

Penny for Your Preferences: Leveraging Self-Expression to Encourage Small Prosocial Gifts

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Abstract

Prior approaches that leverage identity to motivate prosocial behavior are often limited to the set of people who already strongly identify with an organization (e.g., prior donors) or by the costs and challenges associated with developing stronger organization-linked identities among a broader audience (e.g., encouraging more people to care). In contrast, this research demonstrates that small prosocial gifts, such as tips or small donations, can be encouraged by framing the act of giving as an opportunity to express identity-relevant preferences—even if such preferences are not explicitly related to prosociality or the organization in need. Rather than simply asking people to give, the “dueling preferences” approach investigated in this research frames the act of giving as a choice between two options (e.g., cats vs. dogs, chocolate vs. vanilla ice cream). Dueling preferences increases prosocial giving by providing potential givers with a greater opportunity for self-expression—an intrinsically desirable opportunity. Seven experiments conducted in the laboratory, online, and in the field support this theorized process while casting doubt on relevant alternatives. This research contributes to work on self-expression and identity and sheds light on how organizations can encourage prosocial behavior.

Keywords

donation, identity, prosocial, self-expression, tipping

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Prosocial behavior, defined as “actions intended to benefit one or more people other than oneself” (Batson and Powell 2003, p. 463), is critical for society to function. Prosocial organizations “aid populations and people who would otherwise be overlooked, and they fill the gaps where public programs cannot provide sufficient support” (Biberdorf 2017). After Hurricanes Katrina and Rita, for instance, Catholic Charities agencies heavily relied on volunteering and prosocial gifts to help victims (Catholic Charities USA 2006); similarly, service workers depend on tips to make minimum wage and stave off poverty (Gould and Cooper 2018).

But while it is of practical, managerial, and societal interest to increase prosocial giving, motivating prosocial behavior is often difficult. Younger consumers are tipping less than prior generations (Spector 2018), for example, and most charities report that they do not have enough funds to meet need (Non-profit Finance Fund 2018). In this research, we examine two prosocial behaviors, tipping and donating, which are acts of giving intended to help others. We focus on small gifts in particular (e.g., a few dollars or less), which, according to recent research (e.g., Savary and Goldsmith 2020) and popular

press outlets (United States Public Interest Research Group 2019; Wohlfiel 2018), are common and important in both tipping and charitable giving contexts.

One marketing solution to increase prosocial giving is identity-based appeals (e.g., Aaker and Akutsu 2009; Darley and Batson 1973; Duclos and Barasch 2014; Kaikati et al. 2017; White, Habib, and Dahl 2020; Winterich, Mittal, and Aquino 2013). In particular, organizations can increase prosocial giving by appealing to people who strongly identify with them (e.g., donated to them previously; Kessler and Milkman 2016) or by growing the set of people who view an organization as linked with their own identity (Arnett, German, and Hunt 2003; O’Reilly and Chatman 1986).

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These approaches, however, have challenges. Appealing to people who already identify with an organization can promote giving, but this strategy is limited to the group of people who already care. Encouraging more people to strongly identify with an organization can lead more people to care, but shifting identities can be difficult and costly (e.g., Shefska 2016).

To address some of these challenges, we examine a novel approach, occasionally observed in the field, that we call “dueling preferences.” Rather than simply asking people to tip, some cafés have started to frame tipping as a choice between two options (e.g., summer vs. winter; for more examples, see <https://tinyurl.com/exampleduelingpreferences>). Similarly, the American Society for the Prevention of Cruelty to Animals recently asked people to donate money by expressing their preference for cats or dogs (“Vote for your Paw-sident”).

While this approach is intriguing, little is known about its effectiveness and underlying mechanism. Does dueling preferences actually bolster giving compared with traditional approaches? If so, what psychological mechanism might drive this effect? And are all dueling pairs equally effective, or are some more effective than others?

Seven experiments conducted in the laboratory, online, and in the field examine whether dueling preferences increases small prosocial gifts, and if so, why. The results demonstrate that dueling preferences increases the rate of giving and the amount given versus standard giving appeals. Furthermore, we explore how self-expression drives these effects: Dueling preferences frames the act of giving as a choice between two options, which can offer givers a heightened opportunity to say something about who they are (i.e., self-express). This additional, intrinsically desirable opportunity to express oneself, in turn, increases prosocial giving. As a result, duels are more effective than standard appeals when they are seen as providing greater opportunities for self-expression and presented to people who value self-expression to a greater extent.

