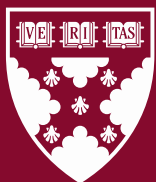# Calculators for Women: When Identity-Based Appeals Backfire

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ABSTRACT

From "Chick Beer" to "Dryer Sheets for Men," identity-based labeling is frequently deployed by marketers to appeal to specific target markets. Yet such identity appeals can backfire, alienating the very consumers they aim to attract. We theorize and empirically demonstrate in five studies that identity appeals lead to consumer avoidance when they evoke a stereotype about a marginalized identity: females in Studies 1-3, racial minorities in Studies 4 and 5. We identify categorization threat—the feeling of being unwillingly categorized as (and reduced to) a single identity—as a critical driver underlying consumer reactions to identity appeals. The negative impact of identity appeals is mitigated in situations in which categorization threat is less likely to be activated: (a) when multiple identities are evoked, preventing consumers from feeling reduced to a single identity, and (b) when targeting by identity is seen as necessary for differentiating product offerings.

Keywords: Identity, Categorization threat, Stereotypes

From Chick Beer to Mangria, from hand tools "for women" to dryer sheets "for men" (Chack 2014; Bailey 2015; Tuttle 2016), examples of identity-based labeling—or what we term *identity appeals*—abound. Often, these appeals serve a practical function: drawing increased attention from members of the appealed-to population: marketers hope that women will be more likely to drink beer labeled "chick" and men more likely to drink sangria labeled "Mangria." This logic is consistent with previous research on labeling theory demonstrating that invoking an identity can motivate individuals to conform to the characteristics of that identity (Schur 1971; Kraut 1973).

In practice, however, the effectiveness of identity appeals has proven to be more mixed. For instance, when the consumer goods company BIC released the *Pens for Her* series, featuring pink and purple colors, consumer reaction was less than positive (Siczkowski 2017), with reviews such as "Well, at last, pens for us ladies to use…Now all we need is 'for her' paper, and I can finally learn to write!" (Amazon Reviews). Similarly, when one Target store location labeled an aisle with *building sets* and *girls' building sets* (Grinberg 2015), consumers rallied on social media and issued online petitions calling on Target to make its stores gender-neutral, forcing them to remove all labels based on gender. Companies have also come under fire for appealing to consumers' racial identities. For instance, when American Greetings sold a Father's Day card prominently featuring a Black couple with the phrase "baby daddy," Black consumers felt singled out, and the company eventually had to pull the product (Jacobs 2018).

What differentiates identity appeals that work and those that go awry? We posit that an identity appeal alienates the very consumers it is meant to attract when it elicits categorization threat, making them feel placed in (and therefore reduced to) a single membership category against their will. We suggest that consumers experience categorization threat when two factors

are present: the target identity is that of a marginalized group, and the appeal evokes a stereotype about that identity. In contrast, we suggest that identity appeals are less likely to backfire when categorization threat is less pronounced—specifically, when an appeal evokes multiple identities (thus preventing consumers from feeling reduced to a single identity), or when consumers believe it is necessary to differentiate product offerings based on consumer identities, thus legitimizing the use of identity appeals.

THEORETICAL DEVELOPMENT

Identity—"a person's sense of self"—is a powerful driver of human attitudes and behavior (Akerlof and Kranton 2000). The identities individuals hold can meet fundamental human needs, such as feelings of belonging and self-esteem (Brewer 1991), and individuals often communicate and reinforce these identities through their consumption choices (Belk 1988; Escalas and Bettman 2005; Kaikati et al. 2017). Accordingly, prior research has shown that marketing messages that evoke an aspect of one's identity tend to be received positively by consumers (Kraut 1973; LeBoeuf, Shafir, and Bayuk 2010; Reed et al. 2012).

At the same time, identity marketing has been shown to have downsides. For instance, Bhattacharjee, Berger, and Menon (2014) showed that identity-defining marketing messages (e.g., "If you are a responsible parent, this is the only sunscreen for you and your kids") can backfire by hurting consumers' perceptions of agency. And in research on breast cancer communications, making women's identity salient can activate defense mechanisms, thus making breast cancer advertisements less effective (Puntoni, Sweldens, and Tavassoli 2011).

Furthering this body of work, we examine categorization threat as an additional factor that may render identity marketing ineffective.

There are numerous situations in which individuals are categorized based on their group memberships, such as race and gender, when they would rather be judged based on their personal characteristics. In such situations, individuals can experience categorization threat: being unwillingly categorized as a single identity (Branscombe et al. 1999). Feeling reduced to a single membership category—rather than viewed as a multifaceted individual—has been shown to engender a host of negative consequences, including poor performance, lower job satisfaction, and difficulty working on teams (Crocker and McGraw 1984; Niemann and Dovidio 1998; Thompson and Sekaquaptewa 2002). Furthermore, when people feel they are unwillingly reduced to a single category, they are prone to resist that categorization entirely. The desire to reject categorization can be so strong that individuals exhibit resistance even when they strongly associate themselves with an identity (Branscombe et al. 1999). Therefore, we contend that products with marketing messages employing identity appeals will backfire—by leading consumers to avoid those products—when they provoke categorization threats within consumers.

