

## Identity Representation in Customization

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While it is agreed that contemporary consumption is a process of identity construction, the majority of research related to identity has focused on why certain products are chosen or why they become significant over time. Consumers now have the opportunity to construct representations of their identity and build them into products via customization. In this paper, we use three studies to demonstrate that consumers' identity motives interact with factors under the firm's control (i.e., design freedom) to influence product evaluations, product meaning, and satisfaction. All three studies engage participants in real customization tasks across three different product categories. Our findings highlight the power of personal identity motivation in influencing consumers' evaluations of their customized products, an effect that endures over time. Our research suggests that customization options offering a high degree of freedom (i.e., image upload) are only effective when certain identity motives are driving customization. Such a finding is important for firms striving to maximize the profitability of customized offerings.

The rapid growth of technological innovation is enabling consumers to construct and communicate their identities through products and services. “Delivering Your Image to the World,” in fact, is the value proposition touted by Custom Identity Apparel, a major on-line retailer of customized clothing. Similar identity-related promises are offered by customization firms across a wide variety of products: Identitydirect.com specializes in custom products for children, NIKEiD in running shoes, and Wii ID in custom skins for the gaming device. IDbottling.com even produces customized bottled water for individuals and corporations.

As identity is a driving force in consumption, it has received wide recognition in the marketing literature. Researchers have shown that identity influences judgments (e.g., Reed 2004), product choices (e.g., Berger and Heath 2007; Escalas and Bettman 2005; White and Dahl 2007), evaluations of advertisements (e.g., Forehand, Deshpande, and Reed 2002), and the value placed on prior purchases (e.g., Ahuvia 2005; Grayson and Shulman 2000; Kleine, Kleine and Allen 1995). With technological advances now giving consumers the opportunity to take on the role of designer, consumers are able to represent their identity by building aspects of it into a product’s design via customization. The goal of our research is to provide a better understanding of how and why identity-relevant motivations influence consumers’ expectations of and satisfaction with their customized products.

In this paper, we use three studies to demonstrate that consumers’ identity motives interact with factors under the firm’s control (i.e., design freedom) to influence product evaluations, product meaning, and satisfaction. All three studies engage participants in real customization tasks across three different product categories. The first study examines how the activation of an identity motivation moderates the influence of design freedom on consumers’ evaluations at the time of design and satisfaction with their customized product six weeks later.

The second study delves deeper into this relationship by isolating different identity motivations (personal and social) to better understand their respective effects. This study also demonstrates the influence of product meaning on evaluations and satisfaction. Finally, the third study examines how the situational activation of personal identity motivation moderates the effects of a chronic identity motivation (need for uniqueness) to influence consumers' reactions to customized products. Together, these studies seek to extend our understanding of how and why consumers value customized products.

### *IDENTITY AND CUSTOMIZATION*

Identities include two major components: a personal identity related to the independent self (i.e., individual traits, characteristics or goals) and a social identity related to the interdependent self (i.e., traits, characteristics and goals that are linked to group membership or personal relationships) (Kirmani 2009; Oyserman 2009). We propose that identity-based motivation, the “readiness to engage in identity-congruent action” (Oyserman 2009, p. 250), is a key factor both prompting consumers to engage in customization activities and influencing how they evaluate the resulting outcomes.

The extent to which a customized product (or any vehicle for identity representation, such as a personal web page or social networking site) enables consumers to represent their identity is likely an important determinant of product satisfaction. Indeed, prior research has demonstrated that consumers are willing to pay a premium for customized products as compared to their mass-produced counterparts (Franke and Piller 2004). Both a superior fit with consumers' preferences (Franke, Keinz, and Steger 2009) and consumers' sense of pride and accomplishment (the “I designed it myself” effect) contribute to the premium (Franke, Schreier, and Kaiser 2010; see

also Norton, Mochon, and Ariely 2010). We argue, however, that these factors alone cannot fully explain consumers' dominant preferences for products they customize. Consumers' motivation to represent their identity is also likely to be important.

Researchers have recognized that a better understanding of consumers' motivations and goals at the time of the customization task will provide companies with a competitive advantage in developing the design task itself (see Randall, Taylor, and Ulrich 2005). Rather than just hoping that consumers will develop a special attachments with products following purchase, marketers can create opportunities for consumers to do so during the design process by cueing certain identity-related motives and providing customization options valued by the consumer.

### *CUSTOMIZING THE CUSTOMIZATION PROCESS*

Firms offering customization opportunities face a number of decisions that determine the quality of consumers' design experiences and their satisfaction with customized products (Dellaert and Stremersh 2005; Randall, Taylor, and Ulrich 2007). Chief among these decisions is the design of the toolkit that consumers use in the customization process. Toolkits vary in their simplicity and the degrees of freedom they afford the consumer (Franke and Piller 2003; Franke, Schreier, and Kaiser 2010; von Hippel and Katz 2002): simple toolkits allow consumers to choose among pre-set options such as colors, sizes, and accessories (see LLBean.com and Timbuk2.com for examples), while more complex toolkits allow consumers to upload their own images. These more complex toolkits afford a greater level of creativity by providing "users with true design freedom – as opposed to the mere opportunity to choose from lists of options that is currently offered by mass customizers" (von Hippel 2001, p. 248).

Does this additional freedom translate into greater consumer satisfaction? The answer to this question has important bottom-line implications if this extra freedom comes at a cost to companies (Franke and Piller 2004; Franke and Schreier 2008; von Hippel 2001). Franke, Schreier, and Kaiser (2010) find a positive correlation between the level of design freedom offered and consumers' willingness to pay for their customized product. They attribute this finding to the higher degree of subjective contribution to the design on the consumers' part (Franke, Schreier, and Kaiser 2010). We expect that this premium is enhanced when consumers' identity-related motivations are activated because higher design freedom better enables consumers to build more unique, meaningful aspects of their identity into the customized product. More formally,

- H1a: Consumers' reactions to customized products (i.e., their evaluations at the time of design and satisfaction at delivery) will be higher when design freedom is high (vs. low).
- H1b: This effect will be enhanced when the consumers are motivated by an identity goal.

## *STUDY 1*

### *Stimuli and Procedure*

Customizable "skins" (vinyl covers for products such as cell phones or MP3 players) were selected as the product category for the study based on their affordability, relevance to the undergraduate participant population, and the type of customization options provided by the firm (see Appendix A for examples). MyTego.com agreed to provide us with unique coupon codes (at a 50% discount) and to oversee the shipping of our batched orders. This cooperation allowed us to distribute the products to the participants personally and to collect satisfaction measures.

Participants were 95 undergraduates from a large North American university who participated in this study for both course credit and receipt of the skin. The study was administered using on-line survey software. Participants completed the study at any time during a 48 hour period.

Participants received an email message containing their id number, coupon code, and link to the on-line survey. Upon opening the survey, participants were given an overview of the study, exposed to the manipulations, and directed to open the MyTego.com website in a separate window to customize their skins. Once they had decided on a final design, participants completed the remaining measures on the survey. Approximately ten days following the study, we received and distributed the completed skins and collected the satisfaction measures.

### *Experimental Design*

Two factors were manipulated between-participants: (1) Identity Prime (identity prime vs. no prime) and (2) Design Freedom (low vs. high).