This work makes three key contributions. First, while there is continual interest in strategies for motivating prosocial giving, prior solutions often suffer from issues of limited scope and difficulty of implementation. To our knowledge, we are the first to systematically examine the effectiveness and underlying mechanism of dueling preferences, an identity-based solution that is relatively flexible and easy to employ. In doing so, we provide insights into how to most effectively implement this strategy.

Second, we add to the academic literature on how identity motivates behavior. While prior work has shown that evoking a specific identity (e.g., helper) can motivate identity-congruent behavior (e.g., helping; Bryan, Master, and Walton 2014; Oyserman 2009), we illustrate that this identity-behavior congruence relationship can be decoupled. Our work demonstrates that prosocial behavior can even be motivated by identities that are not traditionally associated with prosociality (e.g., cat person).

Third, we shed light on the behavioral consequences of self-expressive choice. Prior work has found that people make qualitatively different selections when choices are viewed as more

(vs. less) self-expressive (e.g., selecting more variety [Kim and Drolet 2003], choosing brand-name vs. generic products [Kim and Drolet 2009]). We further demonstrate that self-expressiveness can influence whether people make a choice at all: enhanced self-expressiveness, elicited by dueling preferences, increases people’s likelihood of tipping or donating.

Conceptual Framework

How Identity Motivates (Prosocial) Behavior

Identity is a key driver of consumer behavior (Kleine, Kleine, and Kernan 1993; Levy 1959; Malhotra 1988; Reed 2004; Reed et al. 2012; Sirgy 1982). The identity-based motivation model suggests that people are motivated to behave congruently with their identities (Oyserman 2009; Shavitt, Torelli, and Wong 2009). Someone who identifies as an athlete, for instance, will be motivated to act consistently with that identity by going to the gym or by purchasing new running shoes.

Some identities are chronically active, while others can become salient in a given situation (Reed 2004). The aforementioned athlete, for example, may also be a mother. If her mother identity is situationally cued (e.g., by spending time with her child), she may be more motivated to behave congruently with that identity (e.g., by purchasing something for her child) relative to her athlete identity. Organizations often leverage this principle. By creating an association between their product (e.g., Jif peanut butter) and a specific identity (e.g., “choosy moms”), for example, marketers can increase the likelihood that consumers with that identity will purchase their product (Deshpandé and Stayman 1994; Escalas and Bettman 2003, 2005; Reed et al. 2012).

Consistent with the role of identity in driving congruent behavior, research has examined how evoking prosocial identities can elicit prosocial behavior (Aaker and Akutsu 2009; Darley and Batson 1973; Duclos and Barasch 2014; Gergen, Gergen, and Meter 1972; Kaikati et al. 2017; Winterich, Mittal, and Aquino 2013). Some work advocates for appealing to potential donors who already strongly identify with an organization. Reminding people that they previously donated to an organization, for example, enhances the likelihood that they will donate to that organization again (Kessler and Milkman 2016). Similarly, employees who strongly identify with a company are more likely to volunteer time and effort to their company (O’Reilly and Chatman 1986). In both cases, relying on existing strong identities evokes subsequent prosocial behavior and support.

Unfortunately, however, this approach is limited to people who already strongly identify with an organization. Reminding blood donors that they donated previously may encourage them to donate again, for instance, but by focusing solely on existing donors, this approach is limited in scope. Similarly, employees who already identify with their company may volunteer at company events, but that number of potential volunteers is finite.

Another identity-based approach aims to bolster identification among people who may only weakly identify with an

organization. College students may not initially feel connected to their university, for example, which might prevent desired donation rates. Universities can bolster identification, though, through school-themed events such as homecoming (Arnett, German, and Hunt 2003), thereby increasing alumni donations. Similarly, companies can implement employee team-building and appreciation programs to strengthen employees' identification with their company and, in turn, promote prosocial behavior towards the company (e.g., volunteering time; Arnett, German, and Hunt 2003; O'Reilly and Chatman 1986). While this approach can broaden the number of potential givers, it has its own challenges. For instance, efforts to strengthen identification among potential givers can be financially burdensome and take years to develop (Shefska 2016).

To address these issues, some work has tried to develop identity-based appeals that are easier to implement than prior approaches. Compared with a verb-based appeal (e.g., "please help"), for example, simply invoking the equivalent prosocial identity (e.g., "please be a 'helper'") encourages prosocial behavior (Bryan, Master, and Walton 2014; Bryan et al. 2011). However, this approach, like all of the aforementioned approaches, still relies on the principle of identity-behavior congruence—prosocial identities motivate prosocial behavior. Might there be an even broader identity-based approach?