When do identity appeals induce categorization threat? We posit that such appeals are more likely to induce categorization threat when (a) the target identity is that of a marginalized group, and (b) the appeal evokes a stereotype about that identity. Regarding the first factor, prior research suggests that individuals belonging to marginalized groups tend to be more vigilant for identity threat. For instance, women become more vigilant for identity-threatening cues when they feel their gender is being devalued (Kaiser, Vick, and Major 2006), and Black people are more aware than nonracial minorities of racial cues in their environment (Hicken et al. 2013). This marginalization can also vary among individuals; for example, some women will feel more

keenly than other women that their gender is marginalized (Luhtanen and Crocker 1992; Major et al. 2007). Such vigilance, in turn, can lead them to disassociate from that group (Steele, Spencer, and Aronson 2002). Therefore, identity appeals that explicitly draw on associations with such groups are especially likely to backfire among those who identify as a member of a marginalized population.

Regarding the second factor, several research streams—although rarely in the domain of consumer behavior (Lee, Kim, and Vohs 2011)—have focused on documenting how members of marginalized groups react when viewed stereotypically. For instance, women viewed solely through the lens of their physical appearance experience negative emotional reactions (Fredrickson and Roberts 1997), and Asian Americans tend to reject their ethnic identity by emphasizing their American ways when they are perceived as international (Cheryan and Monin 2005). Awareness of stereotypes alone can trigger prevention-focused behaviors (Seibt and Förster 2004). For instance, when women become aware of the stereotype that they are incompetent at mathematics, they are more likely to adopt avoidance goals (e.g., I will not perform badly on a math test) than approach goals (e.g., I will perform well on a math test; Brodish and Devine 2009). Similarly, Lee et al. (2011) showed that when women are aware of negative stereotypes about their gender, they are more likely to avoid interacting with male service providers who are likely to subscribe to such stereotyped beliefs. Even seemingly positive stereotypes—for example, that women are kinder than men, or Asians are good at math—can engender negative emotions and elicit negative reactions by targeted individuals (Becker and Swim 2011; Glick and Fiske 2011; Siy and Cheryan 2013).

Building on this previous research, we predict that identity appeals evoking a stereotype about a marginalized identity will make targeted consumers experience categorization threat and

thus avoid the focal product—even if they would have preferred the focal product in the absence of an identity appeal. As a natural extension of this prediction, we expect identity appeals to be deemed more acceptable by consumers in situations where those appeals are less likely to activate categorization threat. We theorize that there are at least two ways in which this may occur: when (1) multiple identities are evoked and (2) when differentiating product offerings by consumer identity is clearly warranted. As we explicate below, both factors are conceptually linked to categorization threat.

First, considering that categorization threat is triggered when people feel as if they have been categorized to a single membership category, we suggest that marketing a product by evoking multiple identities—rather than a single identity—will reduce the likelihood that people feel categorization threat. After all, being able to see oneself as multifaceted is associated with a range of benefits, from increased well-being to reduced depression (Linville, 1985, 1987). In addition to seeing themselves as multifaceted, people also desire to be seen by others as such; thus, when making choices in public, they are motivated to appear multifaceted by choosing a variety of options or features (Ratner and Kahn 2002; Thompson and Norton 2011). Thus, we contend that consumers are less likely to avoid products utilizing identity appeals if those appeals evoke multiple identities—for example, "for Asians and food lovers" versus solely "for Asians."

Second, we posit that categorization threat is less likely to be triggered if there is a clearly sensible basis for the identity appeal. Prior work has theorized that people resist categorization especially when they perceive the membership category to be irrelevant to the given situation (Branscombe et al. 1999). After all, people rely on their group memberships to construct a meaningful and coherent sense of self (Hogg and Abrams 1988). Thus, when their group memberships are invoked for reasons that are not clearly warranted or seem unnecessary—for

example, when there is no obvious physiological need to have pens specifically for women—people are likely to experience greater categorization threat. By contrast, some products evoke group memberships because they are indeed designed to suit the unique needs of consumers belonging to different membership categories; for example, underwear designed for women does address their needs better than men's underwear would (and vice versa), and individuals in different racial groups have unique haircare needs. In such situations—that is, when consumers perceive the use of identity as necessary to differentiate product offerings among different membership categories—identity appeals will be deemed more legitimate and thus more acceptable.

