feeling more (less) hopeful, report higher (lower) levels of purchase intention following an identity-linking message with a group descriptor high (low) in prototypicality. Further, self-enhancers will, as a consequence of feeling less (more) hopeful, report lower (higher) levels of purchase intention following an identity-linking message with a group descriptor high (low) in prototypicality.

**H2:** Hope mediates the interaction effects hypothesized in $H1$ onto purchase intention. In particular, cognitive SI and affective SI independently moderate the effect of an identity-linking message onto hope, and these conditional effects are mediated onto purchase intention via hope.

Insert Figure 1 about here

### 2.2.2 Hypotheses development for Study 2

Hypothesis 1a predicts that identity-linking messages low in prototypicality would not be an effective strategy for uncertainty-reducers. Study 2 reverses this negative effect by manipulating consumers’ level of construal and thus their perception of the group descriptor. We argue that placing uncertainty-reducers in an abstract (vs. concrete) mindset leads them to perceive the group descriptors as more prototypical, making the
identity-linking message more attuned to their self-motive. As such manipulating
consumers’ mindset should have a similar effect to manipulating the prototypicality of
a group descriptor.

Construal level theory explains how mental construal affects people’s perception of
objects or events. According to this theory, objects/events can be mentally construed at
varying levels of abstraction, ranging from concrete representations (e.g., as a mobile phone)
to relatively abstract ones (e.g., as a communication device; Trope and Liberman, 2010). At
higher levels of construal, the object/event is represented in terms of its central, enduring, and
superordinate features (e.g., a communication device); whereas at lower levels of construal,
the object/event is construed using detailed, subordinate, and context-specific features (e.g., a
silver iPhone 11; Trope and Liberman, 2010). Moreover, by default, people use concrete
representations (e.g., Malkoc et al., 2010).

Changes in the level of construal have implications for categorization and
personal perceptions (McGowan et al., 2019; Trope and Liberman, 2010), as an
abstract mindset induces a similarity focus. To that effect, consumers in an abstract
mindset focus on few important features that tie objects/events together, rather than
emphasizing incidental or context-specific features. For example, a group of young
Africans, Asians, and Latinos who attend university could be described more
abstractly as a group of students. Further, when choosing from a large assortment,
consumers in an abstract mindset perceive the options to be more similar (Henderson,
2013).

The similarity focus also applies to intergroup perceptions. For example,
McGowan et al. (2019) found that Americans perceive Canadians, which are a
dissociative group, to be more similar to Americans when in an abstract (vs. concrete)
mindset. In particular, the similarity focus induced by an abstract mindset leads individuals to categorize objects into broader categories, suggesting they perceive social categories as more broadly defined and inclusive (Liberman et al., 2002; Wakslak et al., 2006). Thus, the similarity focus induced by an abstract mindset should influence consumers to perceive identity-linking messages that are low in prototypicality as more prototypical. However, no such shift in perception takes place when in a concrete mindset. It follows that in an abstract (vs. concrete) mindset, the social group is perceived to be more inclusive and a given group descriptor is considered to be more prototypical of the social group. As a result, the group descriptor is better able to validate uncertainty reducers’ prototypicality and thus satisfy their self-motive. Taken together, we expect uncertainty-reducers to experience higher levels of hope when in an abstract (vs. concrete) mindset.

The similarity focus induced by an abstract mindset should have the opposite downstream effect on hope for self-enhancers. Specifically, the more prototypical a given group descriptors is seen to be, the less self-enhancers are able to satisfy their need to self-enhance. Therefore, we propose that self-enhancers, when placed in an abstract (vs. concrete) mindset, will appraise an identity-linking message using a group descriptor low in prototypicality as more prototypical of the social group. It follows that, when placed in an abstract (vs. concrete) mindset, self-enhancers should appraise the message as less goal congruent and thus experience lower levels of hope.

**H3a:** Uncertainty-reducers will feel more (less) hopeful following an identity-linking message low in prototypicality in an abstract (concrete) mindset.

**H3b:** Self-enhancers will feel less (more) hopeful following an identity-linking message low in prototypicality in an abstract (concrete) mindset.
2.5 Studies overview

We test our hypotheses across two experimental studies and a pilot study. Study 1 examines our proposition that consumers experience higher levels of hope and report stronger purchase intention for a product advertised using a message that is congruent with their predominant self-motive. A moderately prototypical group descriptor was also included in Study 1, to test whether it mirrors the effects observed for messages high or low in prototypicality. This is because prototypes are fuzzy (Reid and Hogg, 2005), meaning marketing managers may inadvertently use group descriptors that consumers consider to be moderately prototypical.