Dueling Preferences Approach

Leveraging an approach that we call "dueling preferences," we suggest that identity-behavior congruence can be decoupled, such that any valued identity (e.g., cat person) can motivate giving—even if that identity is unrelated to prosociality. In other words, rather than being restricted to the set of people that already hold a strong organization-linked identity or exerting resources to grow that set, we suggest that, by employing the dueling preferences approach, a broader set of valued identities can motivate prosocial behavior. Instead of simply asking people to give, the dueling preferences approach frames the act of prosocial giving as an opportunity to choose between multiple—almost always two—options.

We propose that, compared with a standard giving appeal, dueling preferences can boost small prosocial gifts by increasing the perceived opportunity to self-express valued identities or preferences. Tipping or donating in and of itself can be an opportunity to express oneself. People like to view themselves as prosocial (e.g., Bénabou and Tirole 2011), and giving to a charity or tipping a barista provides the opportunity to express that. Thus, even a standard prosocial giving appeal provides some opportunity for self-expression.

By framing a tip or donation as a means to express a preference between multiple options, we suggest that dueling preferences can heighten the perceived opportunity for self-expression even further. Beyond simply showing that one is generous or considerate via donating or tipping, dueling preferences can transform the act of giving into an opportunity to express something additional about oneself—for instance, whether one prefers dogs or cats, or vanilla or chocolate ice cream.

Choice, by its very nature, is self-expressive (Bodner and Prelec 2003), as it involves stating a preference for one option over another. Dhar and Wertenbroch (2012) explore vice-virtue choices, for example, and note that "[the choice of] virtue and vice become more meaningful in the presence of each other as available opportunities" (p. 24). In other words, the self-expressiveness of choosing an action (e.g., jogging) is greater when it is chosen in the presence of a competing option (e.g., watching TV). Applied to our context, compared with the question "Do you like dogs?," we suggest that the answer to an either/or question such as "Which do you like more, dogs or cats?" should be perceived as more self-expressive. Put simply, stating that you like dogs should feel like it says more about you when in the presence of another available and plausible option, like cats. Consequently, the either/or format of dueling preferences should amplify the perceived opportunity for self-expression.

We suggest that this greater opportunity for self-expression, in turn, can increase prosocial giving. On average, people enjoy (He, Melumad, and Pham 2019) and have an intrinsic desire to express (Tamir and Mitchell 2012) who they are, and they engage in specific behaviors to communicate identity-relevant information to themselves and/or others. These behaviors include choosing, wearing, and talking about products and experiences that reflect their identities (Belk 1988; Berger and Heath 2007, 2008; Gal 2015; Levy 1959; Shavitt 1990; White and Dahl 2006, 2007).

Because people generally find self-expression intrinsically motivating (and, thus, fundamentally desirable), they should be willing to pay to engage in it. Neuroimaging work underscores that people are wired to crave self-expression opportunities and that such opportunities are processed like rewards, much like opportunities for food or money (Tamir and Mitchell 2012). Therefore, just as people pay more for any other desirable product attribute (e.g., a brand they like, a product in their favorite color), they should be willing to pay more for an opportunity to express something valuable about themselves. We propose that this intrinsic value of self-expression underlies the effect of dueling preferences.

Consequently, with the dueling preferences approach, we extend the identity-behavior congruence principle to show that identities can motivate seemingly unrelated behaviors, due to the intrinsically motivating pull of self-expression. Specifically, we predict that

H₁: Compared with a standard appeal, the dueling preferences approach increases prosocial giving.

H₂: This effect (H₁) occurs because, relative to a standard appeal, dueling preferences can provide greater opportunity for self-expression.

Our theoretical perspective suggests when and for whom dueling preferences should be most effective. Duels can enhance the opportunity for self-expression, and therefore increase giving, by virtue of involving choice. Critically, though, this effect should only occur if the dueling options are

seen as relatively self-expressive by potential givers. The extent to which dueling options are perceived as self-expressive may generalize across individuals broadly (e.g., the choice of cats vs. dogs is likely seen as more self-expressive than A vs. B) or vary from person to person (e.g., some individuals find animals more self-expressive than others). The extent to which dueling options are perceived as self-expressive should have a direct impact on how effective the appeal will be.

Second, our perspective suggests that dueling preferences should be more effective among people who chronically value the act of self-expression to a greater extent or in situations that heighten one's need for self-expression. In other words, while duels often provide a greater opportunity for self-expression, that opportunity should be more desirable, and thus more likely to boost giving, for someone who strongly values self-expression (either chronically or for situational reasons). For someone who does not value self-expression, dueling preferences should be less likely to increase giving.