OVERVIEW OF STUDIES

Five studies provide empirical evidence for our theoretical account. Study 1 first shows the main effect—that identity appeals can backfire by alienating the very individuals they aim to attract. Study 2 explores the first factor inducing categorization threat—that the target identity must be that of a marginalized group—by demonstrating that consumers who feel particularly marginalized show greater avoidance of products with identity appeals. Study 3 explores the second factor inducing categorization threat—that the appeal must evoke a stereotype—and shows that nonstereotyped appeals do not lead to avoidance. Two additional studies investigate the mechanism, boundary conditions, and implications for marketers. Study 4 examines categorization threat as an underlying psychological driver, both via mediation and also by testing whether people are less likely to avoid identity appeals if multiple identity appeals are used to market the focal product. Finally, Study 5 tests whether consumers are less likely to

avoid products with identity appeals if they perceive the use of identity appeals as clearly founded. Our preregistrations, study materials, and data can be accessed at https://osf.io/watn8/?view_only=379216d7f50b4e91ad5505b09f601282.

STUDY 1

Study 1 aimed to provide initial evidence that identity appeals can backfire when the two factors we have posited to induce categorization threat are present. Participants chose between a green calculator and a purple calculator, with half encountering an identity appeal: the purple calculators were labeled according to participants' self-reported gender—"for Women" or "for Men." We predicted that women would avoid the purple calculator when the "for Women" appeal was affixed, since both of our hypothesized factors were present: the identity appeal evoked a stereotype (i.e., that women like the color purple) about a marginalized identity (i.e., women are more marginalized than men). However, we did not expect the identity appeal to backfire with men, since they are typically neither marginalized nor presumed to like the color purple.

Procedure

The study was a 2 (participant self-reported gender: male versus female) $\times$ 2 (identity appeal: yes versus no) between-subjects design. Participants ($N = 321$, 45.3% male; $M_{age} = 24.29$, $SD = 6.86$) from a university in the U.S. Northeast completed this study.

All participants were informed, "During this session, you may be selected to complete a few math problems using a calculator of your choice. You will be able to choose between two kinds of calculators that are the same quality but different colors." Participants in the no identity appeal condition chose between two Casio SL-300VC Standard Function calculators that differed in color: green versus purple. Those in the identity appeal condition also chose between green and purple calculators, except that an identity appeal was affixed to the purple calculator: for male participants, it was labeled "for Men," and for female participants, it was labeled "for Women." See Appendix A for stimuli. In addition, a separate stimuli validation test confirmed that purple evokes a stereotype about women while green does not (see SOM).

We also measured how much participants liked the color purple (1 = *Not at all*; 7 = *Very much*) to examine whether the identity appeal caused female participants to forgo the purple calculator despite liking the color. Further, to detect whether avoidance of identity appeals influences subsequent judgments, we gave participants a choice of marker—purple or green (neither of which had an identity appeal attached to it)—to use to answer the math questions. Finally, because deception was not permitted in this laboratory, at the end of each session, we randomly chose one participant to complete the three math problems using the calculator in the color of their choosing.

Results

Calculator choice. We conducted a logistic regression with gender, identity appeal, and their interaction as the independent variables, predicting calculator choice. There was a main effect of gender (i.e., women were more likely than men to choose purple) ($B = .80$, $SE = .33$,

Wald Chi-Square $= 5.88$, $p = .02$), and a marginal main effect of identity appeal (i.e., the choice changed depending on whether the identity appeal was affixed) ($B = .65$, $SE = .34$, Wald Chi-Square $= 3.56$, $p = .06$). Importantly, these main effects were qualified by the predicted interaction ($B = -1.84$, $SE = .48$, Wald Chi-Square $= 14.94$, $p < .001$). Consistent with our hypothesis, fewer female participants chose the purple calculator in the identity appeal condition (24.1%) than in the no appeal condition (51.1%; $\chi^2(1) = 13.58$, $p < .001$). Said differently, while over half of participants preferred the purple calculator at baseline, less than a quarter chose it when the identity appeal was attached, suggesting that many forwent an option they otherwise would have preferred. In contrast, if anything, men were marginally more likely to choose the purple calculator with an appeal to their male identity (47.3%) than one without (31.9%; $\chi^2(1) = 3.59$, $p = .06$).

Liking of the color purple. A 2 (gender) × 2 (identity appeal) ANOVA revealed only a main effect of gender ($F(1, 307) = 18.64$, $p < .001$, $\eta_p^2 = .06$). Female participants ($M = 4.82$, $SD = 1.74$) liked the color purple more than male participants did ($M = 3.95$, $SD = 1.81$; $t(309) = -4.32$, $p < .001$). The lack of an interaction is noteworthy ($F(1, 307) = .94$, $p = .33$, $\eta_p^2 = .003$): female participants who received the identity appeal liked the color purple just as much as those who had not received the identity appeal—but the identity appeal drove them away from the very option they may have chosen in the absence of that appeal.