### *Independent Factors*

*Identity prime.* Prior to the design task, participants identified the product (cell phone, MP3 player, Blackberry) for which they planned to design a skin. Participants in the “no prime” condition were then asked two open-ended questions about the functions and features of their device. In the first, they described “the most important functions and features of the device,” and in the second, they described “the key functions and features” they would mention when trying to convince someone that their device was a good product. Participants in the “identity prime” condition were asked two open-ended questions designed to highlight their relationship with the

device, prompting them to think of it as an identity-relevant product. In the first, they described “how long they had had the device, how often it is with them, and how closely connected they are to it;” in the second, they were asked to think about and describe the important events in their life where the device had played an important role.<sup>1</sup>

*Design freedom.* The MyTego website allows consumers to either upload their own unique images or to select and manipulate any of the 300+ images stored in their library when designing their own skin. Like Franke, Schreier, and Kaiser (2010), we manipulated the design freedom offered by the toolkit: participants in the “low design freedom” condition were told to use only the images stored in the library when customizing their skin; participants in the “high design freedom” condition were told they could either upload their own unique images or use the MyTego library. Importantly, even participants in the “low design freedom” condition could create a genuinely unique skin by manipulating and combining the different library images during the design process. To assess the effectiveness of this manipulation, we asked participants the following question (on a 9-point scale): “How likely is it that someone else would design a skin that looks almost exactly like the one you just designed?”.

#### *Dependent Measures at the Time of Customization*

*Evaluations of the customized skin.* Participants evaluated their skins on four 7-point scales, indicating how attractive, well-designed, and stylish their skin was, and how satisfied they were with their design. All items loaded on a single factor and were averaged to create an overall evaluation measure ( $M = 5.2$ ; Range: 1.5 to 7;  $\alpha = .89$ ).

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<sup>1</sup> Participants’ responses were reviewed by two raters who were blind to the participants’ prime condition. Their coding reveals a successful manipulation. All participants in the “identity prime” condition described life events, while those in the “no prime” condition focused solely on the device’s functionality.

*Covariates.* In their paper, Franke, Schreier, and Kaiser (2010) define the “I designed it myself” effect as “the value increment a subject ascribes to a self-designed object, arising purely from the fact that she feels like the originator of that object” (p. 125). Through several studies, the authors demonstrate that consumers are willing to pay more for objects they designed themselves than for identical (or comparable) objects designed by a firm. In their third study (“Feeling of Accomplishment as a Mediator of the ‘I designed it myself’ effect”), the authors use three measures to assess these feelings of accomplishment: “When I look at the ski I have self-designed, the feeling I have can best be described by the word ‘pride’”; “I feel proud because I did a good job”; and “I feel proud of having accomplished something” (p. 132). Thus, to control for the potential influence of the “I designed it myself” effect (Franke, Schreier, and Kaiser 2010), participants reported the pride and accomplishment they felt from having created their design. These two items were positively correlated ( $r = .60, p < .001$ ) and were averaged and used as a covariate in the analyses along with participants’ age and whether or not they had uploaded their own pictures.

#### *Dependent Measure Following Customization*

*Satisfaction.* Following the design task, eighty-five percent of participants ( $n=81$ ) requested that we order their skins. Ten days later, 69 participants actually picked them up and provided satisfaction ratings. Participants reported how well the skin fit their expectations, how likely they were to put it on the intended device, and how excited they were to show it to other people ( $M = 6.6$ ; Range = 1 to 9;  $\alpha = .91$ ). The independent factors did not influence pick-up behavior.

## Results

*Preliminary analysis.* A two-way ANOVA was used to assess the effectiveness of the design freedom manipulation. The results show only a main effect of the design freedom manipulation ( $F(1, 94) = 10.3, p < .01$ ). Participants in the low freedom condition reported that it was significantly more likely that someone else would design the exact same skin ( $M_{\text{High Design Freedom}} = 3.6$  vs.  $M_{\text{Low Design Freedom}} = 5.3$ ).

A set of two-way ANOVAs was used to test hypothesis 1 and to assess the influence of the two manipulated factors on the perceived value of the customized products.

*Evaluations of the customized skin.* Consistent with hypothesis 1a, evaluations were higher when design freedom was high ( $M_{\text{High Design Freedom}} = 5.6$  vs.  $M_{\text{Low Design Freedom}} = 4.8$ ;  $F(1, 94) = 6.61, p = .01$ ). Hypothesis 1b predicts this difference will be enhanced when participants are exposed to the identity prime, and the predicted interaction was significant ( $F(1, 94) = 4.64, p < .05$ ). When participants were primed with identity, the level of design freedom mattered significantly ( $M_{\text{Identity Prime, High Design Freedom}} = 5.8$  vs.  $M_{\text{Identity Prime, Low Design Freedom}} = 4.7$ ;  $F(1, 47) = 4.14, p < .05$ ). When participants were not exposed to the identity prime, however, the effect was less pronounced ( $M_{\text{No Prime, High Design Freedom}} = 5.5$  vs.  $M_{\text{No Prime, Low Design Freedom}} = 5.0$ ;  $F(1, 46) = .86, n/s$ ; see Figure 1a). These effects were observed after controlling for the “I designed it myself” effect which was positive and significant ( $F(1, 94) = 47.7, p < .01$ ). No other covariates were significant.

Insert Figure 1 about here

*Satisfaction.* At delivery ten days later, these effects remained. Consistent with hypothesis 1a, those with high design freedom reported higher levels of satisfaction with their actual skins than did those who were limited to the library’s images ( $M_{\text{High Design Freedom}} = 7.0$  vs.

$M_{\text{Low Design Freedom}} = 5.7$ ;  $(F(1, 68) = 9.11, p < .01)$ . A significant interaction also emerged ( $F(1, 68) = 3.91, p = .05$ ). Consistent with hypothesis 1b, the effect was larger when the identity prime had been active at the time of design ( $M_{\text{Identity Prime, High Design Freedom}} = 7.3$  vs.  $M_{\text{Identity Prime, Low Design Freedom}} = 5.3$ ;  $(F(1, 36) = 11.52, p < .01)$ ) than when it had not ( $M_{\text{No Prime, High Design Freedom}} = 6.6$  vs.  $M_{\text{No Prime, Low Design Freedom}} = 6.1, F(1, 32) = 1.05, n/s$ ; see Figure 1b). The “I designed it myself” effect measured at time 1 remained positive and significant ( $F(1, 68) = 8.41, p < .05$ ; see Figure 1b).

### *Discussion*

This study demonstrates that consumers given greater design freedom evaluate their custom products higher and are more satisfied at delivery than those given less design leeway. This effect, however, was enhanced by priming consumers with identity-based motivations, and the influence of the identity prime was significant even after controlling for the “I designed it myself” effect (Franke, Schreier, and Kaiser 2010). Importantly, the effect of the identity prime remained following the ten day delay between design and delivery. Thus, Study 1 provides initial evidence that consumers have a desire to express their identity via customized products.

While the findings validate the effectiveness of the positioning strategies used by identity-based customization firms emphasizing identity value, the results from this study are unable to specify the type of identity motivation underlying the effects. When identity-primed participants were asked to think about the events in their lives where the device had played an important role, we found great variance in the types of events and experiences that participants described. Some, for example, described events related to their social or interdependent self (e.g., “The most moving experience that my phone provided me was a way to contact my best friend

that went to school at Virginia Tech after the school shooting. It helped me contact him and relieve a lot of my fear that I had built up inside.”) Others, however, discussed important personal events that reflected their individual achievements (e.g., “I was skiing in the US extreme skiing championships and I needed my iPod blasting Johnny Cash in my ear to get me pumped up.”) Further, the devices themselves may cue different motivations: cell phones are used to connect with others (social); iPods are often used to isolate oneself from others (personal); multi-purpose devices like the iPhone offer a combination of the two. Thus, in order to better understand the influence of different identity motives on customization, it is important to isolate the effects of these different identity-based motivations (personal and social).

#### *PERSONAL AND SOCIAL IDENTITY-BASED MOTIVATIONS*

Prior research has noted that people are motivated to establish and maintain a personal and unique identity, distinct from that of others (i.e., autonomy seeking), yet representative of the interpersonal connections that also define the self (i.e., affiliation seeking) (e.g., Brewer 1991; Kleine, Kleine and Allen 1995; White and Argo 2010). In our next study, we seek to understand how these two motivations will differentially influence consumers’ reactions to their customized products.