Finally, we are not suggesting that duels are the only way to provide givers with an opportunity for self-expression. Indeed, an opportunity for self-expression can be provided *without* the presence of choice. For example, one could express that they love dogs in the absence of cats as a competing option, and, accordingly, an appeal leveraging this "nonchoice" self-expression option should increase giving versus a standard appeal, according to our theory. We directly test such an expressive, nonchoice appeal in Experiment 4. Rather, we are suggesting that, by virtue of involving choice, the dueling preferences appeal can provide people with an even greater perceived opportunity to express something about who they are and, thus, can be especially effective at increasing giving.

Overview of Experiments

Seven experiments test our theorizing. Experiment 1 demonstrates that dueling preferences increases tipping (vs. a standard appeal) in a café, and Experiment 2 demonstrates that dueling preferences increases incentive-compatible donations in a more controlled setting.

The next five experiments examine the underlying process. Experiment 3 measures the perceived self-expressiveness of the giving opportunity and tests the mechanism through mediation. Experiment 4 provides further evidence for our framework by testing the underlying role of self-expressiveness and how the dueling preferences format uniquely amplifies this mechanism. Experiments 5, 6a, and 6b leverage both mediation and moderation to further provide evidence for our theory, testing the role of individual differences in a duel domain's self-expressiveness (Experiment 5), as well as the chronic (Experiment 6a) and situational (Experiment 6b) need to self-express.

The experiments also test several alternative mechanisms, including that the duel increases the feeling of choice (Botti and Iyengar 2004; Iyengar and Lepper 2000; Robinson, Irmak, and Jayachandran 2012), is novel (Hirschman 1980), has a game-like feeling, and features competition (Berger and Pope

2011; Huang, Etkin, and Jin 2017; Triplett 1898). Specifically, we cast doubt on these alternatives by measurement (Experiment 3) and in situations where many of these alternatives are held constant (Experiments 4–6b).

Finally, across experiments, we employed best practices regarding data cleaning. Following suggestions in Meyvis and Van Osselaer (2018), we excluded observations containing (1) IP addresses that appeared two or more times (i.e., duplicate or multiple entries), (2) memory check failures, and (3) outliers based on experiment timing.¹ Samples reported in each experiment are after data cleaning occurred, and original samples sizes prior to data cleaning are reported in Web Appendix A. Unless otherwise specified in Web Appendix A, results are substantively unchanged without employing these exclusions.

Field Experiment 1: Duels Boost Tipping

Experiment 1 tests whether dueling preferences boosts prosocial giving in the field. While paying for their beverages, café customers were shown either a standard giving appeal (i.e., tip jar) or a preference duel. We predicted (H_1) that dueling preferences would encourage more people to tip and increase tip revenue overall.

Method

We conducted a two-cell (standard appeal vs. dueling preferences) between-subjects field experiment during a single business day (7:00 A.M.–4:00 P.M.) at a locally owned café in Durham, North Carolina. Tipping opportunities were placed at their typical location by the cash register. Employees of the café were blind to our hypotheses.

The only difference between conditions was whether patrons encountered a tip jar (standard appeal condition; Web Appendix B) or a cats versus dogs duel (dueling preferences condition; Figure 1). Conditions were alternated every 45 minutes during "peak" times, as reported by the owner before the start of the experiment, and every hour during "off-peak" times (Web Appendix C). This resulted in ten time periods (five standard appeal periods, five duel periods), and each appeal type appeared for 4.5 hours in total.

We inconspicuously observed customers and recorded whether they tipped. Because the café's point-of-sale system did not allow people to tip via credit card, we focused on cash-paying customers ($N = 44$).² Logistical constraints prevented us from recording individual tip amounts, but we were able to measure the total amount tipped during each time period.

¹ To determine outliers based on experiment timing, we used the iterative procedure described in Meyvis and Van Osselaer (2018), which included removing those who took greater than ± 2.5 SD in terms of experiment timing in a first wave, followed by recalculating the timing distribution and removing a second wave of greater than ± 2.5 SD in terms of timing.

² The proportion of cash- (vs. credit-) paying customers did not differ across appeal type conditions ($\chi^2(1, N = 94) = .34, p = .561$).



Figure 1. Field experiment I dueling preferences condition.