Marker choice. Analysis of participant preferences between green and purple markers revealed the same pattern as that observed for calculator choice. Specifically, there was a marginal main effect of identity appeal ($B = .56$, $SE = .34$, Wald Chi-Square $= 2.79$; $p = .095$), a significant main effect of gender ($B = 1.59$, $SE = .36$, Wald Chi-Square $= 20.00$; $p < .001$), and importantly, a significant interaction between the two factors ($B = -1.32$, $SE = .48$, Wald Chi-

Square = 14.94; p = .01). Despite the fact that the purple marker did not include an identity appeal, fewer female participants chose the purple marker in the identity appeal condition (61.9%) compared to those in the no appeal condition (77.6%; $\chi^2(1) = 4.97$, p = .03), suggesting carryover effects from the earlier identity appeal. In contrast, marginally more male participants chose the purple marker when purple had previously been paired with an identity appeal (55.4%) relative to when it had not been (41.4%; $\chi^2(1) = 2.81$, p = .09).

STUDY 2

Study 1 offered initial evidence that identity appeals lead to consumer avoidance when they invoke a stereotype about a marginalized identity. Studies 2 and 3 further isolate the specific role of these factors. Study 2 focused on the first factor, testing whether identity appeals must pertain to a marginalized identity in order to backfire. To test this, we examined reactions of group members who feel strongly (versus weakly) marginalized. To assess perceived marginalization, we included a trait measure of public regard: people's perceptions of how well-regarded their gender is by others (Luhtanen and Crocker 1992). Because those with low public regard would be more likely to see their group as being stereotyped (as they are constantly vigilant; Kaiser et al. 2006), we predicted that stereotype-evoking identity appeals would be particularly likely to backfire for this group.

Procedure

The study was a two-condition, between-subjects design—identity appeal

versus no appeal—with public self-regard assessed as an individual difference. Female

participants were recruited from a university online pool in the southeastern United States. Only

those who indicated that they were female could proceed with the rest of the survey ($N = 183$;

$M_{age} = 21.73$, $SD = 6.57$).

The study consisted of two parts: rating calculators and completing an individual

difference measure. We counterbalanced the order in which these two portions were presented to

participants.[1]

Rating calculators. Participants in the no appeal condition saw two Casio SL-300VC

Standard Function calculators that differed in color: green versus purple (as in Study 1). For

those in the identity appeal condition, an identity appeal was affixed to the purple calculator (i.e.,

"for Women." Participants were asked, "Which calculator are you more interested in using?" (1

= *Definitely the green calculator*; 4 = *Neutral*; 7 = *Definitely the purple calculator*).

Individual difference measure. We adapted Luhtanen and Crocker's (1992) 4-item public

regard scale ($\alpha = .80$): "Overall, my gender group is considered good by others"; "In general,

others respect the gender group I am a member of"; "Most people consider my gender group, on

the average, to be more ineffective than the other gender group" (reverse-coded); and "In

general, others think that the gender group I am a member of is unworthy" (reverse-coded) (1 =

Strongly disagree; 7 = *Strongly agree*).

Results

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[1] Controlling for the order of these two portions revealed consistent effects (See SOM).

Calculator preference. Consistent with Study 1, female participants in the no appeal condition ($M = 4.13$, $SD = 1.83$) expressed greater interest in the purple calculator than did those in the identity appeal condition ($M = 3.54$, $SD = 1.49$; $t(181) = 2.39$, $p = .02$, $d = .36$).

Public regard. We conducted a regression with identity appeal condition, public regard, and their interaction predicting calculator preference. We observed one significant effect of identity appeal ($B = -2.51$, SE $= .89$, $p = .01$), which was qualified by a significant interaction between identity appeal and public regard ($B = .45$, $SE = .20$, $p = .02$): participants who scored low on the public regard scale (i.e., who believed women were poorly regarded) were particularly likely to avoid the purple calculator labeled "for Women."

To unpack this interaction, we performed a spotlight analysis focusing on participants with higher and lower levels of public regard. The spotlight analysis performed at one standard deviation above the mean of public regard did not reveal a significant difference ($B = -.003$, $SE = .35$, $p = .94$): among participants with high public regard, their calculator preference did not differ depending on whether they were in the identity appeal or no appeal condition. A similar spotlight analysis performed at one standard deviation below the mean of public regard, however, revealed a significant difference ($B = -1.13$, $SE = .35$, $p = .001$): participants with low perceptions of public regard (i.e., women who believed their gender to be held in low regard by others) were less likely to select the purple calculator in the identity appeal condition than in the no appeal condition. In other words, consistent with our account, stereotype-evoking identity appeals backfired only among women who chronically feel that their gender identity is not highly regarded by others.[2]

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[2] We also conducted a study in which we compared reactions to stereotype-evoking identity appeals to women (a marginalized group) versus men (a non-marginalized group), which provides converging evidence for the first factor (See S1 in SOM).