While we often think of people’s identities as stable entities, identity is also “highly malleable and situation-sensitive” such that different aspects of an individual’s identity can be cued to subsequently influence actions and judgments (Oyserman 2009, p. 250). Thus, consumer’s chronic independent (personal) and interdependent (social) motivations can be made more or less salient by situational factors (e.g., Brewer and Gardner 1996). These motivations have important implications for the way the self is construed and ultimately represented (e.g.,

Brewer 1991; Brewer and Gardner 1996; Kleine, Kleine and Allen 1995; Markus and Kitayama 1991; Singelis 1994).

*Social identity.* According to Oyserman (2009), social identity-based motivation suggests that people are people are ready to act “in ways that are congruent with beliefs about group membership” (p. 252). In addition to specific group memberships, social identity encompasses the interpersonal levels of self-representation: the aspects of the self that are derived from connections and relationships with significant others (Brewer and Gardner 1996). In the customization context, this motivation could prompt consumers to build meaning and value into a product by including design elements which clearly indicate the consumers’ membership in certain groups or relationships with important people (White and Dahl 2007).

*Personal identity.* Personal identity “refers to traits and characteristics that are unrelated to group membership, e.g., being smart” (Kirmani 2009, p.11). Personal identity motivations, therefore, prompt people to act in ways congruent with those traits and values that define them as a unique individual (Oyserman 2009). When customizing products, this motivation would likely prompt consumers to incorporate images or other content into their design which would signify aspects of their unique, personal accomplishments or traits.

With high levels of design freedom, consumers can upload their own unique images and content, a capability that is likely more valued by those driven by personal rather than social identity motivations. Design freedom allows consumers to achieve a more unique solution, which is consistent with a personal, independent identity motivation. Allowing consumers to incorporate design elements that are less likely to have a shared, public meaning through image upload will provide greater value to participants who are motivated by a personal identity goal. For participants who are motivated by a social, interdependent identity motivation, this design

freedom may provide little additional value as they may prefer design elements containing a shared public meaning. Thus, we make the following prediction:

- H2a: When consumers are motivated by a personal identity goal, reactions to the customized product (i.e., evaluations at the time of design and satisfaction at delivery) will be higher when design freedom is high (vs. low).
- H2b: This effect will be attenuated when consumers are motivated by a social identity goal.

An additional goal of Study 2 is to gain a better understanding of *how* different types of identity motivations influence consumers' reactions to customized products. We propose that the mechanism through which identity works is through meaning creation (Richins 1994a, b). Different types of toolkits or interfaces enable consumers to build varying levels of meaning into their products, and the activation level of different identity-related motivations likely influences how much meaning consumers build in to the product. Whether public or private in nature, meaning is "multiply determined and multidimensional" (Richins 1994a; p. 506). Thus, measures of meaning should be able to capture the meaning derived from an object's ability to represent both consumers' interpersonal ties and independent traits. Formally, we propose:

- H3: Product meaning will mediate the effects in hypothesis 2.

## *STUDY 2*

### *Stimuli and Procedure*

In this study, participants designed customized travel mugs. Like Study 1, this product category was also chosen because of its affordability and relevance to participants. Zazzle.com, an industry leader in customized products, agreed to provide the mugs at cost (\$15 per mug) and

to oversee the shipment of our orders. This allowed us to distribute the products and collect measures at the time of delivery.

Rather than visiting the live website as they did in Study 1, participants in this study made all relevant design decisions within the survey that was distributed via email. This change meant that participants were unable to experiment with different designs “live” on the website as they had in Study 1, but we provided images of the mugs and all related design decisions to make the design process more realistic. The primary benefit of such an approach was that the “low design freedom” participants were unaware that uploading personal images was even a possibility. As such, they were less likely to feel unduly restricted by the manipulation.

Participants were 87 undergraduates from a large North American university who participated in this study for both course credit and receipt of the mug they designed. Two participants did not complete the full study and were subsequently removed from the analyses. This study was also administered using on-line survey software, with participants completing the study when and where they chose (within a 48 hour window). The survey provided an overview of the study, the relevant manipulations, directions for the design process, and all relevant measures. Six weeks following the study, the completed mugs were distributed and satisfaction measures were collected.

### *Experimental Design*

Two factors were manipulated between-participants: (1) Motivation Primed (social vs. personal identity) and (2) Design Freedom (low vs. high).

### *Independent Factors*

*Motivation primed.* Prior to designing their mugs, all participants were exposed to one of two identity motivation primes: social or personal.<sup>2</sup> Participants read the following paragraph:

“Many designers (e.g. Michael Graves, Philippe Starck) have attributed their success to having a really good understanding of who their customers are. Since you’ll be acting as a designer of your own product, take some time to think about who you are and what defines you.”

The *social identity* condition followed with: “Specifically, think about the relationships, interpersonal connections, and group memberships that are important to you. In the space below, please list at least four special times that you've shared with the important people in your life.” Following that list, they were told: “In the space below, please describe why you chose each of these as important times that you've shared with people in your life.”

The *personal identity* condition followed with: “Specifically, think about the experiences, accomplishments and personality traits that make you a unique individual. In the space below, please list at least four important things that distinguish you from everyone else.” Following that list, they were told: “In the space below, please describe why you chose each of these as things that set you apart.”

*Design freedom.* Participants in the “high design freedom” condition were given the chance to either upload their own images or to select and manipulate any of the 80 images stored in their library. Participants in the “low design freedom” condition were told to use only the 80 images provided in the library when customizing their mug, and were unaware of the option to upload their own images. Even with this limitation, participants could create a genuinely unique mug through the other design decisions such as image size and the inclusion of text. Two items were used to assess the effectiveness of this manipulation. Participants indicated how much they agreed that 1) there were plenty of options to pick from and 2) they felt frustrated by the library of images and wish there had been more options. The latter item was reverse-scored and the two were averaged to create a manipulation check.

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<sup>2</sup> As in Study 1, two raters who were blind to the participants’ prime condition reviewed participants’ open-ended responses to confirm effective manipulations.

### *Dependent Measures at the Time of Customization*

*Evaluations of the customized mug.* Participants evaluated their customized product on the same four items used in Study 1. All items loaded on a single factor and were averaged to create an overall evaluation measure ( $M = 5.4$ ; Range: 1.0 to 7.0;  $\alpha = .81$ ).

*Product meaning.* A new index was created to capture the level of meaning that the mug held for the participant. Four measures were adapted from Richins (1994a), and the items were selected such that either one's social or personal identities could contribute to the product's meaning. Participants indicated their agreement with the following statements: "This mug reminds me of important events in my life"; "The design I put on this mug really means something to me"; "The thing represented on this mug is of high importance to me."; and "The image on this mug reminds me of something I am proud of." The items were averaged for an overall measure of meaning ( $M = 4.7$ ; Range: 1.0 to 8.0;  $\alpha = .82$ ).

*Involvement.* To test for potential differences in task involvement, three measures were used. Participants indicated their agreement with the following: "I put a lot of effort into designing this mug"; "I really care about having a well-designed mug"; and "I was really engaged in the design task." The items were averaged for an overall measure of involvement ( $M = 4.8$ ; Range: 1.0 to 7.0;  $\alpha = .86$ ). Time spent on the entire study (including the design process) was also used as a measure of involvement ( $M = 33.3$  minutes, Range: 3.0 to 128.0).

*Covariates.* As in study 1, the source of the image (library or upload) and the age of the participant were included as covariates.