Study 1 tests the hypothesis $H1$ with an additive multiple moderation model, whereby cognitive SI and affective SI are independent moderators of the relationship between message prototypicality and hope (see Figure 1). We utilize PROCESS Model 9 (Hayes, 2017) to establish the mediating role of hope, as specified in $H2$. This model stipulates that cognitive SI and affective SI independently moderate the effect of prototypicality on hope. The model thus quantifies the conditional effect of prototypicality on hope at varying combinations of the levels of cognitive SI and affective SI. This allows us to explore the conditional effect for participants high on only one SI dimension, as specified in $H1a$ and $H1b$. The pilot study tests our argument, whereby an abstract mindset alters consumers’ perception of how prototypical a particular group descriptor is. Based on the findings of this pilot study, Study 2 manipulates participants’ level of construal to test hypotheses $H3a$ and $H3b$.

3. Study 1

3.1. Pretests
Prior to the main study, which uses gender as the target SI, an initial pretest was conducted to identify a gender-neutral product, to ensure that the chosen product would not confound the results. Perceived gender fit of the product was measured (7=extremely female; 1=extremely male). Fifty seven US women were recruited through MTurk and evaluated a number of products thought to have no prior association with gender. The products being evaluated were a silver coloured digital camera, cotton buds, wrist watch, and headphones. The silver camera was seen as the most gender-neutral product ($M_{\text{camera}} = 3.64$, $M_{\text{cotton buds}} = 4.40$, $M_{\text{watch}} = 2.46$, $M_{\text{headphones}} = 3.61$) and used in the main study.

In a later separate pretest, 51 US women were recruited through MTurk and asked to evaluate six taglines for the identity-linking message, designed to highlight positive descriptions of women, while allowing for variations in perceived prototypicality. The descriptions were taken from literature on gender stereotypes\textsuperscript{2}, which compares women and men on two dimensions. The first dimension revolves around competency, agency, and individualism, while the second dimension revolves around warmth, communality, and collectivism (e.g., Judd et al., 2005). Women tend to be characterised as warm and communal, descriptions that are regarded as socially desirable (e.g., Fiske et al., 2007; White and Gardner, 2009). Drawing on this literature, participants read six taglines describing women as either compassionate, assertive, rebellious, caring, loving, or dominant. Participants then rated the perceived prototypicality of each tagline (1=not at all descriptive; 7=very descriptive).

Using a repeated measures ANOVA, caring was shown to be the most descriptive of women ($M = 5.31$, $SD = 1.53$), assertive was rated closest to the overall mean value across the six taglines ($M = 3.59$, $SD = 1.47$), whereas rebellious was perceived to be the least descriptive ($M = 2.06$, $SD = 1.50$; $F(2, 100) = 42.90$, $p < .001$). To demonstrate the monotonic increase in prototypicality across the conditions, planned contrasts revealed differences between rebellious and assertive ($F(1, 50) = 4.34$, $p < .001$) and between assertive and caring ($F(1, 50) = 11.17$, $p <$
Finally, participants indicated how sexist the six attributes were (1=not at all; 7=very much), revealing no difference ($F(2, 100) = 2.03, p = .14$). Importantly, caring, assertive, and rebellious were equally low in perceived sexism ($M_{caring} = 2.73; M_{assertive} = 2.33; M_{rebellious} = 2.84$). Caring, assertive, and rebellious were therefore used in the main study as group descriptors for the conditions high, moderate, and low in prototypicality respectively.

### 3.2. Participants and procedure

A total of 190 US female MTurk workers ($M_{age} = 41$) took part in a between-subjects experiment with three levels for the manipulation (Prototypicality: low vs. moderate vs. high); cognitive and affective identification with being female was measured prior to the manipulation. Participants saw a camera advert with the tagline ‘We capture your passions’, adding ‘For women who are rebellious’ (prototypicality: low; N=66), ‘For women who are assertive” (prototypicality: moderate; N=57) or ‘For women who are caring’ (prototypicality: high; N=67). The remainder of the advert was held constant, while the brand name was fictitious to avoid pre-existing brand associations.

### 3.3. Measures and analysis

Cognitive SI ($\alpha = .88$; Johnson et al., 2012, see Table 1 for all items), affective SI ($\alpha = .94$; Johnson et al., 2012), hope (single item; adapted from Frijda et al., 1989), purchase intention ($\alpha = .95$; adapted from White et al., 2012), and the perceived fit of the group descriptors with the product were captured on seven-point Likert response scales. The group descriptors were seen to fit the product equally well ($M_{caring} = 4.54, SD = 1.70; M_{assertive} = 4.19, SD = 1.64; M_{rebellious} = 4.49, SD = 1.59; F(2,187) = .80, p = .45$).

PROCESS Model 9 (Hayes, 2017; 5,000 bootstrap samples, 95%CI) tested the proposed model. Cognitive SI and affective SI were simultaneously analysed as moderators at different levels of each SI dimension. Indicator coding is used to compare the conditions low in
prototypicality versus moderately prototypical, and the conditions low versus high in prototypicality.