STUDY 3

Study 2 examined the role of the first factor by testing whether for identity appeals to backfire, the target identity must be perceived as that of a marginalized group. Study 3 focused on the second factor by manipulating whether the identity appeal evoked a stereotype.

Female participants chose between two pens: purple or green. Informed by Study 1's stimuli validation test (see SOM) demonstrating that purple is linked to an overgeneralized stereotype about women (i.e., "all women like the color purple") while green does not, we varied which color the identity appeal accompanied—either a "purple pen for women" or a "green pen for women." To capture baseline preferences, a third condition excluded identity appeals altogether. We predicted a negative impact of identity appeal only when that appeal evoked a stereotype about women—i.e., when the identity appeal was attached to the purple pen.

Procedure

Study 3 was a three-condition, between-subjects design: no appeal, stereotype-evoking appeal, and non-stereotype-evoking appeal. Female participants ($N = 204$; $M_{age} = 26.1$, $SD = 12.3$) were recruited from the campus of a university in the southeastern United States.

Participants chose between two pens, identical except in color. Specifically, those in the no appeal condition chose from "BIC Grip Xtra Comfort Pen, Medium pt, Green" and "BIC Grip Xtra Comfort Pen, Medium pt, Purple." For those in the stereotype-evoking condition, the options were the same except that the purple option (confirmed in Study 1 to evoke a stereotype

about women) was labeled "for Women." For those in the non-stereotype-evoking condition, the green option (confirmed in Study 1 not to evoke a stereotype about females) was labeled "for Women" (see Appendix B). After the survey, we gave participants the pen they had chosen, such that the choice was incentive compatible.

Results

There was a significant impact of condition on pen choice ($\chi^2(2) = 14.42$, $p = .01$). Participants were less likely to choose the purple pen in the stereotype-evoking condition (45.8%) than were those in the non-stereotype-evoking condition (76.5%; $\chi^2(1) = 13.76$, $p < .001$), or those in the no appeal condition (65.6%; $\chi^2(1) = 5.37$, $p = .02$). In other words, while the majority of women preferred the purple pen at baseline, this preference was reduced when the purple pen was labeled "for Women." Importantly, by contrast, the non-stereotype-evoking appeal (i.e., ascribing "for Women" to the green pen) did not backfire: participants were just as likely to choose the green pen when it was paired with an identity appeal (23.5%) relative to when no appeal was made (34.4%; $\chi^2(1) = 1.89$, $p = .17$).[3]

STUDY 4

Studies 1–3 demonstrated that for identity appeals to backfire, they must evoke a stereotype about what consumers perceive as a marginalized identity. As our account contends, this effect is due to consumers feeling categorization threat, or being unwillingly categorized into

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[3] See S2 in SOM for an additional study in which we show that even identity appeals that evoke positive stereotypes—in this case, that Asians are good at math—can backfire.

a single membership category. If this is the case, evoking multiple identities—rather than a single identity—when marketing a product should reduce the likelihood that people perceive categorization threat and thus avoid the product. Study 4 tested this idea directly. To provide converging evidence of categorization threat as an underlying mechanism, we also directly measured felt categorization threat. This study was preregistered at https://aspredicted.org/6R9_1J8.

Procedure

Study 4 was a three-condition, between-subjects design: no appeal, single-identity appeal, and multiple-identities appeal. Asian participants ($N = 297$; 113 women, $M_{age} = 27.71$, $SD = 9.10$) were recruited through a panel via Prolific Academic (participants were not aware when signing up for the study that it was just for Asian participants).

All participants were told, "Suppose that you are grocery shopping at a local store, and come across the following product," and then randomly assigned to view one of the following three products: (1) Cooking Oil with Ginger and Green Onion (i.e., no appeal), (2) Cooking Oil with Ginger and Green Onion, for Asians (i.e., single-identity appeal), and (3) Cooking Oil with Ginger and Green Onion, for Asians and food lovers (i.e., multiple-identities appeal). A separate stimuli validation pretest confirmed that "liking ginger and green onion" is perceived to be a stereotype about Asians (see SOM).

Participants were asked, "How interested are you in this product?" (1 = *Not at all*; 7 = *Very much*) and "How welcome would you feel at this store?" (1 = *Not at all*; 7 = *Very much*). We also assessed categorization threat using the following four items ($\alpha = .90$): This product (1)

misrepresents who I am as a person, (2) categorizes me against my will, (3) threatens who I am as a person, and (4) reduces me to a single category of customers (1 = *Not at all*; 7 = *Very much*). For exploratory purposes, we also asked the extent to which they identified as an Asian and as a food lover on 7-point scales.