### *Dependent Measure at Delivery*

*Satisfaction.* Following the design task, 90 percent of participants ( $n=78$ ) of the 85 participants requested that we order their mugs. Six weeks later, a series of email reminders was sent to the participants to let them know that the mugs had arrived and to schedule a pick up time. Fifty participants actually picked them up and provided satisfaction ratings. There was no influence of the manipulations on pick-up behavior. Participants reported how well the mug met their expectations, how well-designed their mug was, how much they would enjoy using it, how likely they were to actually use it, and how often they were likely to use it ( $M = 7.5$ ; Range: 3.2 to 9.0;  $\alpha = .87$ ).

### *Results*

*Preliminary analyses.* To assess the effectiveness of the design freedom manipulation, a two-way ANOVA was used and revealed only a main effect of the design freedom manipulation ( $F(1, 84) = 4.6, p < .05$ :  $M_{\text{High Design Freedom}} = 5.4$  vs.  $M_{\text{Low Design Freedom}} = 4.1$ ).

A two-way ANOVA was also used to determine whether the manipulations significantly influenced participant involvement. The results for both the self-reported measures and the objective time measure indicated no such effects (both  $F$ 's  $< 1.0$ ).

*Evaluations of the customized mug.* A two-way ANOVA revealed a significant interaction between the two independent factors ( $F(1,84) = 4.6, p < .05$ ). Participants reported higher evaluations of their mugs when allowed high versus low design freedom ( $M_{\text{High Design Freedom}} = 5.6$  vs.  $M_{\text{Low Design Freedom}} = 5.1$ ). Consistent with hypothesis 2, this effect was more pronounced for those primed with personal identity motivations ( $M_{\text{Personal, High Design Freedom}} = 5.7$  vs.  $M_{\text{Personal, Low Design Freedom}} = 4.7$ ;  $F(1, 42) = 8.4, p < .01$ ) than with social identity motivations ( $M_{\text{Social, High Design Freedom}} = 5.5$  vs.  $M_{\text{Social, Low Design Freedom}} = 5.5$ ;  $F(1, 41) = .1, n/s$ ; see Figure 2a).

*Product meaning.* For product meaning, a similar interaction was present ( $F(1,84) = 4.1, p < .05$ ). Participants primed with personal identity motivations reported greater levels of meaning associated with their mug when they had high versus low design freedom ( $M_{\text{Personal, High Design Freedom}} = 5.8$  vs.  $M_{\text{Personal, Low Design Freedom}} = 3.8; F(1, 42) = 5.3, p < .01$ ). For those primed with social identity motivations, however, design freedom had little influence on the meaning they perceived their mug to hold ( $M_{\text{Social, High Design Freedom}} = 4.8$  vs.  $M_{\text{Social, Low Design Freedom}} = 4.5; F(1, 41) = .10, n/s$ ; see Figure 2b). Regression was used to test for mediation, and product meaning was added to the model predicting evaluations. Product meaning was significant ( $F(1, 84) = 4.68, p < .05$ ), and the previously significant interaction dropped below significance ( $F(1, 84) = 1.61, p > .20$ ; Sobel = 2.03,  $p < .05$ ), suggesting that the meaning participants ascribed to the mug explained the pattern of evaluations observed.

Insert Figure 2 about here

*Satisfaction.* A two-way ANOVA was used to test for the effects of the independent factors six weeks later at delivery. The analysis revealed a significant interaction between the two manipulated factors on satisfaction at pickup ( $F(1, 49) = 4.13, p < .05$ ). Similar to the results observed for evaluations, design freedom had little impact on participants motivated by their social identity ( $M_{\text{Social, High Design Freedom}} = 7.0$  vs.  $M_{\text{Social, Low Design Freedom}} = 7.6; F(1, 22) = .85, n/s$ ). Participants motivated by their personal identity, however, were significantly more satisfied when given high rather than low design freedom ( $M_{\text{High Design Freedom}} = 8.1$  vs.  $M_{\text{Low Design Freedom}} = 7.1; F(1, 26) = 5.56, p < .05$ ; see Figure 2c).

## *Discussion*

Study 2 demonstrates that higher levels of design freedom translate into higher evaluations, product meaning, and satisfaction when participants are motivated by their personal, but not their social identities. As in Study 1, the influence of the prime and design freedom on evaluations was sustained over time. Six weeks later at pickup, we observed higher levels of satisfaction from those given greater design freedom, but only when a personal identity was made salient at the time of design. Importantly, involvement did not differ across conditions, and the number of participants given high design freedom who chose to upload a picture was virtually equivalent across motivation conditions.

Further evidence of this connection between personal identity motivations and customization value could help firms both better position themselves and design the customization experience more effectively. However, it could be argued that the results from Studies 1 and 2 are simply due to the fact that personal identity motivations better match the design freedom manipulation than do social identity motivations. Higher design freedom enabled participants to achieve a more unique solution, and this ability was valued more by those primed with their personal identity. Participants primed with a social identity motive were thinking about their identity as it relates to others, placing a greater value on shared identity representations. Thus, the more restrictive toolkit did not have the same negative influence on evaluations and satisfaction as it had for those primed with a personal identity motive. The product meaning mediation supports this explanation: participants in the social identity condition were able to create meaningful designs regardless of the level of design freedom provided. Participants in the personal identity condition, however, were unable to build in the same level of meaning when their design freedom was restricted. It is important to note that both the social and personal

identity motivation manipulations encouraged participants to think of themselves as a special person, either through the important events they had shared with others (social) or through the events and traits that distinguished them from others (personal). In neither of these conditions was the individual's distinctiveness threatened.

Thus, to demonstrate more convincingly that personal identity motivations are the key drivers of the observed effects, we employ a different manipulation of this drive and examine the interplay between chronic and contextually created needs for differentiation.

### *PERSONAL IDENTITY MOTIVATION AND CUSTOMIZATION*

As Berger and Heath (2007) indicate, individuals have a “drive to differentiate themselves from others,” a need for autonomy influenced both by the individual's relatively stable need for uniqueness (Snyder and Fromkin 1977; Tian, Bearden, and Hunter 2001) and by situational factors leading the person to feel undifferentiated (p. 121). This drive is quite similar to the motivations attached to one's personal identity. Since these motivations are thought to be influenced by both chronic and situational factors, we measure the former and manipulate the latter in the following study to better isolate the influence of personal identity motives on evaluations of customized products.

*Need for uniqueness.* Consumers are driven to acquire and display their possessions in order to differentiate themselves from others. Tian, Bearden, and Hunter (2001) suggest that individuals vary in their drive for this differentiation. Consumers' need for uniqueness (NFU) is defined as “an individual's pursuit of differentness related to others that is achieved through the acquisition, utilization, and disposition of consumer goods for the purpose of developing and enhancing one's personal and social identity” (p. 50). We propose that the influence of NFU will

extend past the realm of mass-produced consumer goods to also influence the way in which consumers evaluate customized products. All else being equal, we expect consumers' NFU to be positively-related to the consumers' evaluations of the customized products they create (Franke and Schreier 2008).

*Situational factors.* Situational influences can heighten (or lessen) the influence of chronic NFU. When consumers are led to feel less differentiated, their chronic need for uniqueness will likely exert a strong effect, with those high in chronic need valuing or asserting their uniqueness to a much greater degree than those with a less pressing chronic need. Evidence of such an effect could manifest itself in how consumers evaluate a customized product and the meaning they build into it. When situations lead consumers to feel differentiated (e.g., by making salient their personal identity), however, the influence of their chronic need is likely to be less powerful. More formally,

H4a: Consumers' evaluations of their customized product will be positively related to their chronic need for uniqueness.

H4b: This effect will be attenuated when consumers' personal identity is made salient.

We test this hypothesis and the underlying effects in the following study.

