

Calculators for Women: When Identity Appeals Provoke Backlash

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Abstract

From “Chick Beer” to “Dryer sheets for Men,” identity-based labeling is frequently deployed to appeal to people who hold the targeted identity. However, five studies demonstrate that identity appeals can backfire, alienating the very individuals they aim to attract. We begin by demonstrating backlash against identity appeals in the field during the 2016 presidential election (Study 1) and in the lab (Study 2). This (in)effectiveness of identity appeals is driven by categorization threat—feeling unwillingly reduced to a single identity—which is induced when a) the identity deployed is that of a typically marginalized group (Studies 3-4) and b) the appeal evokes a stereotype about that identity (Study 5). Ironically, identity appeals often drive identity-holders away from options they would have preferred in the absence of that appeal.

Keywords: Identity, Gender, Categorization threat, Stereotypes

From *Chick Beer* to *Mangria*, hand tools “for Women” to dryer sheets “for Men” (Bailey, 2015; Chack, 2014; Tuttle, 2016), examples of identity-based labeling—or “identity appeals”—abound. Oftentimes these appeals serve a practical function: increasing attraction from members of the appealed-to population, with the hope that women will drink more beer when labeled for “*Chicks*,” and men will drink more sangria labeled *Mangria*. This logic is consistent with previous research on labeling theory, where invoking an identity can motivate individuals to conform to characteristics of that identity (Kraut, 1973; Schur, 1971).

In practice, however, the effectiveness of identity appeals has proven more complex. For instance, uproar ensued when BIC released the “Pens for Her” series—featuring pink and purple colors—which spurred outraged reviews (Siczkowski, 2017). Likewise, Target Inc. faced consumer ire after one store labeled an aisle “Building Sets” and another “Girls’ Building Sets” (Grinberg, 2015). And in 2016, Hillary Clinton’s supporters appealed to women to support the first female presidential candidate specifically because of their shared gender, but instead provoked backlash from many voters (Rappeport, 2016).

Why did these identity appeals go awry? We investigate when and why identity appeals backfire, alienating the very individuals they aim to attract. We posit that categorization threat—being categorized unwillingly into a single identity (Branscombe, Ellemers, Spears, & Doosje, 1999)—drives the negative effect of identity appeals. Branscombe et al. (p. 41; 1999) suggest that “simply being categorized as a member of a group may be a threatening experience,” such that when people feel unwillingly reduced to a single category, they become likely to resist the categorization entirely—even when they strongly identify with that identity. For example, we suggest that even when a given tendency is, in fact, truer for women than men—such as a preference for the color purple (which we show empirically)—the implication that *all* women

like purple, because and only because they are women, provokes negative responses. As a result, we suggest that even when women prefer purple pens *in general*, they will avoid those same purple pens when labeled “for Her.”

Drawing on previous research, we posit that identity appeals can induce categorization threat—and in turn, backfire—when a) the evoked identity is that of a typically marginalized group and b) the appeal evokes a stereotype about that identity. With regard to the first factor, whenever individuals are aware of the fact that they belong to a group with negative stereotypes, they tend to be more vigilant about experiencing identity threat, which may lead them to disassociate from that group (Goffman, 1963; Steele, Spencer, & Aronson, 2002). Therefore, identity appeals—which explicitly draw upon associations with said groups—are especially likely to backfire among members of these marginalized populations. Such marginalization may occur at the group level (e.g., women, racial minorities), but may also vary between individuals (Luhtanen & Crocker, 1992; Major, Kaiser, O’Brien, & McCoy, 2007); for instance, women may be more marginalized than men on average, but not all women feel equally marginalized. Therefore, we hypothesize that identity appeals will cause more backlash amongst members of marginalized (versus non-marginalized) groups, and amongst members of that group who feel strongly (versus weakly) marginalized.

With regard to the second factor, several streams of research suggest that members of marginalized groups react negatively when viewed stereotypically. Mere awareness of stereotypes can trigger prevention-focused behaviors (Seibt & Förster, 2004; Lee, Kim, & Vohs, 2011). Further, objectification theory suggests that women viewed solely through the lens of their physical appearance experience negative emotional reactions (Fredrickson & Roberts, 1997); similarly, Asian-Americans tend to reject their ethnic identity—by emphasizing their

American ways—when they are perceived as foreigners (Cheryan & Monin, 2005). Critically, even seemingly positive stereotypes—such as women being kinder than men and Asians being good at math—can engender negative emotions and elicit negative reactance by targeted individuals (Becker & Swim, 2011; Glick & Fiske, 2011; Siy & Cheryan, 2013). Accordingly, we suggest that identity appeals evoking negative stereotypes (e.g., that women are inept at handling emotions), as well as those evoking more neutral stereotypes (e.g., that women like the color purple) can fail in equal measure.