INSERT Table 1 about here

3.4. Results

Overall, affective SI had a simple effect onto hope \((B = .99, t = 2.70, p = .01)\), but cognitive SI \((p = .06)\) and prototypicality did not \((p = .97)\). When comparing the low versus high prototypicality conditions, the interaction effect of cognitive SI and prototypicality on hope was significant \((B = 1.04, t = 2.31, p = .02)\), as was the interaction between affective SI and prototypicality \((B = -.95, t = -2.13, p = .03)\). \(H1\) is thus supported. Further, in support of \(H1a\), uncertainty-reducers reported higher levels of hope in the high (vs. low) prototypicality condition \((B = 2.30, t = 2.52, p = .01)\). In support of \(H1b\), self-enhancers felt more hopeful in the low (vs. high) prototypicality condition \((B = -1.66, t = -2.04, p = .04)\). See Figure 2 for a visual depiction with cognitive SI and affective SI at high \((84^{th} \text{ percentile})\) and low \((16^{th} \text{ percentile})\) levels respectively. Finally, participants high on both SI dimensions \((p = .21)\) and low on both dimensions \((p = .95)\) felt similarly hopeful following a message high (vs. low) in prototypicality. See Table 2 for an overview of the results.

Figure 2 shows similar results for the moderately and highly prototypical conditions (see Appendix A for the comparison between the moderately and highly prototypical conditions). Additional comparisons of the moderately and highly prototypical conditions revealed no interaction effects between prototypicality and cognitive SI \((p = .73)\) or between prototypicality and affective SI \((p = .34)\). As discussed further in the General Discussion, this finding is reassuring for marketers.

INSERT Table 2 about here

INSERT Figure 2 about here
The results also show that hope had a positive direct effect onto purchase intention \((B = .55, t = 11.27, p < .001)\), but prototypicality did not \((p = .62)\). The proposed conditional indirect effect through hope was significant as the index of partial moderated mediation is significant with cognitive SI (index: .58, CI [.06, 1.17]) and affective SI (index: -.53, CI [-1.02, -.08]) as the moderator. Consistent with \(H2\), when comparing the conditions low versus high in prototypicality conditions, mediation occurred for uncertainty-reducers \((B = 1.27, CI [.29, 2.39])\) and for self-enhancers \((B = -.92, CI [-1.97, -.01])\).

With the significant indirect effects evidenced, and as no direct effect of prototypicality on purchase intention was found, the hypothesized mediating role of hope (i.e. \(H2\)) is supported. This means that uncertainty-reducers (self-enhancers) reported higher levels of hope and purchase intention when they saw an identity-linking message high (low) in prototypicality. Given that hope did not differ across prototypicality conditions when SI dimensions were either both high or both low, we did not expect hope to mediate the effect of prototypicality onto purchase intention. In support, the conditional indirect effect was not significant for participants high (CI [-.24, 1.01]) and low on both SI dimensions (CI [-.58, .52]). Overall, the model explained 41% of the variance in purchase intention.

4. Study 2

4.1. Pretest

A pretest was conducted to identify a tagline that would be perceived as low in prototypicality for Americans, the target identity. We identified a number of descriptors on the basis of online searches on descriptions that were typical of different nationalities. The author team discussed and generated a list of descriptions less frequently associated with being American, as the basis for the pretest. A sample of 40 US MTurk workers (25% Female; \(M_{age} = 35\)) rated how descriptive (1=not at all, 7=very much) a number of descriptors are of Americans. These
descriptors included dependable ($M = 4.77$, $SD = 1.57$), creative ($M = 4.74$, $SD = 1.57$),
generous ($M = 4.13$, $SD = 1.75$), selfless ($M = 3.74$, $SD = 1.83$), sophisticated ($M = 3.61$, $SD =
1.36$), passionate about fine food ($M = 3.58$, $SD = 1.75$), and curious about other cultures ($M =
3.35$, $SD = 1.61$). We identified ‘curious about other cultures’ as low in prototypicality, with a
one-sample t-test yielding a significant difference from the scale mid-point ($M = 4$; $t(39) = -2.55,
p = .02$). Thus, the tagline ‘Americans are curious about other cultures – MLE helps you
discover the world’, for the fictitious brand MLE, was adopted for the main study.

4.2. Pilot study

A pilot study was conducted to offer an initial test of whether construal level influences how
prototypical consumers perceive group descriptors to be. Specifically, consumers in an abstract
(vs. concrete) mindset should perceive a group descriptor to be more prototypical. Sixty seven
US MTurk workers (45% female, $M_{\text{age}} = 35$) took part in a single factor between-subjects
design, with level of construal being manipulated (Construal level: coded 0 = how/concrete vs. 1
= why/abstract) in line with Freitas et al. (2004). These authors showed that when individuals
are primed to think repeatedly in terms of “why”, superordinate, abstract thoughts are activated;
whereas, subordinate, concrete thinking is activated when individuals are primed to think
repeatedly in terms of “how”. Participants assigned to the abstract construal condition wrote
why they would want to maintain and improve their health. Participants assigned to the concrete
construal condition wrote how they would maintain and improve their health. After the
manipulation, participants rated how descriptive “curious about other cultures” was of
Americans (1=not at all, 7=very much). Following the detailed manipulation check procedures
outlined in Fujita et al. (2006), an independent judge, unaware of the conditions, coded each
participant’s level of construal based on the abstractness of their responses to the why/how
manipulation. Ratings of each participant’s four responses were summed to create an index of
level of construal with a potential range of -4 to 4; whereby higher scores indicate higher levels of construal.