### *STUDY 3*

#### *Stimuli and Procedure*

Custom t-shirts were chosen as the stimuli for this study because they are relevant to the undergraduate population and like the products used in the first two studies, can be customized on purely aesthetic dimensions. Like Studies 1 and 2, online survey software was used to administer this experiment, allowing participants to complete it at a time and location of their choosing (within a 48 hour window). All participants were directed to open the design website

([www.youdesignit.com](http://www.youdesignit.com)) in a separate window and to design a t-shirt using the company's toolkit. We chose this company, in part, because the website's toolkit is simple to use, does not require participants to register in order to save a design, and has an extensive library of images available on the site. Further, the website does *not* allow consumers to upload their own image, thus insuring that design freedom was held constant across all participants.

Sixty-seven undergraduates from a large North American university participated in this study for course credit. Participants received an email with a link to the on-line survey, and upon opening it, were given an overview of the study which contained the manipulation. Participants were directed to open the youdesignit.com website, and once their designs were complete, they emailed their designs to a research assistant and completed the remaining measures in the survey.

### *Experimental Design*

In this study, personal identity motivation was manipulated between subjects (personal identity salient vs. personal identity not salient) while need for uniqueness was measured.

### *Independent Factors*

*Personal identity motivation.* Prior to the design task, participants read an overview of the study. When personal identity motivation was salient, the description read (emphasis added):

We are working with a customization company that is particularly interested in understanding how individuals like you design their T-shirts. The company wants to learn about the things that influence the design experience that each unique individual has while on their website. Because the company will soon have the ability to program the website to fit each individual's specific needs, they want to understand how you personally feel at different stages of the design process.

When personal identity motivation was not made salient, the description read:

We are working with a customization company that is particularly interested in understanding how college-age students design T-shirts. The company wants to learn about the things that influence the design experience for the college students across the country who use their website. Because the company will soon have the ability to program the website to fit the specific needs of college students in the US, they want to understand how members of this large group of consumers feel at different stages of the design process.

As in Study 2, involvement was measured. Further, the survey software captured the actual amount of time spent on the task. Neither of these measures was significantly influenced by this manipulation (both overall  $F$ 's < 1).

*Need for uniqueness.* Following the customization task and its relevant dependent measures, all participants completed the NFU scale. To shorten the battery of questions, we used only the creative choice counter-conformity subcomponent of the scale (Tian, Bearden, and Hunter 2001). This portion of the scale seemed the most relevant to the customization context as it emphasizes uniqueness while still seeking social approval. According to Tian, Bearden, and Hunter (2001), “creative choice counter-conformity reflects that the consumer seeks social differentness from most others but that this consumer makes selections that are likely to be considered good choices by these others” (p. 52). Participants completed 11 measures (each on a 5-point scale). Examples of these measures include: “I have sometimes purchased unusual products or brands as a way to create a more distinctive personal image” and “I often look for one-of-a-kind products or brands so that I create a style that is all my own.” Responses were summed to create a measure of need for uniqueness ( $M = 35.93$ ; Range: 18.0 to 55.0;  $\alpha = .91$ ). An ANOVA was used to insure that need for uniqueness was unaffected by the identity salience manipulation. Importantly, the need for uniqueness reported in the personal identity salient

condition did not differ significantly from that reported in the personal identity not salient condition ( $M_{\text{Personal Identity Salient}} = 35.27$  vs.  $M_{\text{Personal Identity Not Salient}} = 36.55$ ;  $F(1, 66) = .40$ , n/s).

### *Dependent Measures*

Participants' age was the only covariate used in this study, as all participants were confined to the library of images during their design.

*Evaluations of the customized t-shirts.* The same four items used in the first two studies were used to measure participants' evaluations of the shirts ( $M = 4.9$ ; Range: 1.3 to 7.0;  $\alpha = .83$ ).

*Product Meaning.* The items used to form the product meaning index from Study 2 were also adapted for the t-shirt context ( $M = 4.5$ ; Range: 1.0 to 7.0;  $\alpha = .93$ ).

### *Results*

*Evaluations of the customized t-shirts.* Following Irwin and McClelland (2003), Need for Uniqueness was treated as a continuous measure, and regression was used to test the independent and interactive effects of the independent variables.

The main effect of participants' NFU on evaluations predicted by hypothesis 4a was supported ( $\beta = .43$ ,  $t = 2.99$ ,  $p < .01$ ), and a main effect of motivation salience emerged as well ( $\beta = 15.9$ ,  $t = 2.42$ ,  $p = .01$ ). The main effects were qualified by an interaction ( $\beta = -.39$ ,  $t = -.20$ ,  $p < .05$ ). To better interpret the interaction, we used a spotlight analysis (Fitzsimons 2008; see Figure 3a) which demonstrated support for the pattern predicted by hypothesis 4. The slope of NFU was significant and positive when personal identity motivation was not made salient ( $\beta = .08$ ,  $t = 2.11$ ,  $p < .05$ ). When the motivation was made salient, however, the slope of NFU was not significantly different than zero ( $\beta = -.01$ ,  $t = -.45$ , n/s).

*Product meaning.* Regression revealed a main effect of participants' NFU on product meaning ( $\beta = .12$ ,  $t = 2.65$ ,  $p < .01$ ), and a main effect of motivation salience ( $\beta = 4.45$ ,  $t = 2.12$ ,  $p < .05$ ). Here, the main effects were also qualified by an interaction ( $\beta = -.11$ ,  $t = -1.98$ ,  $p < .05$ ; see Figure 3b). Again, the slope of NFU was significant and positive when personal identity motivation was not made salient ( $\beta = .12$ ,  $t = 2.59$ ,  $p = .01$ ). When the motivation was made salient, the slope of NFU was not significantly different than zero ( $\beta = .02$ ,  $t = .49$ , n/s).

To test for mediation, product meaning was added to the model predicting evaluations. Meaning was significant ( $\beta = .49$ ,  $t = 5.57$ ,  $p < .01$ ), and both the main effects as well as the interaction dropped below significance. Sobel tests confirmed that meaning mediated the main effect of NFU (2.35,  $p < .01$ ), the main effect of motivation salience (1.96,  $p < .05$ ) and marginally, their interactive effect (1.81,  $p = .06$ ).

Insert Figure 3 about here

### *Discussion*

The results from this study demonstrate that personal identity motivations, both chronic and situational, play a significant role in influencing evaluations of customized products. For participants whose personal identity motivation was not salient, chronic need for uniqueness played a significant role in influencing evaluations of the customized t-shirt. Making a personal identity motivation salient removed that influence.

Since prior research (Franke and Schreier 2008) suggests that that product uniqueness drives evaluations, it comes as no surprise that consumers with a chronic need for uniqueness tend to evaluate their products more favorably. However, a more compelling result from this study is that, by simply changing a few words to prime a personal identity motive, marketers can improve consumers' product evaluations for those lacking the chronic drive. The naming of

many of these customization sites implies that our findings confirm what the firms already believed (e.g., myHeinz.com, MiAddidas.com, myMMs.com, Dell4U.com).

### *GENERAL DISCUSSION*

Whether customizing a coffee mug or designing a personal webpage, consumers are often torn between representing their personal and social identities. (How many people have struggled to identify the “right” profile picture to upload to Facebook or background image for their computer?) As consumers face more opportunities and challenges to represent their identities digitally, it is important to understand how different types of identity motivations influence the effectiveness of firms’ initiatives to yield more positive evaluations and greater satisfaction with those outcomes.

By engaging participants in real customization tasks, the three studies presented here examine the influence that identity-related motivations have on consumers’ reactions to customized products. These studies demonstrate that simply making salient an identity motivation prior to design can significantly influence product evaluations, product satisfaction and the effectiveness of the customization options (i.e., design freedom). Franke and Schreier (2008) suggest that providing consumers with a sufficiently large solution space is essential for customization companies. Our research qualifies this finding, suggesting that customization options offering a high degree of freedom (i.e., image upload) are only effective when certain identity motives are driving customization. Such a finding is important for firms striving to maximize the profitability of customized offerings. In their recent review article, Arora et al. (2008) note that “the long-term impact and profitability of customization has not...been analyzed systematically” (p. 309). To become a “smart customizer,” a firm must attain a solid

understanding of the sources of value that customization brings to their consumers (Jaruzelski and Jones 2007).