Results

Interest in product. There was a significant impact of condition on product interest ($F(2, 296) = 5.11$, $p < .01$, $\eta_p^2 = .03$). Participants in the single-identity appeal condition expressed lower interest in the product ($M = 3.35$, $SD = 1.86$) than did those in the no appeal condition ($M = 4.14$, $SD = 1.82$; $p < .01$, $\eta_p^2 = .06$). Participants in the single-identity appeal condition were also significantly less interested in the cooking oil compared to those in the multiple-identities appeal condition ($M = 4.00$, $SD = 1.86$; $p = .01$). There was no difference in product interest ratings between the no appeal condition and the multiple-identities appeal condition ($p = .59$).

Feeling welcomed. There was a significant impact of condition on the extent to which participants felt they would be welcomed at the store ($F(2, 296) = 16.22$, $p < .001$, $\eta_p^2 = .10$). Specifically, those in the single-identity appeal condition ($M = 3.58$, $SD = 1.90$) thought they would feel less welcomed at the store than did those in the no appeal condition ($M = 4.82$, $SD = 1.23$; $p < .001$). However, appealing to multiple identities mitigated the negative impact of using a stereotype-evoking appeal: compared to those in the single-identity appeal condition, those in the multiple-identities appeal condition thought they would feel more welcome at the store ($M = 4.34$, $SD = 1.44$; $p < .001$). However, invoking multiple identities still did not fully close the gap, as participants in the multiple-identities appeal condition still reported that they would feel less

welcome at the store than did those in the no appeal condition ($p = .03$), perhaps because a marginalized identity had been made salient—even if somewhat diluted.

Categorization threat. Categorization threat also varied by condition ($F(2, 296) = 44.66$, $p < .001$, $\eta_p^2 = .23$). Participants in the single-identity appeal condition ($M = 4.08$, $SD = 1.82$) reported greater categorization threat than did those in the no appeal condition ($M = 2.08$, $SD = 1.26$; $p < .001$). Categorization threat was reduced when the appeal evoked multiple identities ($M = 3.57$, $SD = 1.51$; $p = .02$), though participants in this condition still experienced higher categorization threat than did those in the no appeal condition ($p < .001$)—again, perhaps unsurprising given that a marginalized category had, indeed, been evoked.

Supplemental measures. There were no differences between conditions in the extent to which participants identified as Asian ($F(2, 294) = .22$, $p = .81$) or as food lovers ($F(2, 296) = 2.15$, $p = .12$).

Mediation. Categorization threat mediated the relationship between condition and product interest, as well as between condition and feeling welcome at the store (using the single-identity appeal condition as the baseline). For product interest, a 5,000-sample bootstrap test estimated a significant indirect effect of .90 ($SE = .17$, 95% bias-corrected CI [.58, 1.25]) for the difference between the single-identity appeal condition and the no appeal condition, and .23 ($SE = .11$, 95% bias-corrected CI [.02, .46]) for the difference between the single-identity appeal condition and the multiple-identities appeal condition. Similarly, for feeling welcome, a 5,000-sample bootstrap test estimated a significant indirect effect of 1.00 ($SE = .17$, 95% bias-corrected CI [.68, 1.36]) for the difference between the single-identity appeal condition and the no appeal condition, and .26 ($SE = .13$, 95% bias-corrected CI [$-.03$, $-.51$]) for the difference between the single-identity appeal condition and the multiple-identities appeal condition.

STUDY 5

Supporting our account that identity appeal avoidance is driven (at least in part) by feeling reduced to a single membership category, Study 4 found that consumers are less likely to avoid identity appeals when they evoke multiple identities. Our account also suggests that identity appeals should be less likely to activate categorization threat when consumers perceive the use of identity appeals to be need-based—for instance, when a product is made to uniquely suit the needs of consumers belonging to a specific racial group (as with Black women's hair that can especially benefit from sulfate-free shampoo). This study was preregistered at https://aspredicted.org/K2N_33K.

Procedure

Study 5 was a three-condition, between-subjects design: no appeal, unwarranted appeal, and warranted appeal. Self-identified Black women ($N = 448$, $M_{age} = 31.51$, $SD = 10.60$) were recruited through a panel via Prolific Academic.