Level of construal was successfully manipulated, as participants’ responses in the abstract construal condition reflected higher levels of construal ($M = 3.09$, $SD = 1.29$) than in the concrete condition ($M = -3.27$, $SD = .98$; $t(65) = -22.73$, $p < 0.001$). As expected, being “curious about other cultures” was seen as more descriptive of Americans in the abstract ($M = 4.59$, $SD = 1.14$) than the concrete condition ($M = 3.94$, $SD = 1.18$, $t(65) = -2.29$, $p = .03$). In further support, the mean descriptiveness of being “curious about other cultures” is above the scale midpoint ($M = 4$) in the abstract condition ($t(33) = 3.01$, $p < .01$).

4.3. Main study participants and procedure

A total of 232 Americans (48% female) took part in a between-subjects MTurk experiment, with two levels for the manipulation (Construal level: concrete coded 0 vs. abstract coded 1); cognitive SI and affective SI were measured prior to the CLT manipulation. After being induced into an abstract or concrete mindset, all participants saw a message low in prototypicality. Level of construal was manipulated as in the Pilot Study, using the same manipulation check. The study focuses on participants’ identification with being American and participants saw an advert for a travel organizer with the pretested tagline. After being randomly assigned to either the concrete (N=114) or abstract condition (N=118), all participants saw the advert with the pretested tagline.

4.4. Main study measures and analysis

For measurement items and associated alpha values see Table 1. Cognitive SI, affective SI and purchase intention were measured as in Study 1. A three-item scale captured hope. Level of construal was successfully manipulated, as participants’ responses reflected higher levels of construal in the abstract ($M = 3.27$, $SD = 1.10$) vs. concrete mindset ($M = -3.45$, $SD = .64$;
\( t(189.27) = -57.15, p < .001 \). PROCESS Model 9 (Hayes, 2017; 5,000 bootstrap samples, 95%CI) tested the proposed additive moderated mediation model, assessing the moderating effects of cognitive SI and affective SI on the relationship between construal level, with hope as the mediator, and purchase intention as the outcome variable.

4.5. Results

Affective SI had a simple effect onto hope \( (B = .55, t = 4.04, p < .001) \), but cognitive SI \( (p = .37) \) and level of construal did not \( (p = .52) \). The interaction effect of cognitive SI and level of construal on hope was significant \( (B = .53, t = 2.57, p = .01) \), as was the interaction between affective SI and level of construal \( (B = -.63, t = -3.23, p < .01) \). In support of H3a, uncertainty-reducers felt more hopeful in the abstract (vs. concrete) condition \( (B = 1.90, t = 2.71, p < .01) \). In support of H3b, self-enhancers felt more hopeful in the concrete (vs. abstract) condition \( (B = -2.55, t = -3.13, p < .01) \). See Figure 3 for a visual depiction of the focal findings with full results in Appendix B. The reported levels of hope did not differ across the abstract (vs. concrete) conditions for consumers high \( (p = .06) \), or low \( (p = .89) \), on both SI dimensions.

INSERT Figure 3 about here

The mediation results show hope had a positive direct effect onto purchase intention \( (B = .78, t = 15.46, p < .001) \) but level of construal did not \( (p = .92) \). The proposed conditional indirect effect through hope was significant as the index of partial moderated mediation was significant with cognitive SI \( \text{index: .41, CI [.07, .74]} \) and affective SI \( \text{index: -.49, CI [-.83, -.16]} \) as the moderator. When comparing the concrete (vs. abstract) conditions, mediation occurred for self-enhancers \( (B = -1.99, CI [-3.35, -.61]) \), and for uncertainty-reducers \( (B = 1.48, CI [.30, 2.64]). \) As expected, the conditional indirect effect was not
significant for participants high (CI [-1.02, .04]) or low on both SI dimensions (CI [-.58, .51]).

The findings support the hypothesized role of construal level in influencing the mediating role of hope when consumers are presented with an identity-linking message that is low in prototypicality. Uncertainty-reducers reported higher levels of hope and higher purchase intention when they were in an abstract (vs. concrete) mindset. This means that the negative effect previously observed when uncertainty-reducers encounter an identity-linking message low in prototypicality is mitigated. The opposite was true for self-enhancers: they reported higher levels of hope and purchase intention when in a concrete (vs. abstract) mindset. Overall, the model explained 51% of the variance in purchase intention.