OVERVIEW

We predict that identity appeals will backfire when they evoke stereotypes about a marginalized group. We focus on appeals to women—a typically stereotyped and marginalized group (e.g., Glick & Fiske, 2001). We begin by showing the main effect—that identity appeals can backfire—in both the field (Study 1) and the lab (Study 2). The remaining three studies investigate the mechanism and boundary conditions. Central to our account is the notion that identity appeals make people feel that they have been unwillingly categorized; Study 3 assesses this directly by showing that identity appeal backlash is mediated by perceived categorization threat. Study 3 also explores the first categorization threat-inducing factor—that the evoked identity must be that of a typically marginalized group—by comparing reactions to identity appeals from women versus men. Study 4 presents converging evidence by allowing perceived marginalization to vary among individuals and demonstrating that such backlash occurs for those who feel particularly marginalized. Study 5 explores the second categorization threat-inducing factor—that the appeal must evoke a stereotype—and shows that non-stereotyped appeals avoid identity appeal backlash.

STUDY 1

Study 1 was a field study, testing whether identity appeals will backfire when the two categorization threat-inducing factors are present. We distributed (unofficial) campaign materials for Hillary Clinton the summer before the 2016 presidential election. We gave female participants the choice between a lower-value sticker or a higher-value button and varied whether the button had an identity appeal (“Candidate for Women”). We hypothesized that women would avoid the higher-value button once the “for Women” appeal was affixed since both factors would be present: the identity appeal evoked a stereotype (i.e., Hillary Clinton was stereotyped as a candidate for women during the 2016 presidential election) about a marginalized identity (i.e., women are more marginalized than men).

Method

Pretest. We conducted a separate pretest to confirm the stereotype that Hillary Clinton was a candidate for women, which was a much-discussed aspect of her 2016 presidential campaign (Rappeport, 2016). Participants ($N = 51$; 49% males; $M_{\text{age}} = 36.10$, $SD = 8.70$) rated their agreement with the statement: “During the 2016 presidential election, Hillary Clinton was more stereotyped as a candidate for women than for men” (1 = *Strongly disagree*; 7 = *Strongly agree*). The mean rating was statistically significantly higher than the scale midpoint ($M = 5.00$, $SD = 1.77$), $t(50) = 4.07$, $p < .001$, $d = 1.15$, suggesting that the female-Hillary stereotype does exist.

Participants. Study 1 was a two-condition, between-subjects study: no appeal and identity appeal. Four research assistants who were blind to our hypotheses were instructed to approach female students ($N = 198$) on a northeastern university campus with the following question: “Would you like to take a moment to choose a campaign material that you can keep? Your participation is voluntary, and I am only going to record your choice, without any information to

identify you.” The study was conducted across two dates in July 2016, four months before the 2016 U.S. presidential election.

For studies conducted in the field and on Amazon’s Mechanical Turk, we targeted at least 100 participants per condition (for pretests, we targeted 50 participants per condition). In laboratory studies, we targeted at least 50 participants per condition. Some sessions had greater or fewer show-ups than expected. For all studies, informed consent was obtained from all participants, and our Institutional Review Boards reviewed and approved the materials and procedures. All data and stimuli are available at https://osf.io/watn8/?view_only=379216d7f50b4e91ad5505b09f601282.

Procedure. When a prospective participant agreed to participate in the study, the researcher handed her one of two forms in a pre-determined alternating sequence. Both forms featured two campaign materials for Hillary Clinton’s campaign: a sticker valued at \$0.05 and a button valued at \$0.25. While the materials were provided at no cost to participants (and participants were made aware of this fact), the monetary amounts were included to signal that the button was objectively more valuable than the sticker. The slogans varied by condition. Participants in the no appeal condition saw that both the sticker and the button featured the slogan: “Hillary, the Candidate for America.” Those in the identity appeal condition saw that the sticker featured the same slogan (i.e., “Hillary, the Candidate for America”) while the button featured the slogan: “Hillary, the Candidate for Women.” All participants who agreed to participate in the study indicated which product they preferred and then received it. See Appendix A.