### *Theoretical Contributions*

The findings of our studies show that consumers are now capable of building their identity into a product via customization. Rather than simply choosing a divergent mass-produced option to signal their unique personality to others (Berger and Heath 2007), consumers can more explicitly represent both their social or personal identity to others. Further, consumers' possessions no longer have to attain special meaning over time. Special meaning can now be built into the product from the outset.

In the literature on special possessions, assessments of a product's "specialness" tend to occur retrospectively, with consumers assigning value to products that have typically been in their possession for some time. Further, consumers asked to identify special possessions tend to overwhelmingly mention products that have been mass-produced (e.g., Richins 1994a; Grayson and Shulman 2000; Kleine, Kleine and Allen 1995). Interestingly, products that consumers identify as "special" often derive their meaning from their ability to represent either their owner's interpersonal ties (i.e., social identity) or their owner's individuality (i.e., personal identity) (Ahuvia 2005; Arnould and Wallendorf 1994; Kleine, Kleine and Allen 1995; Richins 1994a, b). Our research demonstrates that consumers may engage in customization tasks to achieve similar sources of identity value. Rather than simply hoping that consumers will develop a special meaning with products following purchase (during use), marketers can create opportunities for consumers to do so during design.

Our research also makes a theoretical contribution by demonstrating that different types of identity motivations (personal and social) are differentially responsive to the offerings provided by customization firms. In Study 2, consumers with a social identity motivation appear to be quite satisfied with somewhat restricted design options; these people demonstrated an ability to create meaningful products regardless of the amount of design freedom allowed. Consumers with personal identity motivations, however, were far more sensitive to design restrictions. Study 3 further demonstrates the power of the personal identity motivation in influencing evaluations. Participants with a low chronic drive for uniqueness were less satisfied with their custom products and found them less meaningful than those for whom the drive was higher. Simply activating a personal identity motivation attenuated the influence of this individual difference.

### *Managerial Implications*

Our research identifies the way in which identity motivation influences evaluations and product satisfaction. Because customization programs are expensive for firms to offer (Hirsch, Egol, and Martin 2005), it is crucial to understand how customization adds value to consumers. By identifying the conditions under which investments in certain customization options (e.g., the capability for high levels of design freedom) are and are not warranted, our findings may help decrease the waste associated with the indiscriminate approach most firms are using to add variety to their product mix (Jaruzelski and Jones 2007). Specifically, von Hippel and Katz (2002) suggest that, in order for toolkits to make sense, a user must have a need for something different that is strong enough to offset the costs of putting a toolkit to use (p. 831). Thus, our findings may prove useful in helping firms making such a need salient.

Importantly, Studies 1 and 2 demonstrate that making such a need salient at the time of design can have enduring implications for satisfaction. Higher levels of satisfaction may influence important factors such as product usage, word-of-mouth communications as well as repeat purchases.

### *Limitations and Future Research Opportunities*

An important limitation of the current research is related to the methodologies chosen. Because participants engaged in the studies for class credit, we were unable to examine the basic motivations prompting them to initiate a customization experience on their own. While the sources of value identified in this research are likely to be influential in such a decision, our research does not fully document a comprehensive set of motivations. Future research is needed to understand the basic motivations underlying consumers' decisions to customize.

The choice of methodology also influenced the type of dependent measures used. Because we used live websites in two studies, participants had very strong reference prices for the customized products they created. In one case, the price was made even more salient by the \$10 face value of the coupon code. Under these conditions, obtaining meaningful measures of consumers' willingness-to-pay is challenging. Future research may be able to avoid such limitations by creating customization interfaces devoid of pricing information.

As the digital opportunities for identity representation continue to expand, numerous research opportunities exist to provide a better understanding of the value created for both the firm and the consumer. As our research has shown, the two are often inter-related. On the consumer side, future research could examine how other individual differences influence consumers' reactions to customized products. On the firm side, such research could examine

how different industry- and firm-specific variables (e.g., nature of the product (hedonic vs. functional), level of competition, strength and nature of brand equity) influence consumers' reactions both in isolation and in conjunction with the different identity-based motivations active in the consumer.

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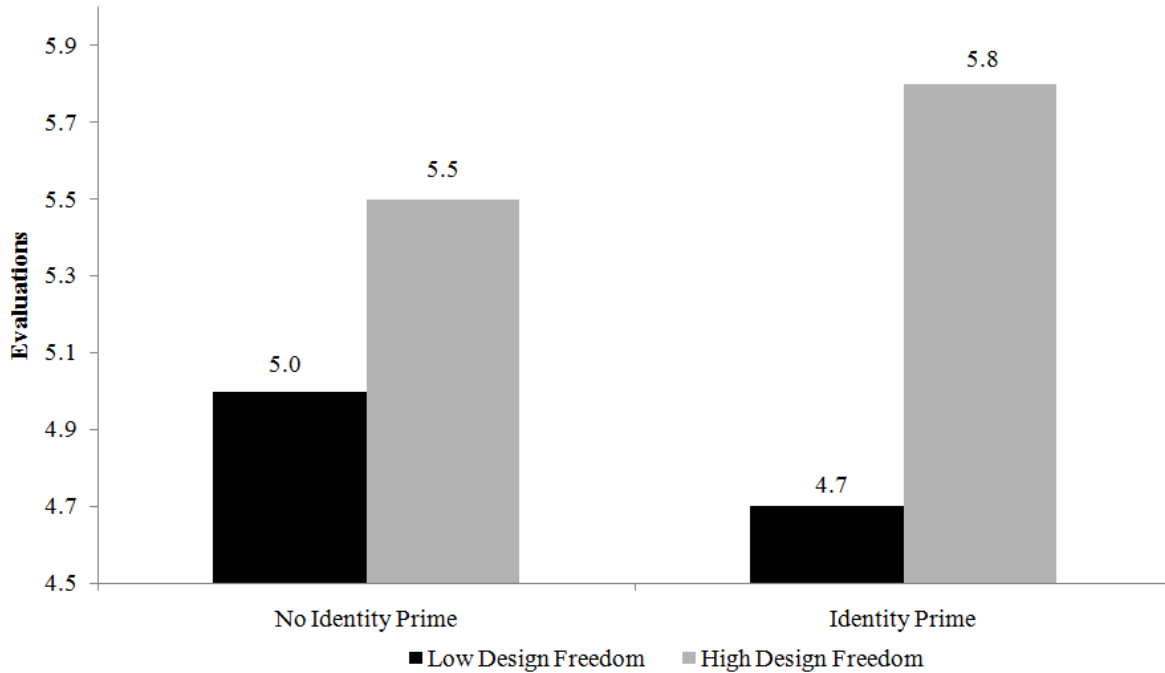
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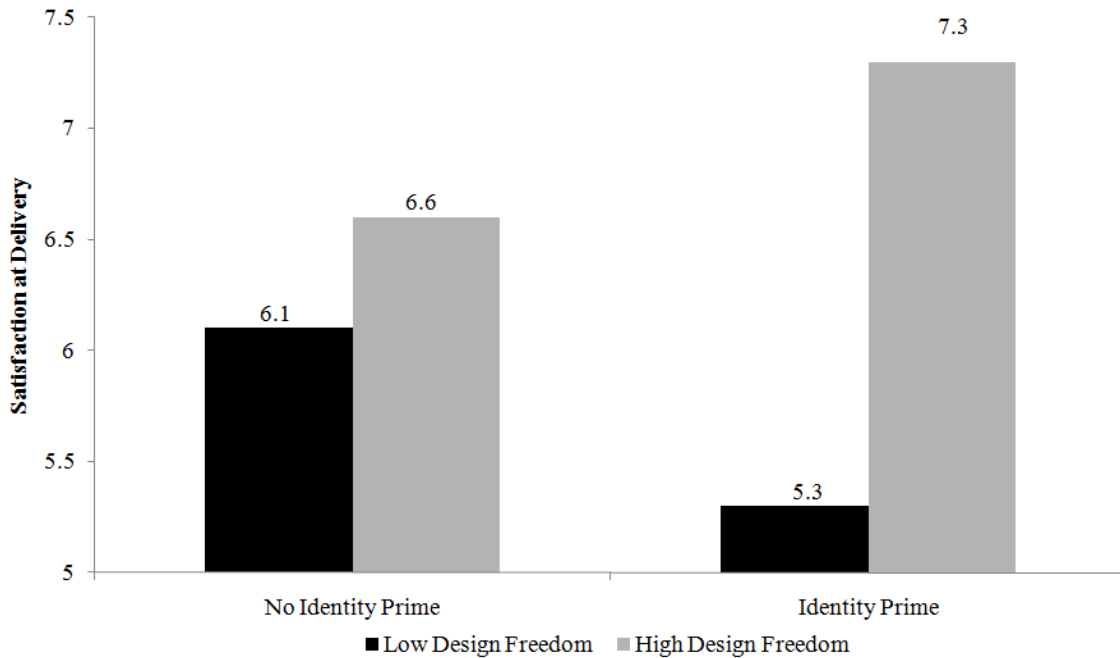
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**FIGURE 1:  
THE EFFECT OF DESIGN FREEDOM AND IDENTITY MOTIVATION ON  
EVALUATIONS AND SATISFACTION (STUDY 1)**