All participants read, "You are looking for a bottle of shampoo. You come across the ad below." They then were randomly assigned to view one of three versions of the shampoo advertisement. For those in the no appeal condition, the ad simply displayed a bottle with label text reading "Fruity scent, Sulfate-free." For those in the unwarranted appeal condition and warranted appeal conditions, the image retained the label text but had additional statements reading "Fruity scent for Black women!" and "Sulfate-free for Black women!" respectively. A separate stimuli validation test confirmed that Black women perceive sulfate-free shampoo

products to be especially effective for their hair, making this targeting warranted, while fruity scent shampoo products are not seen as more effective, making this targeting unwarranted (see SOM).

Participants then indicated the extent to which they were interested in the product and the extent to which they felt offended using an 8-item measure: annoyed, irritated, disgusted, upset, offended, insulted, awkward, and comfortable (Adams, Flynn, and Norton 2012; $\alpha = .96$).[4] All items were administered on 7-pt scales.

Results

Interest in product. There was a significant impact of condition on product interest ($F(2, 445) = 12.21, p < .001, \eta_p^2 = .05$). Participants in the unwarranted appeal condition expressed lower interest in the product ($M = 2.91, SD = 1.70$) than did those in the warranted appeal condition ($M = 3.92, SD = 1.96; p < .001$) as well as those in the no appeal condition ($M = 3.34, SD = 1.64; p = .035$). Those in the warranted appeal condition were more interested in the product than those in the no appeal condition ($p = .005$).[5]

Feeling offended. There was a significant impact of condition on the extent to which participants reported feeling offended ($F(2, 445) = 53.17, p < .001, \eta_p^2 = .19$). Specifically, those in the unwarranted appeal condition ($M = 3.03, SD = 1.86$) reported feeling more offended than did those in the warranted appeal condition ($M = 1.93, SD = 1.42; p < .001$) and those in the no appeal condition ($M = 1.39, SD = .71; p < .001$). Participants in the warranted appeal condition

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[4] Participants also indicated how much they agree with the following statement: "Sulfate-free products are especially good for Black women's hair" on a 7-pt scale. The mean rating was significantly higher than the scale midpoint, $t(447) = 17.72, p < .001$.

[5] See S3 in SOM for an additional study comparing the effectiveness of warranted versus unwarranted identity appeals.

reported feeling more offended than those in the no appeal condition ($p < .001$), perhaps because, as in Study 4, a marginalized identity had been made salient.

GENERAL DISCUSSION

Marketers often rely on identity-based labeling to target certain consumer groups. We explore the risks of identity appeals by examining when and why they can backfire by alienating the very group of consumers they are intended to target. We theorize and empirically demonstrate that identity appeals lead to avoidance when the target identity is marginalized and when the appeal evokes a stereotype about that identity (Studies 1–2). Furthermore, we show that consumer avoidance of identity appeals is driven by perceptions of categorization threat (Study 3). In contrast, consumers are less likely to avoid identity appeals in situations where they are less likely to feel categorized to a single membership category: when multiple identities are evoked (Study 4) and when the use of identity appeals is perceived as legitimate (Study 5).

Our findings make several theoretical contributions. First, we contribute to the literature on stereotypes. While existing research has mainly studied how the threat of stereotypes influences achievement and performance outcomes, little work has examined these factors in the domain of consumer behavior. A few exceptions include work on stereotype threat in face-to-face service interactions (Lee et al. 2011) and on consumers' use of stereotypes to evaluate products and service providers (Matta and Folkes 2005). We advance this line of work by demonstrating that consumers will go out of their way to avoid stereotype-evoking identity appeals even when they would otherwise prefer those products. In fact, a field study, which we conducted during the 2016 U.S. Presidential Election, provides converging evidence. During this

election, some popular figures insinuated that that female voters should support candidate Hillary Clinton because she was a woman, thus invoking a gender-based identity appeal that many found unwarranted. In our field study (S4 in SOM), we found that females were indeed more likely to avoid campaign paraphernalia that invoked this identity appeal, instead choosing lower quality items that lacked such targeting.

Relatedly, we also advance our understanding of discrimination in the consumer marketplace. Recently, a group of marketing scholars has emphasized the importance of studying topics that could allow for a more inclusive marketplace (Dubois and Ordabayeva 2015; Lamberton 2019). Our findings suggest that even if marketers have good intentions in employing identity appeals to market products, those appeals can make consumers feel alienated; for instance, in Study 4, participants encountering a stereotype-evoking identity appeal reported that they would feel less welcome at the store compared to those who did not encounter a stereotype-evoking identity appeal, while in Study 5, participants reported feeling more offended. These findings suggest that identity appeals can serve as micro-aggressions, imposing a psychological toll on consumers (Sue 2010). When such negative experiences accumulate, people can experience heightened stress levels, reduced psychological safety, and overall skepticism of corporations, making cumulative effects on victims "of an unimaginable magnitude" (Pierce 1970). By developing an account of when and why identity appeals backfire, we highlight the importance of understanding the behaviors of marginalized customers and the roles of stereotypes and categorization threat in shaping consumer experience.