Results and Discussion

As we predicted (H_1), compared with the standard appeal, dueling preferences led more customers to tip ($P_{\text{duel}} = 77.3\%$ vs. $P_{\text{standard}} = 40.9\%$; $\chi^2(1, N = 44) = 6.02, p = .014$). Furthermore, the duel more than doubled the amount of money raised overall during the business day ($\text{Total}_{\text{duel}} = \18.61 vs. $\text{Total}_{\text{standard}} = \7.87 ; Web Appendix C).

Experiment 1 provides preliminary support for our theorizing in the field. Relative to a standard appeal, dueling preferences led more consumers to tip and more than doubled the amount of money tipped overall (H_1). This experiment also provides initial evidence that identity–behavior congruence can be decoupled, given that the desired behavior (tipping a barista) was motivated by leveraging the expression of something conceptually unrelated (preference for dogs vs. cats).

Experiment 2: Duels Boost Donations

Experiment 2 uses a more controlled setting and an alternative duel to investigate whether dueling preferences can increase another form of prosocial giving: donations. Participants were given an incentive-compatible donation opportunity. We predicted (H_1) that, compared with a standard appeal, a duel would result in greater rates of donation and in greater amounts, thereby raising more money for charity.

Method

One hundred seventy-eight Amazon Mechanical Turk (MTurk) workers (63.5% male; $M_{\text{age}} = 33.5$ years) were randomly assigned to a two-cell (standard appeal vs. dueling preferences) between-subjects design. In addition to their \$.50 payment for completing the survey, all participants were given a \$.10 bonus to use for a potential donation.

First, we manipulated appeal type. All participants were given an opportunity to donate to the American Red Cross.

After reading introductory information about the charity, participants were shown images depicting their donation opportunity. In the standard appeal condition, the image displayed a jar labeled “donations” featuring a Red Cross logo and the caption, “make your donation!” In the dueling preferences condition, the image displayed two jars, one labeled “chocolate ice cream” and the other labeled “vanilla ice cream,” with the caption “vote with your donation!” and the Red Cross logo beside it (Web Appendix B).

Participants then completed the dependent variable, donation behavior. Participants selected how much of their \$.10 bonus they wanted to donate (ranging from \$.00 to \$.10 in \$.01 increments). We examined both whether people donated and how much they chose to donate. Because donation amount was heavily skewed toward zero (Kolmogorov–Smirnov test of a single distribution indicating nonnormality: $D(178) = .33, p < .001$), we performed a nonparametric test (Mann–Whitney test of equality of two distributions) on donation amount.

Results and Discussion

As we predicted (H_1), compared with the standard appeal, the duel led more participants to donate ($P_{\text{duel}} = 54.0\%$ vs. $P_{\text{standard}} = 37.4\%$; $\chi^2(1, N = 178) = 4.98, p = .026$). The duel also directionally increased how much people donated ($M_{\text{duel}} = \$.037$ vs. $M_{\text{standard}} = \$.030$; $U = 3,462.50, Z = -1.59, p = .111, d = .17$). While this difference was not statistically significant, the total amount donated in the duel condition was 28% greater than the total amount donated in the standard appeal condition ($\text{Total}_{\text{duel}} = \3.83 vs. $\text{Total}_{\text{standard}} = \2.99).

Experiment 2 demonstrates that dueling preferences can also increase donations. Compared with a standard appeal, dueling preferences encouraged more people to donate (H_1). Furthermore, dueling preferences raised more money for the American Red Cross, illustrating the value of this approach for nonprofit organizations. The experiment also provides further evidence that this approach is able to decouple identity–behavior congruence: The desired behavior (giving to the Red Cross) was motivated by leveraging the expression of something conceptually unrelated (ice cream preference).

Experiment 3: The Role of Self-Expression

Experiment 3 tests whether self-expression underlies the positive effect of dueling preferences on prosocial giving (H_2) as well as several potential alternative explanations. Rather than providing a heightened opportunity for self-expression, one could argue that duels boost prosocial giving because they are more novel (Hirschman 1980). Alternatively, competition can increase motivation (Berger and Pope 2011; Huang, Etkin, and Jin 2017; Triplett 1898), so perhaps duels increase giving because they stimulate competition or feel like a game. Similarly, embedding a choice between multiple options into the appeal could enhance a *feeling* of choice, which could also bolster giving. Indeed, providing choice to consumers has been

shown to encourage action by increasing their feelings of agency and control (Robinson, Irmak, and Jayachandran 2012). In this study, we measured all of these possibilities and tested whether they can explain the results on real donation behavior.

We also used a novel context to test generalizability. One could wonder whether the dueling preferences effect is somehow restricted to displaying two jars. To rule out this possibility, this experiment removed any mention or images of jars.