Results

Most participants in the no appeal condition chose the button over the lower-value sticker

(60.8%). This percentage was significantly different from chance, $p = .04$, not surprising given that the button was more expensive and higher quality. However, when the button featured a slogan using an identity appeal, “Hillary, the Candidate for Women,” marginally fewer participants chose the button over the sticker (47.5%), $\chi^2(1) = 3.52, p = .06$. That is, adding an identity appeal shifted participants’ preference, specifically causing women to avoid the very item that was targeted to them. This pattern was robust to the research assistant’s gender, $B = -.54, SE = .29, p = .06$.

STUDY 2

Study 1 provided initial field evidence that identity appeals can backfire when the two factors we have posited to induce categorization threat are present. Study 2 tested this account in the lab, using more neutral stimuli in a tightly controlled setting, and also examined the impact of identity appeals on not just those belonging to a marginalized group (i.e., women) but also those in a non-marginalized group (i.e., men).

Participants chose between a green or purple calculator, with half encountering an identity appeal: the purple calculators were labeled as “for Women” or “for Men” depending on participants’ self-reported gender. We predicted that women would avoid the purple calculator when the “for Women” appeal was affixed, since both factors would be present: the identity appeal evoked a stereotype (i.e., women are stereotyped as liking 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 the appeal did not evoke a stereotype (i.e., purple is not a stereotypically masculine color) and men are not typically marginalized.

Method

Pretest. We conducted a separate pretest to confirm that purple evokes a stereotype about women while green does not. Participants ($N = 102$; 45.1% males; $M_{\text{age}} = 37.19$, $SD = 12.44$) were divided into two conditions: purple or green. They rated their agreement with the following statement: “In general, women are stereotyped as liking the color [purple / green]” (1 = *Strongly disagree*; 7 = *Strongly agree*). Results indicated that purple more strongly evokes a stereotype about women ($M = 4.38$, $SD = 1.65$) than green ($M = 2.38$, $SD = 1.65$), $t(100) = -6.14$, $p < .001$, $d = 1.23$.

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

Procedure. 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,” whereas for female participants, it was labeled “for Women.” See Figure 1.

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 backlash against identity appeals influences subsequent judgments, participants also chose which marker—purple or green (neither of which had an identity appeal ascribed 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

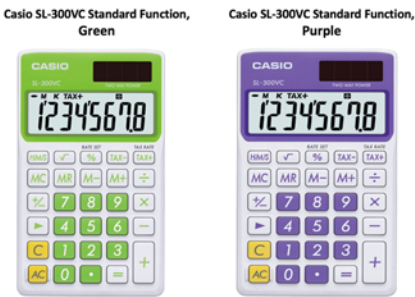
Calculator choice. We conducted a logistic regression with gender, identity appeal, and their interaction as the independent variables, predicting calculator choice. There was a main effect of gender (i.e., women were more likely than men to choose purple), $B = .80$, $SE = .33$, Wald Chi-Square = 5.88, $p = 0.02$, and a marginal main effect of identity appeal (i.e., choice changed depending on whether the identity appeal was affixed), $B = .65$, $SE = .34$, Wald Chi-Square = 3.56, $p = 0.06$. These main effects were qualified by the predicted interaction, $B = -1.84$, $SE = .48$, Wald Chi-Square = 14.94, $p < 0.001$. Consistent with our hypothesizing, fewer female participants chose the purple calculator in the identity appeal condition (24.1%) than those in the no appeal condition (51.1%), $\chi^2(1) = 13.58$, $p < .001$. In contrast, if anything, men were *more* likely to choose the purple calculator with an appeal to their male identity (47.3%) than without one (31.9%), $\chi^2(1) = 3.59$, $p = .06$.

Liking of the color purple. A 2 (gender) x 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 ($M = 3.95$, $SD = 1.81$), $t(309) = -4.32$, $p < .001$, $d = .49$. 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—such that the identity appeal drove them away from the options they would have chosen in the absence of that appeal.