5. General Discussion

The implicit assumption has always been that for identity-linking messages to be effective, they must reflect prototypical descriptors of the social group. However, more recently we see a trend towards using group descriptors low in prototypicality in advertising. In particular, beauty and fashion brands (e.g., Under Armour’s ‘I will what I want’ or H&M’s ‘She’s a lady’ campaign) have been at the forefront of this, with the stated aim of empowering consumers to reject highly prototypical group descriptors. Given current interest in issues around inclusivity and empowerment, brands in other sectors are expected to follow suit. However, the effectiveness of group descriptors low in prototypicality had not previously been tested. Study 1 shows that while this strategy is counterproductive for uncertainty-reducers, it does evoke greater hope and higher purchase intention in self-enhancers. Study 2 further shows that an abstract (vs. concrete) mindset can reverse the effects of a low prototypicality appeal on hope and purchase intention for both uncertainty-reducers and self-enhancers. While most research simply distinguishes between strongly and weakly identified
consumers, our findings suggest that there is a need to examine consumers who rate highly on only one SI dimension to take into account the underlying self-motives driving identification.

Our research further evidenced the important mediating role of the emotion of hope, through which identity-linked appeals lead to behavioural outcomes, such as purchase intention.

Previous research on identity-linked marketing had yet to examine the role of hope, while our research reveals that hope is an important motivational factor explaining much of the variance in purchase intention.

5.1 Theoretical contribution

Which identity-linking messages are effective for uncertainty-reducers and self-enhancers is a function of the prototypicality of the group descriptors used in the message and consumers’ level of construal. The current research therefore makes five interlinked theoretical contributions to identity literature.

First, our research challenges the assumption that identity-linking messages always evoke desirable responses in consumers holding the relevant identity. Literature to date has found messages to backfire when they impede consumers’ agency (Bhattacharjee et al., 2014) or evoke self-presentation concerns (Thomas et al., 2015). Our findings suggest another boundary condition for the effectiveness of identity-linking messages, namely whether they are congruent with consumers’ predominant self-motive that drives their distinctive identification with social groups. Given the downstream effects evidenced in our research, this has important implications for researchers examining identity-linked communications.

Further, the current research suggests a need to take into account consumers’ underlying self-motives across the identity marketing domain.

Second, this research shows that highly prototypical group descriptors are not always effective. Self-categorisation theory and literature in organisational behaviour has concluded
that group members are motivated to be seen to be prototypical members (Abrams and Hogg, 2010) and are more positively inclined towards prototypical group members or exemplars (e.g., Barreto and Hogg, 2017). We show that this is contingent on consumers’ predominant self-motive, as highly prototypical group descriptors do not evoke greater hope and purchase intention in self-enhancers. In addition, the results highlight the conditions when using group descriptors low in prototypicality can be effective. Given the diverse results evidenced between uncertainty-reducers and self-enhancers across group descriptors high versus low in prototypicality, identity researchers should assess if the stimuli adopted in identity priming is perceived by participants as high or low in prototypicality.

Third, this research draws on prior work identifying the distinct self-motives driving cognitive versus affective SI (Wolter and Cronin, 2016). While some research accounts for strength of identification being a multidimensional construct, the current findings highlight the importance of accounting for consumers’ cognitive and affective SI, the strength of which may differ. Our findings contribute to identity literature by highlighting the importance of accounting for consumers’ self-motives. Both studies show that consumers appraise and respond to information in line with their self-motives, resulting in different emotional and behavioural outcomes. The two self-motives are expected to influence how consumers respond to any identity relevant information. Taken together, our findings suggest that it is not sufficient to merely distinguish between consumers who overall identify strongly or weakly with a given identity.

Fourth, our findings contribute to identity literature by introducing hope as a novel mediator through which identity-linking messages affect behaviour. Emotions have always played an important role in SI literature, starting from Tajfel’s (1981) definition of SI as holding emotional significance. Emotions may also affect consumers’ response to different types of identity-linking messages (e.g., prevention-focus or promotion-focus message
appeals, Bang et al., 2017). Despite this, little is known about the specific emotions evoked by identity primes. Our research differs from existing work, by drawing on literature on identity specific self-motives to examine consumers’ response to messages with varying levels of prototypicality. Our findings suggest that when one self-motive is dominant, an identity-linking message evokes more hope only when the message is attuned to address the specific need underlying the self-motive. Past identity research had focused mainly on cognitive and behavioural outcomes. There is a need to examine affective outcomes in the form of discrete emotions to yield a better understanding of the underlying mechanisms in identity research.