A) Evaluations (time of customization)

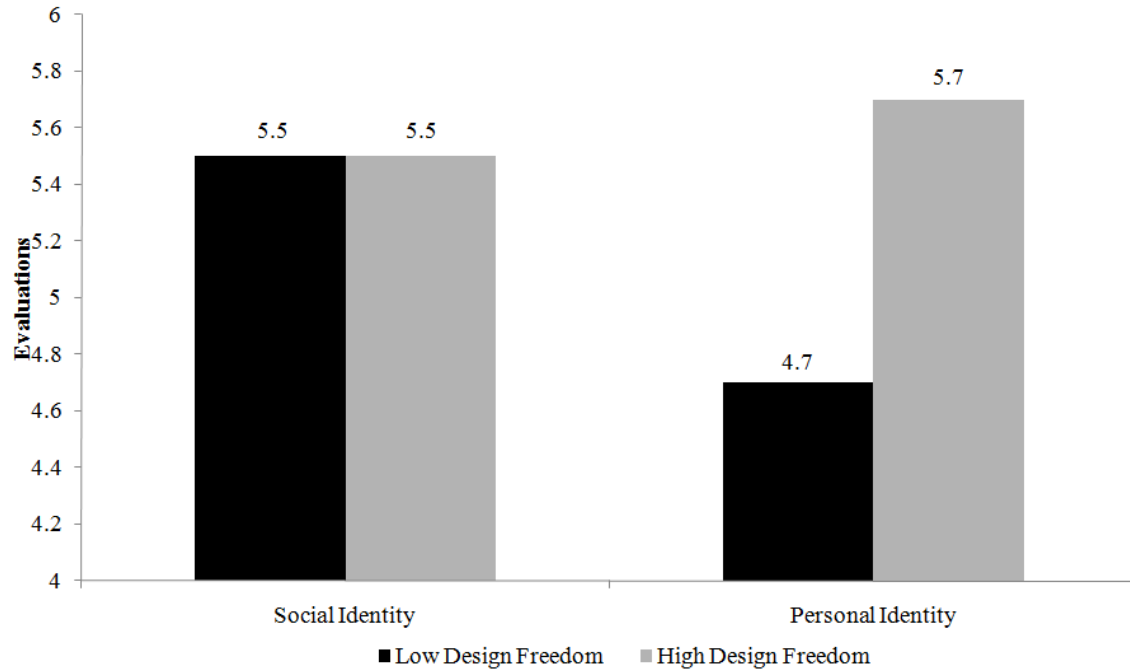


B) Satisfaction (10 days later at pick-up)

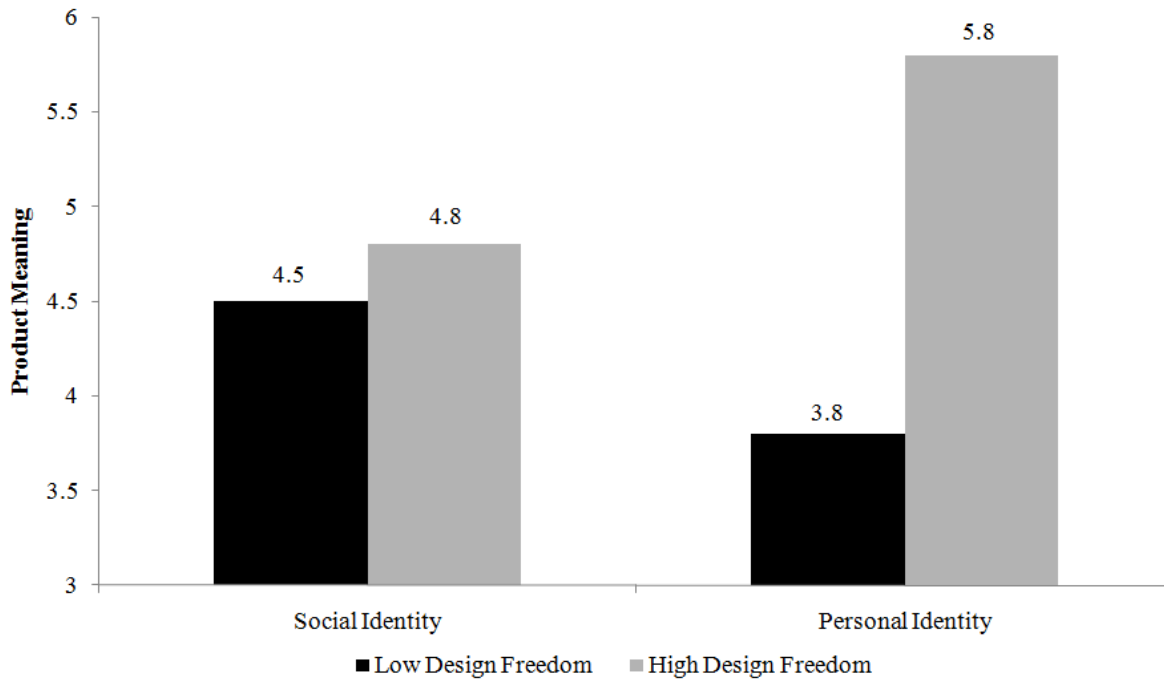


**FIGURE 2:**  
**THE EFFECT OF DESIGN FREEDOM AND MOTIVATION PRIMED ON EVALUATIONS, PRODUCT MEANING, AND SATISFACTION (STUDY 2)**