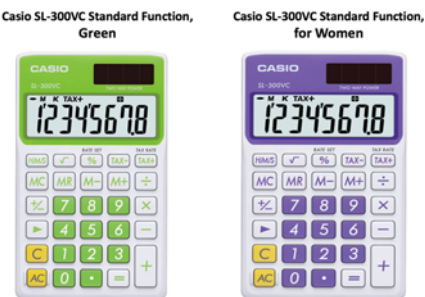
Marker choice. Analysis of participant preferences between green and purple markers revealed the same pattern as that observed for calculator choice. Specifically, there was a marginal main effect of identity appeal, $B = .56$, $SE = .34$, Wald Chi-Square = 2.79; $p = .095$, a significant main effect of gender, $B = 1.59$, $SE = .36$, Wald Chi-Square = 20.00; $p < .001$, and a significant interaction between the two factors, $B = -1.32$, $SE = .48$, Wald Chi-Square = 14.94; $p = .01$. Fewer female participants chose the purple marker in the identity appeal condition (61.9%) compared to those in the no appeal condition, (77.6%), $\chi^2(1) = 4.97$, $p = .03$, despite the fact that the purple marker did not use an identity appeal, suggesting carryover effects from encountering an 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%), $\chi^2(1) = 2.81$, $p = .09$.

Fig. 1. Study 2 stimuli (for female participants): a) no appeal, b) identity appeal.

a)



b)



STUDY 3

Studies 1 and 2 offered initial evidence that identity appeals backfire when they invoke a stereotype about a marginalized identity. Studies 3-5 further isolate the specific role of these factors. Study 3 focused on the first factor, testing whether—for identity appeals to backfire—they must pertain to a marginalized identity.

We varied the extent to which the appeal evoked a stereotype and whether the evoked stereotype concerned a marginalized identity. Participants were presented with two articles (about morals and about emotions), and encountered an identity-relevant appeal: female and male participants saw the emotions article labeled for “Women” and “Men” respectively. To manipulate stereotype evocation, half of participants were told that their gender was typically viewed as bad at managing emotions (pretested as credible to both genders). We tested whether—for an identity appeal to backfire—the evoked stereotype must be linked to a marginalized identity by comparing female (a marginalized group) and male (a non-marginalized group) responses. We predicted that the identity appeal would only backfire when the stereotype was evoked for females. We also tested categorization threat as an underlying mediator.

Method

Pretest. We conducted a pretest to confirm that both men and women are seen as inept at handling emotions. Participants from Amazon’s Mechanical Turk were randomly assigned to one of two conditions: male stereotype or female stereotype ($N = 99$, 49.5% males; $M_{age} = 37.31$, $SD = 12.60$). Those in each condition indicated the extent to which they agreed with the statement: “[Men / Women] are stereotyped as bad at handling emotions” (1 = *Strongly disagree*; 7 = *Strongly agree*). Results suggested the gender emotion stereotype existed for both men and women; the mean rating was statistically significantly higher than the scale midpoint in both the

male stereotype condition ($M = 5.31$, $SD = 1.36$), $t(48) = 6.74$, $p < .001$, $d = 1.95$, and the female stereotype condition ($M = 5.36$, $SD = 1.38$), $t(49) = 6.96$, $p < .001$, $d = 1.99$. There was no difference in ratings between those in the male and female stereotype conditions, $t(97) = -.20$, $p = .85$, $d = .04$.

Participants. The study was a 2 (participant self-reported gender: male versus female) x 2 (stereotype evocation: yes versus no) between-subjects design. Participants ($N = 600$, 44.4% males; $M_{age} = 37.42$, $SD = 12.01$) were recruited from Amazon's Mechanical Turk.

Procedure. All participants were told, "At the end of today's session, we will ask you to read an excerpt from an article." Male participants saw "Morality and Moral Controversies" and "Manage Your Emotions: A Guide for Men," while female participants saw "Morality and Moral Controversies" and "Manage Your Emotions: A Guide for Women." In other words, for all participants, the article about emotions was paired with an identity appeal. Both male and female participants indicated which article they preferred to read on a 7-point scale (1 = *Definitely "Morality and Moral Controversies"*; 7 = *Definitely "Manage Your Emotions: A Guide for [Men / Women]"*).