Finally, this research brings together the identity and construal level theory literature. Specifically, Study 2 shows that messages low in prototypicality can be effective for uncertainty-reducers, but only for consumers with an abstract mindset. Identity literature has largely ignored the potential influence of construal level on how consumers process and respond to information relevant to their identity. An exception is McGowan et al. (2019), who show that consumers perceive themselves to be more similar to a dissociative group when in an abstract, relative to a concrete, mindset. The current research builds on and extends this finding, by showing that level of construal alters how prototypical a given group descriptor is perceived to be. Specifically, a descriptor is seen as more prototypical when consumers are in an abstract mindset, with implications for whether a message is appraised as goal-congruent or not, with consequences in boosting or inhibiting hope.

5.2 Managerial implications

Given the importance of the level of prototypicality in identity-linking messages, marketing managers need to pretest their identity-linked appeals to assess the level of perceived prototypicality by their target audiences. Promotional campaigns may have different themes
that are better in addressing different consumer needs. Consideration thus needs to be given as to which self-motive (uncertainty reduction or self enhancement) the promotional campaign aims to address. Further, our research shows hope to predict and explain much variation (41% in Study 1 and 51% in Study 2) in consumers’ purchase intention, raising the question of how practitioners can tailor their campaigns to best evoke hope across customer segments. Our findings suggest that identity-linking messages containing group descriptors low in prototypicality are effective for self-enhancers, but not for uncertainty-reducers, unless these latter consumers are placed into an abstract mindset.

We expect uncertainty-reducers and self-enhancers to represent a sizeable target market for a number of reasons. Firstly, for most – if not all – identities, consumers go through a developmental phase, whereby they learn about and are motivated to emulate the group’s prototypes, while interacting with group members (e.g., Cleveland and Xu, 2019). In most cases, consumers are likely to differ on the two identity dimensions, based on their individual experiences and interactions with their respective social group (Kessler and Holbach, 2005). Secondly, factors relating to the social group or consumers’ personality may result in uneven levels of cognitive SI and affective SI. For example, research on brand-identification and company-identification has identified distinct antecedents (e.g., brand prestige, brand warmth; memorable experiences, brand distinctiveness) that map onto the distinct self-motives of cognitive SI versus affective SI (e.g., Stokburger-Sauer et al., 2012). Johnson et al. (2012) also find that personality factors, such as extraversion versus neuroticism, differentially affect cognitive SI and affective SI.

Brands that wish to target uncertainty-reducers with messages containing low prototypical group descriptors can prime an abstract mindset, to shift the perceived prototypicality of said descriptors. In practice, an abstract mindset can be induced in different ways. One way is by adopting the ‘How’ versus ‘Why’ manipulation used in the current
research; for example by asking consumers to 'think about reasons' (vs. 'think about ways') to use the product, which primes an abstract (vs. concrete) mindset (White et al., 2011). Thus, by encouraging consumers to engage in a sequence of Q&A, consumers may be induced to focus on the similarity between their social group (e.g., gender) and the group descriptor (e.g. rebellious women), evoking greater hope in uncertainty-reducers. In contrast, group descriptors low in prototypicality offer an effective communication strategy for self-enhancers when they are in the default - concrete - mindset (Malkoc et al., 2010). As such, managers can be assured that low prototypical descriptors would not normally present a problem when targeting self-enhancers. However, managers need be aware that other features of the identity-linked message may inadvertently manipulate an abstract mindset, thereby reducing the effectiveness of the message. For example, background music (low vs. high frequency music; Sunaga, 2018) or the visual imagery of an advert (e.g., filmed far away vs. nearby; Fujita et al., 2006) may induce an abstract mindset.

Our findings illustrate the importance of differentiating uncertainty-reducers and self-enhancers, thus emphasising the need for segmentation based on levels of cognitive and affective SI amongst the target audience. As such, firms need to track levels of both affective SI and cognitive SI within their target audience, as this determines whether group descriptors are perceived to be goal congruent and therefore evoke hope. While it may be difficult to directly capture the relative strength of cognitive/affective SI, consumers’ online and offline behaviour may offer circumstantial evidence. For example, consumers holding a Nike+ membership are likely to hold a runner identity. The more these consumers engage with the Nike app, for example by sharing their running statistics online, the more likely they are to hold higher levels of cognitive SI. Other consumers who are seen to interact frequently with fellow members of the community, which offer affirmation and a sense of community, will likely rate high on both cognitive SI and affective SI. In contrast, consumers posting pictures
of themselves on social media with their new running gear – but who otherwise do not seem to engage much with the runner app – likely rate higher on affective SI than cognitive SI. Where such data is not available, marketers should undertake an A/B test to examine different online adverts that are high versus low in prototypicality, which would provide an easy and low-cost way of identifying the most effective approach for each target market segment.

Finally, Study 1 shows that consumers respond the same to moderately and highly prototypical messages. This is important, as group prototypes are fuzzy, potentially blurring the line between descriptors moderate to high in prototypicality. This may make it difficult for outsiders who do not hold the identity in question to identify the most appropriate group descriptor to use in advertising without detailed research. Our findings reassure marketers, who may inadvertently use moderately rather than highly prototypical descriptors, that their campaign would still be equally effective.