Method

Sixty-three MTurk workers (68.3% male; $M_{age} = 34.8$ years) were randomly assigned to a two-cell (standard appeal vs. dueling preferences) between-subjects design. As in Experiment 2, in addition to their \$.50 payment for completing the survey, all participants were given a \$.10 bonus to use for a potential donation.

First, participants received information about Afterschool Alliance, a real charity that promotes access to affordable, quality afterschool programs. They were told that they had a donation opportunity based on the charity's recent online fundraising material for their "Play Outside" campaign.

Then, we manipulated appeal type. In the standard appeal condition, the materials said, "Donate TODAY to the Play Outside Campaign!" In the dueling preferences condition, the material said, "Which makes you happier: SUMMER or WINTER? Tell us how you feel with your donations to the Play Outside Campaign!" (Web Appendix B). In both conditions, the material also featured the Afterschool Alliance logo and a tagline, "Encouraging kids to play outside safely all year round."

Second, participants completed the dependent variable, real donation behavior. As in Experiment 2, participants selected how much of their \$.10 bonus they wanted to donate (ranging from \$.00 to \$.10 in \$.01 increments). We examined both whether and how much people donated. Donation amount was heavily skewed toward zero (Kolmogorov–Smirnov test of a single distribution indicating nonnormality: $D(63) = .29, p < .001$), so we used a nonparametric test (Mann–Whitney test of equality of two distributions).

Third, we collected the proposed mediator. Participants reported how expressive the donation opportunity felt with two items ($r = .82$; averaged to create a self-expressiveness index): (1) "Compared to other donation situations I usually see, this situation gave me MORE of an opportunity to express something about who I am" (1 = "strongly disagree," and 7 = "strongly agree") and (2) "Compared to other donation situations you usually see, how much did this donation situation give you an opportunity to say something about who you are?" (1 = "this situation was LESS of an opportunity to say something about who I am," and 7 = "this situation was MORE of an opportunity to say something about who I am").

Finally, we measured potential alternative explanations in a linguistically similar format as the proposed mediator (i.e., "Compared to other donation situations I usually see...").

Participants reported the degree to which the appeal gave them more of an opportunity to participate in a competition, felt more novel, gave them more of an opportunity to make a choice, and felt more like a game (1 = "strongly disagree," and 7 = "strongly agree").

Finally, we collected a memory check that assessed whether participants recalled seeing a prompt to express their preference ("Did the donation opportunity you viewed mention anything about sharing your preference between two options?"; 1 = yes, 0 = no). Those in the standard appeal condition (who, in reality, were not shown a prompt to self-express) who responded "yes," and those in the duel condition (who, in reality, were shown a prompt to self-express) who responded "no," were coded as failing the memory check.

Results

Incidence and amount. As we predicted (H_1), compared with the standard appeal, the duel increased willingness to donate ($P_{duel} = 69.0\%$ vs. $P_{standard} = 38.2\%$; $\chi^2(1, N = 63) = 5.93, p = .015$). The duel also increased how much people donated ($M_{duel} = \$.055$ vs. $M_{standard} = \$.028$; $U = 332.50, Z = -2.38, p = .017, d = .63$) and, overall, raised 68% more money for Afterschool Alliance ($Total_{duel} = \$1.60$ vs. $Total_{standard} = \$.95$).

Mediation by self-expressiveness. Consistent with our theorizing, compared with the standard appeal, the duel was perceived to be a greater opportunity for self-expression ($M_{duel} = 5.71$ vs. $M_{standard} = 4.15$; $t(61) = 2.74, p = .008, d = .69$). Furthermore, as we predicted (H_2), a mediation analysis (Hayes 2013; Model 4 with 5,000 bootstraps) demonstrated that the effects on donation incidence ($ab = .45, 95\%$ confidence interval [CI] = [.10, 1.11]) and amount ($ab = .68, 95\%$ CI = [.21, 1.44]) were driven by perceived self-expressiveness.