For participants in the stereotype evocation condition, we evoked the emotions stereotype by informing them that their gender was typically viewed as worse at handling emotions than the opposite gender. Specifically, female [male] participants read: "It is generally agreed upon that personality characteristics tend to vary across gender. For example, women [men] are believed to be worse than men [women] at handling a variety of emotions." The other half of participants (i.e., stereotype non-evocation condition) were not given this additional information.

Finally, we assessed categorization threat with the following three questions presented in random order ($\alpha = .89$): The article "Manage Your Emotions: A Guide for [Men / Women]

“misrepresents who I am as a person,” “categorizes me against my will,” and “threatens who I am as a person” (1 = *Strongly disagree*; 7 = *Strongly agree*).

Results

Article preference. To assess article preference, we conducted a 2 (participant gender) x 2 (stereotype evocation) ANOVA. The analysis revealed a significant interaction, $F(1, 596) = 5.67$, $p = .02$, $\eta_p^2 = .01$. Female participants in the stereotype evocation condition were significantly less likely to choose the article on emotions ($M = 3.47$; $SD = 2.25$) than female participants in the stereotype non-evocation condition ($M = 4.13$; $SD = 2.42$), $t(331) = 2.61$, $p = .01$, $d = .29$. Preference for the article on emotions amongst male participants did not differ whether the emotions stereotype was evoked ($M = 4.19$; $SD = 2.24$) or not evoked ($M = 3.98$; $SD = 2.06$), $t(265) = -.82$, $p = .41$, $d = .10$.

Categorization threat. To assess categorization threat, we conducted a 2 (participant gender) x 2 (stereotype evocation) ANOVA. There was a main effect of participant gender, $F(1, 596) = 35.47$, $p < .001$, $\eta_p^2 = .06$, and a main effect of stereotype evocation, $F(1, 596) = 9.54$, $p < .01$, $\eta_p^2 = .02$, both qualified by a significant interaction, $F(1, 596) = 3.96$, $p = .05$, $\eta_p^2 = .01$. Female participants in the stereotype evocation condition ($M = 4.45$, $SD = 1.81$) reported greater categorization threat than those in the stereotype non-evocation condition ($M = 3.73$, $SD = 1.92$), $t(331) = -3.54$, $p < .001$, $d = .39$. However, there was no difference in experienced categorization threat among male participants ($M_{stereotype\ evocation} = 3.32$, $SD = 1.55$; $M_{stereotype\ non-evocation} = 3.16$, $SD = 1.55$), $t(265) = -.82$, $p = .41$, $d = .86$.

Moderated Mediation. We tested whether differences in article preferences between the stereotype evocation and non-evocation conditions were mediated by feelings of categorization and moderated by participant gender. Conducting a 5,000 sample bootstrap analysis showed that

the 95% bias corrected confidence interval for the size of the indirect effect excluded zero (-.60, -.01), indicating that categorization threat drove the relationship between stereotype evocation and article choice for female participants but not for male participants—supporting our account that identity appeals must be about a marginalized identity for it to induce categorization threat (Hayes, 2015; Preacher and Hayes, 2004).

STUDY 4

While Study 3 demonstrated that identity appeals backfire among members of marginalized (versus non-marginalized) groups, Study 4 presents converging evidence by examining reactions of group members who feel strongly (versus weakly) marginalized. To gauge perceived marginalization, we included a trait measure of public regard: people's perceptions of how well-regarded their gender is by others (Luhtanen & Crocker, 1992). Because those with low public regard would be more likely to see their group as being stereotyped (since they are constantly on the lookout), we predicted that stereotype-evoking identity appeals would be particularly likely to backfire for this group.

Method

Participants. 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 an online pool of a university in the southeastern United States. Participants first indicated their gender. Only those who indicated that they were female could proceed with the rest of the survey ($N = 183$; $M_{age} = 21.73$, $SD = 6.57$).

Procedure. 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 (order did not have an effect, therefore we collapse across it in the results).

Rating Calculators. As in Study 2, participants in the no appeal condition saw two Casio SL-300VC Standard Function calculators that differed in color: green versus purple. 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. As in Major et al. (2007), we adapted Luhtanen and Crocker (1992)’s 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

Calculator preference. Consistent with the previous studies, participants in the no appeal condition ($M = 4.13$, $SD = 1.83$) expressed greater interest in the purple calculator than 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., believed women were poorly regarded) were particularly likely to avoid the purple calculator labeled “for Women.”