5.3 Limitations and future directions

Future work should examine the role of hope in identity-marketing and explore potential boundary conditions. While we capture hope as a unidimensional construct, recent research has distinguished between two subdimensions, agency and pathways (e.g., Kelberer et al., 2018), and between promotion hope versus prevention hope (e.g., Choi et al., 2019). Future work should therefore investigate whether consumers at different levels of cognitive SI and affective SI would respond differently on these other dimensions of hope. For example, an argument could be made that, in line with their self-motive, uncertainty-reducers are more likely to experience prevention hope, whereas self-enhancers may experience promotion hope.
Going forward, given our argument that identity-linking messages low in prototypicality are not goal congruent with the self-motive driving uncertainty-reducers, future work should examine if and when such depictions low in prototypicality might be considered an identity threat. Further, while it is unlikely that marketing managers would intentionally use identity cues that are not positive, consumers may nevertheless perceive such cues as negative or even derogatory. Future work should test how consumers respond to perceived negative descriptors. Self-enhancers would presumably dislike them, because they conflict with their self-enhancement need. However, uncertainty-reducers may respond favourably, if the descriptor was accepted as highly prototypical, and therefore satisfying their need for uncertainty reduction.

A limitation of the current research is that Study 1 only distinguishes between male and female but failed to account for additional gender categories, such as non-binary or transgender. This binary gender distinction allowed us to draw on stereotype literature, which specifically looks at descriptors of females/males, when designing the manipulation. However, future research may wish to reflect a more current understanding of gender rather than sex assigned at birth. For example, more work is needed to identify which gender related descriptors would be considered to be high or low in prototypicality for non-binary consumers. In addition, consumers’ gender may be fluid, meaning how consumers relate to gender-based identity-linking messages is likely to change over time.

The current research assumes that group descriptors are clearly associated with particular genders and that people are aware of these prototypes. However, future research should investigate instances in which a particular social group (here gender) is described in terms of conflicting group descriptors or instances in which a given group descriptor is applicable to different social groups. Finally, the current research assumes that consumers can
confidently identify whether a group descriptor is prototypical. Future research may therefore wish to use a longitudinal approach to understand how prototypes develop over time.

Footnotes

1 Using PROCESS Model 3 we verify in Study 1 that cognitive SI and affective SI do not interact, nor was there a three-way interaction with the prototypicality condition.

2 The terms prototype and stereotype are sometimes used interchangeably in literature. Mostly, the term ‘prototype’ is used in self-categorisation theory to denote the specific attributes that people associate with ingroups in contrast against outgroups (Abrams and Hogg, 2010). However, when people use specific attributes to describe members of an outgroup, they engage in stereotyping (Abrams and Hogg, 2010). We draw on stereotyping literature because women have been shown to apply the relevant attributes purported to describe women by outgroup members, such as men, to themselves (see e.g., Hentschel et al., 2019).

References


Appendix A

Study 1 - Conditional effect of prototypicality on hope

Overview of additive multiple moderation model onto hope. To explore the difference between the moderately and highly prototypical conditions we use Helmert coding. Helmert coding first compares the low prototypicality condition to the moderate and high prototypicality conditions jointly, and then compares the moderate to high prototypicality conditions. We only report the comparison of interest here, which is between the moderately and highly prototypical conditions.

<table>
<thead>
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<th>b</th>
<th>t</th>
<th>p</th>
<th>95%CI</th>
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<td>.01</td>
<td>.12, .85</td>
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Prototypicality condition × Cognitive SI

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<td>Low</td>
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<tr>
<td>High</td>
<td>Low Affective SI</td>
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Prototypicality condition × Affective SI

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<td>Low Affective SI</td>
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<td>High</td>
<td>Low Affective SI</td>
<td>-1.76, 1.14</td>
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Self-enhancers

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<th>Affective SI</th>
<th>95%CI</th>
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<tbody>
<tr>
<td>Low</td>
<td>Low Affective SI</td>
<td>-0.31, 0.68</td>
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Uncertainty-reducers

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<td>Low Affective SI</td>
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<td>High</td>
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High Cognitive SI

<table>
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<tr>
<th>Affective SI</th>
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<tbody>
<tr>
<td>High</td>
<td>-0.002, 0.003</td>
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</table>

Note: Low = 16th percentile represents low levels of SI; High = 84th percentile represents high levels of SI

Appendix B

Study 2 - Conditional effect of construal level (CL) on hope

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<tr>
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<td>CL</td>
<td>.42</td>
<td>.65</td>
<td>.52</td>
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<td>.000</td>
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CL × Cognitive SI

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<td>Low Affective SI</td>
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CL × Affective SI

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<th>95%CI</th>
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<td>-.04, -1.3</td>
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Self-enhancers