Alternative mechanisms. Finally, we examined alternative explanations. Compared with the standard appeal, the duel was viewed as more novel ($M_{duel} = 6.03$ vs. $M_{standard} = 3.79$; $t(61) = 3.69, p < .001, d = .93$), like a game ($M_{duel} = 4.97$ vs. $M_{standard} = 3.32$; $t(61) = 2.55, p = .013, d = .64$), and competitive ($M_{duel} = 4.59$ vs. $M_{standard} = 2.56$; $t(61) = 3.35, p = .001, d = .84$), and it marginally increased the feeling of choice ($M_{duel} = 5.90$ vs. $M_{standard} = 4.76$; $t(61) = 1.67, p = .099, d = .43$). Importantly, although some alternatives mediated the observed effects when entered individually (i.e., without self-expression in the model), virtually none of them consistently drove the observed effects when entered in parallel with self-expression. Moreover, self-expression remained significant in these parallel mediation models (for detailed results, see Web Appendix D). Thus, while dueling preferences differs from standard appeals on several dimensions, the difference in perceived self-expressiveness appears to be the most important and predictive driver of the effects on prosocial giving.

Discussion

Experiment 3 provides further evidence that dueling preferences can increase real prosocial giving behavior (H_1) while providing support for the proposed underlying mechanism (H_2). Dueling preferences increased real donations because it provided greater perceived opportunity for self-expression.

Additional analyses also cast doubt on a range of alternative explanations including competition, novelty, feelings of choice, or a game-like feeling. Furthermore, two larger conceptual replicates, including a version that randomized the presentation order of all potential mediators (i.e., the proposed self-expression mechanism and all potential alternatives), found similar results (Web Appendix E). Together, these studies provide convergent support for our proposed self-expression mechanism.

Experiment 4: The Role of Dueling Options

While Experiment 3 provides evidence for the role of self-expression and begins to cast doubt on several alternatives, one could still wonder if some other feature of duels, rather than perceived self-expressiveness, is driving these effects. To test this possibility, Experiment 4 adds a duel condition that provides *less* of an opportunity for self-expression—the choice between the letters A versus B. If our theorizing about the role of self-expressiveness is correct, the effect of dueling preferences on giving should be stronger (weaker) when a duel involves options that are seen as more (less) self-expressive.

As discussed previously, one might also wonder if choice is the only way to provide givers with an opportunity for self-expression. According to our theory, while duels are not the only way to provide an opportunity to self-express—one could simply express what one likes without the presence of a comparison option—they are particularly effective at doing so by virtue of their either/or format. To test this argument, Experiment 4 also adds a condition that provides a nonchoice opportunity for self-expression. We predicted that, due to the intrinsic appeal of self-expression, an expressive nonchoice appeal should increase giving relative to a standard appeal. Critically, however, we further predicted that a preference duel with expressive options should increase giving the most. In other words, we are expecting that the expressive preference duel should uniquely amplify perceived self-expressiveness and, in turn, prosocial giving. We also held constant the actual preference being expressed across the expressive duel and expressive nonchoice appeals in order to tease out the specific proposed role of choice in amplifying perceived self-expressiveness.

Method

Four hundred sixty-three participants on Prolific Academic (42.8% male; $M_{\text{age}} = 34.9$ years) were randomly assigned to one of four appeal types (standard appeal, less expressive duel, expressive nonchoice, expressive duel). First, participants in the expressive nonchoice appeal condition indicated whether

they preferred the mountains or the beach. We included this question so that we could later provide an expressive nonchoice appeal that matched their preference.

Second, all participants completed a nine-question filler task involving counting syllables and judging the brightness of colors (Web Appendix B). We included this filler task to create distance between the preference expression (in the expressive nonchoice condition) and the main study.

Third, all participants were given information about a real environmental conservation charity, the Environmental Investigation Agency (EIA), and were told that the charity was testing online fundraising materials. Fourth, we manipulated appeal type. All appeals (Web Appendix B) featured the EIA logo. In the standard appeal condition, the appeal said, “Donate TODAY!” and featured a button that said, “Click this button to donate.” In the expressive duel condition, the appeal said, “Which do you love more: The MOUNTAINS or the BEACH?” and featured two “donation buttons” allowing donors to click the button that expresses their preference.

In the less expressive duel condition, the appeal involved a choice designed to be relatively low in self-expression—the preference for letters. It said, “Which do you love more: A or B?” and featured two donation buttons similar to those in the expressive duel condition. Both the expressive and less expressive duels offer the opportunity to make a choice between two options, but the expressive duel condition should provide a greater opportunity for self-expression. We later validate this assumption in our measure of the mediator.

The expressive nonchoice condition provided the opportunity for self-expression without choice. We took the information participants provided previously (i.e., whether they preferred the mountains or the beach) and piped that preference into the text of the appeal, so that the appeal read “Do you love the [beach/mountains]?” and featured a button stating, “I LOVE THE [BEACH/MOUNTAINS].” By controlling for the actual preference being expressed across the expressive duel and expressive nonchoice conditions (i.e., the fact that the person likes the mountains or beach), we isolate the specific proposed role of choice in amplifying perceived self-expressiveness.