Our findings also contribute to the literature on social labels, or explicit characterizations of individuals based on their behavior, beliefs, and personalities (Goffman 1963). While existing research has suggested that labels appealing to identity can motivate behaviors consistent with

the target identity (Summers, Smith, and Reczek 2016), our findings join a growing body of research offering a complementary perspective to these works (e.g., Bhattacharjee, Berger, and Menon 2014; Puntoni, Sweldens, and Tavassoli 2011). Specifically, our account not only allows us to identify the potential pitfalls of identity appeals previously addressed by existing research, but also shows how consumers go to great lengths to avoid products with off-putting identity appeals.

Our findings open several avenues for future research. While we have identified two situations in which identity appeals do not backfire—each of which stemmed directly from our proposed underlying mediator, categorization threat—future research should investigate other factors that reduce the likelihood of consumers experiencing categorization threat. First, consumers may find identity appeals less offensive if they are aware that another group of consumers has been subject to the same labeling process, making them feel less singled out and possibly removing some of the sting of categorization. A second factor that may lessen categorization threat is the explicitness of identity appeals. While we focused on identity appeals that explicitly appeal to different consumer identities (inspired by the real-world explicit identity appeals our opening examples highlight), it is also important to investigate whether implicit identity appeals (e.g., showing a Black woman in an ad without stating race explicitly) would engender similar patterns to our studies (Ivanic, Overbeck, and Nunes 2011). A third opportunity for future research is to investigate whether there are situations in which non-stereotype evoking identity appeals would still result in consumer avoidance. For instance, in Study 3, directionally fewer participants—although not significant—chose the product with a non-stereotype evoking identity appeal than the product with no appeal. Thus, it is possible that consumers may still experience categorization threat regardless of identity appeal type if they are sensitive to the

marginalized identity that is being targeted. Finally, future research could also identify the situations in which consumers belonging to typically non-marginalized groups (e.g., men) may perceive categorization threat.

From a managerial perspective, these findings offer clear takeaways. For one, the identity-labeling backlash stories—from BIC's pens to Target's store aisles—were headline-making faux pas that any company would surely seek to avoid. Thus, understanding when to use (or more importantly, when not to use) identity labels is of immediate practical relevance. Study 5 suggests one way marketers may use identity appeals while minimizing concern for consumer avoidance: when they are employed for clear and obviously warranted reasons—for instance, to communicate the focal product's ability to fulfill the consumer's unique needs. But more broadly, these results highlight the complexities and sensitivities of targeting consumers—which is particularly relevant as marketers collect ever more attributes on which targeting can be based: even when consumers are better off with more tailored, customized products, the way in which such options are presented can have profound effects. For instance, purple calculators were—empirically—more preferred by women, but once the targeted label was affixed, this preference reversed. Therefore, the manner in which the targeted offer is presented to consumers matters—a finding that aligns with other research on consumers' sensitivities to targeted marketing (Kim, Barasz, and John 2018). Just because a company *can* target based on very particular attributes does not necessarily mean it *should*.

The ubiquity of identity appeals suggests a lack of understanding of their risks. Indeed, a Target spokesperson defended the chain's actions during the girls' building sets scandal by noting that "guests prefer having a variety of indicators that can help inform and guide their shopping trip" (Pittman 2017). Our results suggest otherwise: while identity appeals to non-

marginalized, non-stereotyped groups can have neutral and even beneficial effects, identity appeals to other groups risk not only alienating certain segments of consumers, but also perpetuating felt discrimination in the consumer marketplace.

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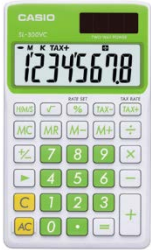
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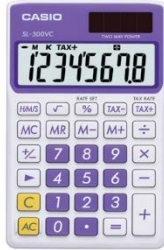
APPENDIX A

Study 1 Stimuli (for female participants): a) no appeal, b) identity appeal.

a)

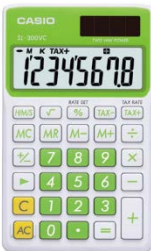Casio SL-300VC Standard Function, Green
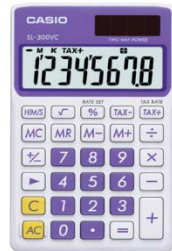
Casio SL-300VC Standard Function, Purple

b)

Casio SL-300VC Standard Function, Green

Casio SL-300VC Standard Function, for Women

APPENDIX B

Study 2 stimuli: a) no appeal, b) stereotype-evoking appeal, c) non-stereotype-evoking appeal.

APPENDIX C

Study 5 stimuli: a) no appeal, b) unwarranted appeal, c) warranted appeal.