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<th>95%CI</th>
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</thead>
<tbody>
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<td>High Affective SI</td>
<td>-2.55, -3.13</td>
</tr>
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<td>High</td>
<td>High Affective SI</td>
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Uncertainty-reducers

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<th>Affective SI</th>
<th>95%CI</th>
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</thead>
<tbody>
<tr>
<td>High</td>
<td>Low Affective SI</td>
<td>1.90, 2.71</td>
</tr>
<tr>
<td>High</td>
<td>High Affective SI</td>
<td>0.52, 3.28</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Cognitive SI</th>
<th>Affective SI</th>
<th>95%CI</th>
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</thead>
<tbody>
<tr>
<td>High</td>
<td>High Affective SI</td>
<td>-0.61, -1.91</td>
</tr>
</tbody>
</table>

Note: Low = 16th percentile represents low levels of SI; High = 84th percentile represents high levels of SI; Independent variable: CL (concrete vs. abstract)
Fig. 1. Conceptual model (Study 1)
Fig. 2. Conditional effects of prototypicality on hope (Study 1)
Fig. 3 Conditional effect of construal level on hope (Study 2)
### Table 1.

**Measurement items (Study 1 woman; Study 2 American)**

#### Cognitive social identity (Johnson et al., 2012) \( \alpha = .88 \) (.95)
- Your self-identity is based in part on being a woman (American)
- Being a woman (American) is very important to your sense of who you are
- Your sense of self overlaps with the identity of women (American)

#### Affective social identity (Johnson et al., 2012) \( \alpha = .94 \) (.98)
- You feel happy to be a woman (American)
- You are proud to be a woman (American)
- It feels good to be a woman (American)

#### Hope
- Study 1: Please indicate how much the advert made you feel hopeful (1=Not at all hopeful; 7=Very hopeful; adapted from Frijda et al., 1989)
- Study 2: Please indicate how much the advert made you feel hopeful/inspired/optimistic (adapted from Richins, 1997; Prestin, 2013, \( \alpha = .94 \))

#### Purchase intention (adapted from White et al., 2012) \( \alpha = .95 \) (.93)
- You would be likely to purchase the camera (travel organizer) shown in the advert
- Given the opportunity, you would want to purchase the camera (travel organizer) shown in the advert
- You would not want to purchase the camera (travel organizer) shown in the advert (reversed)

#### Perceived fit of the tagline with the product; Study 1: \( \alpha = .93 \)
- How well does the tagline fit the advertised camera? (0=not at all well; 6=very well)
- How appropriate do you think the tagline is for the advertised camera? (0=not at all appropriate; 6=very appropriate)

**NOTE:** All measurement used 7-point response scale (1 = strongly disagree; 7 = strongly agree) except where indicated. Study 2 in parenthesis unless otherwise indicated.
### Table 2.

Results of additive multiple moderation model onto hope, comparing conditions low vs. high in prototypicality (Study 1)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Hope</th>
<th>b</th>
<th>t</th>
<th>p</th>
<th>95%CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prototypicality condition</td>
<td></td>
<td>.08</td>
<td>.03</td>
<td>.97</td>
<td>-4.85, 5.01</td>
</tr>
<tr>
<td>Cognitive SI</td>
<td></td>
<td>-.65</td>
<td>-1.92</td>
<td>.06</td>
<td>-1.31, .02</td>
</tr>
<tr>
<td>Affective SI</td>
<td></td>
<td>.99</td>
<td>2.70</td>
<td>.01</td>
<td>.27, 1.71</td>
</tr>
<tr>
<td>Prototypicality condition × Cognitive SI</td>
<td></td>
<td>1.04</td>
<td>2.31</td>
<td>.02</td>
<td>.15, 1.93</td>
</tr>
<tr>
<td>Prototypicality condition × Affective SI</td>
<td></td>
<td>-.95</td>
<td>-2.13</td>
<td>.03</td>
<td>-1.84, -.07</td>
</tr>
<tr>
<td>Low Cognitive SI Low Affective SI</td>
<td></td>
<td>-.04</td>
<td>-.07</td>
<td>.95</td>
<td>-1.11, 1.04</td>
</tr>
<tr>
<td>Low Cognitive SI High Affective SI</td>
<td></td>
<td>-1.66</td>
<td>-2.04</td>
<td>.04</td>
<td>-3.26, -.06</td>
</tr>
<tr>
<td>High Cognitive SI Low Affective SI</td>
<td></td>
<td>2.30</td>
<td>2.52</td>
<td>.01</td>
<td>.50, 4.10</td>
</tr>
<tr>
<td>High Cognitive SI High Affective SI</td>
<td></td>
<td>.68</td>
<td>1.26</td>
<td>.21</td>
<td>-.38, 1.74</td>
</tr>
</tbody>
</table>

NOTE: Low = 16th percentile represents low levels of SI; High = 84th percentile represents high levels of SI