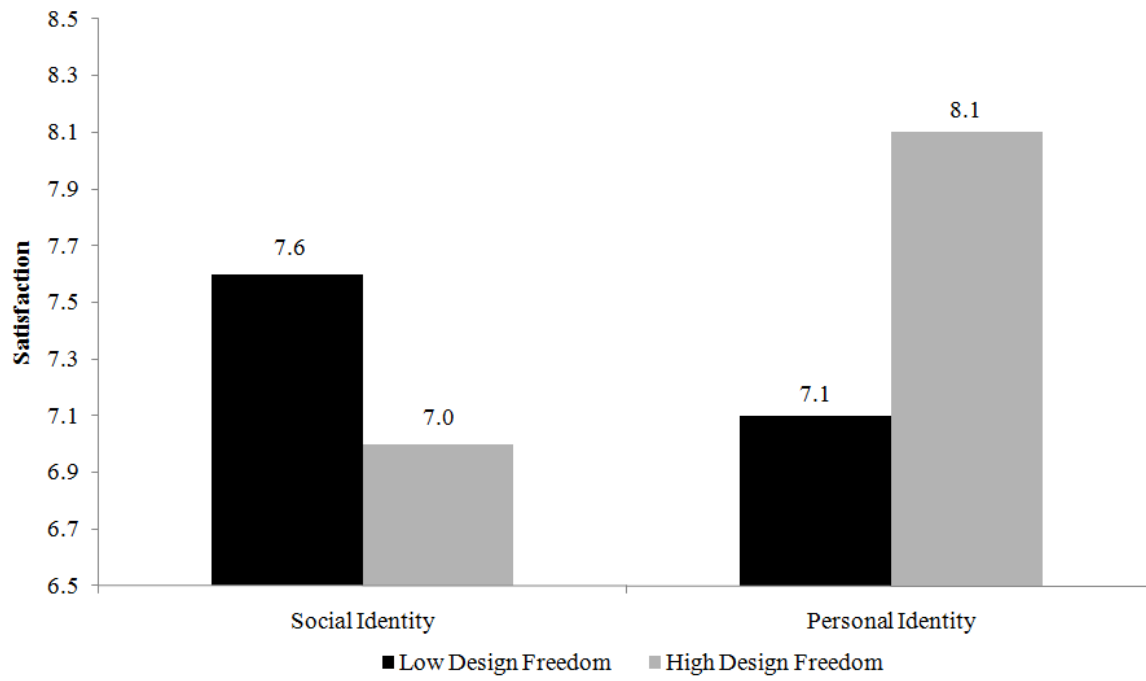
A) Evaluations (time of customization)



B) Product Meaning (time of customization)

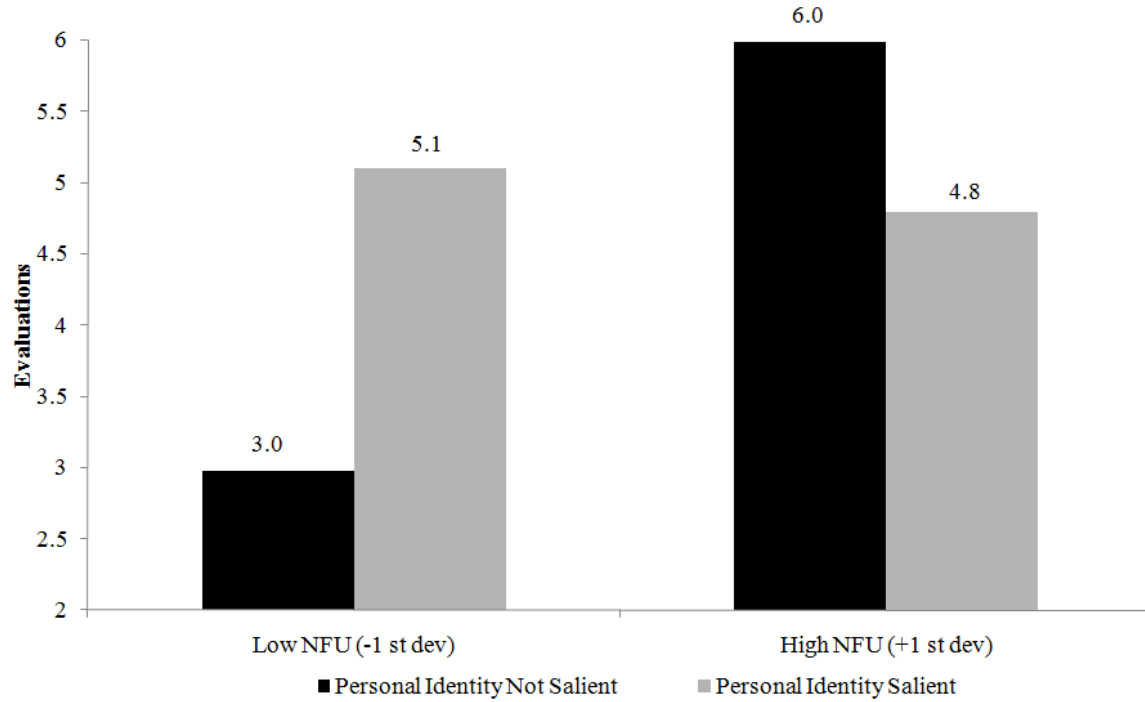


## C) Satisfaction (6 weeks later at pick-up)

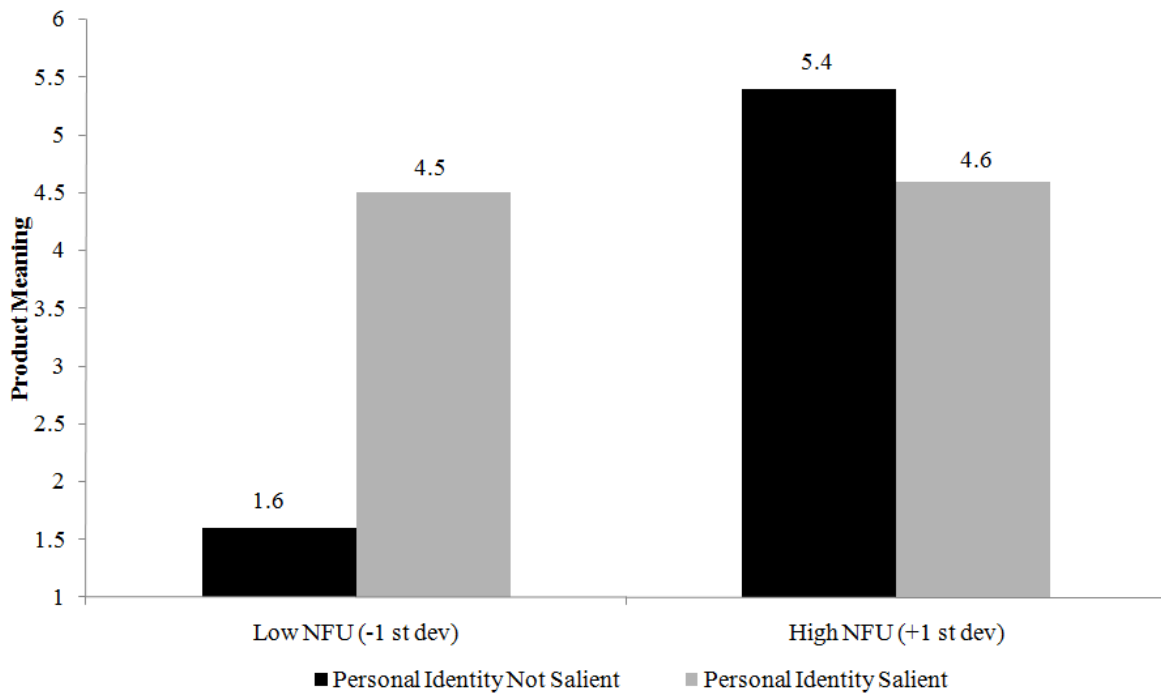


**FIGURE 3:**  
**EFFECTS OF NEED FOR UNIQUENESS AND PERSONAL IDENTITY SALIENCE ON EVALUATIONS AND PRODUCT MEANING (STUDY 3)**

A) Evaluations

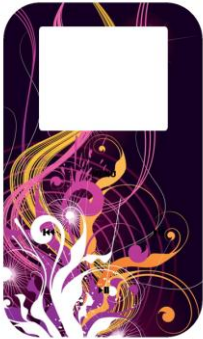


B) Product Meaning



# APPENDIX A: DESIGN EXAMPLES

## Study 1



## Study 2



## Study 3