To explore the interaction between condition and public regard empirically, 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, $B = -.003$, $SE = .35$, $p = .94$: amongst participants with high public regard, participants' 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 unfavorably perceived by others) were less likely to select the purple calculator in the identity appeal condition than in the no appeal condition. Consistent with our account, stereotype-evoking identity appeals backfired only among women who chronically feel that their gender is being negatively stereotyped by others.

STUDY 5

Studies 3 and 4 examined the role of the first factor by testing whether for identity appeals to backfire, they must pertain to a commonly marginalized identity. Study 5 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 2's pretest demonstrating that purple evokes a stereotype (e.g., "Most women like 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.

Method

Participants. Study 5 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.

Procedure. Participants chose between two pens, identical except 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 but the purple option (pretested in Study 2 to evoke a stereotype about women) was labeled as “for Women.” For those in the non-stereotype-evoking condition, the green option (which was pretested in Study 2 not to evoke a stereotype about females) was labeled as “for Women.” After taking the survey, we gave participants the pen they had chosen, such that the choice was incentive compatible. See Appendix B.

Results

We conducted a logistic regression to examine whether pen choice varied as a function of appeal type. There was a significant difference in pen choice between the no appeal and stereotype-evoking appeal conditions. Specifically, at baseline (no appeal condition), 65.6% of women chose a purple pen; however, participants were less likely to choose the purple pen when it bore the label “for Women” (45.8%), $B = -.81$, $SE = .35$, Wald $\chi^2 = 5.29$, $p = .02$. 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%), $B = .53$, $SE = .39$, Wald $\chi^2 = 1.88$, $p = .17$.

GENERAL DISCUSSION

Five studies demonstrate when and why identity appeals backfire. We theorize and empirically document that identity appeals lead to avoidance when the evoked identity is one that is marginalized and the appeal evokes a stereotype about that identity. Furthermore, we show that the negative impact of identity appeals is driven by categorization threat. Using incentive-compatible choices (Studies 1, 2, and 5), we show that individuals avoid items labeled with identity appeals even when those products are otherwise preferred.

Our research advances our understanding of social labels: explicit characterizations of individuals based on their behavior, beliefs, and/or personality (Goffman, 1963). While existing research suggests that labels appealing to one's identity can motivate behaviors consistent with the evoked identity, we show that such labels can backfire if they provoke categorization threat. Relatedly, we contribute to the literature on categorization threat by identifying the conditions necessary to induce this threat. Finally, we add to prior research on stereotypes by assessing preferences and choices rather than achievement and performance outcomes.

Our research offers several avenues for future research. First, while we focused on gender stereotypes given their universal familiarity, future research should examine whether our theoretical account applies to other membership groups (e.g., age and race) as well as to those who may not perfectly fit under the evoked identity (e.g., a multiracial individual encountering a single-race identity appeal; Durham & Olson, 2016). Second, there may be situations in which stereotype-evoking identity appeals do not backfire. For instance, individuals may find identity appeals less bothersome if they are aware that another group of individuals had also been subject to the same labeling process—thus, making them feel less singled out and possibly removing some of the sting of categorization.

The ubiquity of identity appeals suggests a lack of understanding in the risks of identity appeals. Indeed, in defense of its actions during the “Girls’ Building Sets” scandal, a Target spokesperson noted that “guests preferred having a variety of indicators that can help inform and guide their shopping trip” (Pittman, 2015). Our results suggest otherwise: while identity appeals to non-marginalized, non-stereotyped groups can have a neutral or even beneficial effect, identity appeals to other groups have a negative and even backlash effect.

References

- Bailey, Luke. (2015, June 15). 27 gendered products that prove masculinity is incredibly fragile. *Buzzfeed*. Retrieved from <https://www.buzzfeed.com/lukebailey/masculinity-is-strong-and-powerful>.
- Becker, J. C., & Swim, J. K. (2011). Seeing the unseen: Attention to daily encounters with sexism as way to reduce sexist beliefs. *Psychology of Women Quarterly*, 35(2), 227-242.
- Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threat. *Social Identity: Context, Commitment, Content*, 35-58.
- Brewer, M. B., & Pierce, K. P. (2005). Social identity complexity and outgroup tolerance. *Personality and Social Psychology Bulletin*, 31(3), 428-437.
- Brodish, A. B., & Devine, P. G. (2009). The role of performance–avoidance goals and worry in mediating the relationship between stereotype threat and performance. *Journal of Experimental Social Psychology*, 45(1), 180-185.
- Chack, Erin. (2014, January 24). 21 pointlessly gendered products. *Buzzfeed*. Retrieved from <https://www.buzzfeed.com/erinchack/pointlessly-gendered-products>.
- Cheryan, S., & Monin, B. (2005). Where are you really from?: Asian Americans and identity denial. *Journal of Personality and Social Psychology*, 89(5), 717-730.
- Dunham, Y., & Olson, K. R. (2016). Beyond discrete categories: Studying multiracial, intersex, and transgender children will strengthen basic developmental science. *Journal of Cognition and Development*, 17(4), 642-665.
- Fredrickson, B. L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206.

- Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, *56*(2), 109-118.
- Glick, P., & Fiske, S. T. (2011). Ambivalent sexism revisited. *Psychology of Women Quarterly*, *35*(3), 530-535.
- Goffman, E. (1963). *Stigma: Notes on a spoiled identity*. New York, New York: Jenkins, JH & Carpenter.
- Grinberg, Emanuella (2015, June 11). What's wrong with this Target sign? *CNN*. Retrieved from <https://www.cnn.com/2015/06/09/living/target-girls-building-set-feat/index.html>.
- Hayes, Andrew F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, *50*(1): 1-22.
- Kraut, R. E. (1973). Effects of social labeling on giving to charity. *Journal of Experimental Social Psychology*, *9*(6), 551-562.
- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, *80*(6), 942-958.
- Lee, K., Kim, H., & Vohs, K. D. (2011). Stereotype threat in the marketplace: Consumer anxiety and purchase intentions. *Journal of Consumer Research*, *38*(2), 343-357.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, *18*(3), 302-318.
- Major, B., Kaiser, C. R., O'Brien, L. T., & McCoy, S. K. (2007). Perceived discrimination as worldview threat or worldview confirmation: Implications for self-esteem. *Journal of Personality and Social Psychology*, *92*(6), 1068-1086.

Pittman, T. (2017, December 6). Mom calls out target For ‘unnecessarily gendered marketing’.

Huffington Post. Retrieved from https://www.huffingtonpost.com/2015/06/04/abibeichel-target-gendered-toys_n_7513768.html.

Rappeport, Alan. (2016, February 7). Gloria Steinem and Madeleine Albright rebuke young

women backing Bernie Sanders. *The New York Times*. Retrieved from

<https://www.nytimes.com/2016/02/08/us/politics/gloria-steinem-madeleine-albright-hillary-clinton-bernie-sanders.html>.

Ratner, R. K., & Kahn, B. E. (2002). The impact of private versus public consumption on

variety-seeking behavior. *Journal of Consumer Research*, 29(2), 246-257.

Schur, E. M. (1971). *Labeling deviant behavior: Its sociological implications*. New York, New

York: Harper & Row.

Seibt, B., & Förster, J. (2004). Stereotype threat and performance: how self-stereotypes influence

processing by inducing regulatory foci. *Journal of Personality and Social Psychology*,

87(1), 38-56.

Siczkowski, Cavan. (2017, December 6). Bic Pens ‘For Her’ get hilariously snarky Amazon

reviews. *Huffington Post*. Retrieved from

https://www.huffingtonpost.com/2012/08/30/bic-pen-for-her-amazon-reviews_n_1842991.html.

Siy, J. O., & Cheryan, S. (2013). When compliments fail to flatter: American individualism and

responses to positive stereotypes. *Journal of Personality and Social Psychology*, 104(1),

87-102.

- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In *Advances in Experimental Social Psychology* (Vol. 34, pp. 379-440). San Diego, CA: Academic Press.
- Thompson, D. V., & Norton, M. I. (2011). The social utility of feature creep. *Journal of Marketing Research*, 48(3), 555-565.
- Tuttle, Brad. (2016, June 9). 12 products marketed to one gender for no good reason. *Time*. Retrieved from <http://time.com/money/4360406/gender-marketing-products-pen-laundry-yogurt/>.

APPENDIX A

Study 1: A) no appeal, B) identity appeal.

a)



b)



APPENDIX B

Study 5: A) no appeal, B) stereotype-evoking appeal, C) non-stereotype-evoking appeal.

a)



b)



c)