Fifth, we collected the dependent measures. We measured donation likelihood with two items ($r = .81$): (1) “Based on the material that you viewed above, how likely would you be to donate any amount of money to Environmental Investigation Agency?” (1 = “not at all,” and 7 = “very”) and (2) “Rate your agreement with the following statement: This fundraising material makes me more likely to donate to the Environmental Investigation Agency” (1 = “strongly disagree,” and 7 = “strongly agree”). In addition, we asked participants how much they would donate to the EIA (up to \$10).

Sixth, we collected the mediator using the two items from Experiment 3 on nine-point scales ($r = .83$). Finally, we collected a memory check. All participants responded to the question “Which of the donation opportunities below did you see for the Environmental Investigation Agency earlier in this study?” and were shown photos of each condition’s appeal.

Table 1. Expressive Duels Provide Greater Opportunity for Self-Expression (vs. Other Appeals), Which Drives Giving (Experiment 4).

Appeal Type	Donation Likelihood	Donation Amount (\$)	Self-Expressiveness
Standard	2.22 (1.13)	1.55 (2.43)	3.18 (1.77)
Less expressive duel	2.06 (1.23)	1.50 (2.51)	3.67 (2.08)
Expressive nonchoice	2.62 (1.39)	2.32 (2.98)	4.42 (1.96)
Expressive duel	3.01 (1.66)	3.12 (3.48)	5.36 (2.21)

Notes: Statistics reported as M (SD).

Those who recalled seeing a different appeal than the one they actually saw were coded as failing the memory check.

Results

Likelihood and amount. Omnibus tests revealed significant differences between conditions on both donation likelihood ($F(3, 459) = 10.87, p < .001$) and amount ($F(3, 459) = 7.80, p < .001$; Table 1). As in the prior experiments, compared with the standard appeal, the expressive duel increased donation likelihood ($M_{\text{exp. duel}} = 3.01$ vs. $M_{\text{standard}} = 2.22$; $t(459) = 4.26, p < .001, d = .56$) and amount ($M_{\text{exp. duel}} = \3.12 vs. $M_{\text{standard}} = \$1.55$; $t(459) = 4.02, p < .001, d = .52$), again confirming H_1 .

Importantly, and as we expected, compared with the expressive duel, the less expressive duel significantly reduced giving (likelihood: $t(459) = 5.20, p < .001, d = .65$; amount: $t(459) = 4.20, p < .001, d = .53$). In addition, the less expressive duel did not increase giving relative to the standard appeal (likelihood: $M_{\text{less exp. duel}} = 2.06$ vs. $M_{\text{standard}} = 2.22$; $t(459) = .89, p = .38, d = .14$; amount: $M_{\text{less exp. duel}} = \1.50 vs. $M_{\text{standard}} = \$1.55$; $t(459) = .14, p = .89, d = .02$), suggesting that choice alone, without self-expression, cannot boost prosocial giving.

Finally, we examined the expressive nonchoice appeal. Consistent with the hypothesized role of self-expression, the expressive nonchoice appeal increased donation likelihood relative to both the standard appeal (likelihood: $M_{\text{exp. NC}} = 2.62$; $t(459) = 2.24, p = .025, d = .32$; amount: $M_{\text{exp. NC}} = \$2.31$; $t(459) = 2.04, p = .042, d = .28$) and the less expressive duel (likelihood: $t(459) = 3.19, p = .001, d = .39$; amount: $t(459) = 2.21, p = .028, d = .49$). However, as we predicted, the expressive nonchoice appeal was not as effective as the expressive duel (likelihood: $t(459) = 2.19, p = .029, d = .25$; amount: $t(459) = 2.15, p = .032, d = .25$). In other words, although a nonchoice appeal that provides the opportunity for self-expression increases giving somewhat, an expressive duel increases giving even more.

Mediation by self-expressiveness. Again, omnibus tests revealed significant differences between conditions on self-expressiveness ($F(3, 459) = 24.87, p < .001$; Table 1). Consistent with Experiment 3, compared with the standard appeal, the expressive duel was seen as an enhanced opportunity for self-expression ($M_{\text{exp. duel}} = 5.36$ vs. $M_{\text{standard}} = 3.18$; $t(459) = 8.06, p < .001, d = 1.09$), and mediation analysis (Hayes 2013; Model 4 with 5,000 bootstraps) revealed that this drove the effects on donation likelihood ($ab = .77, 95\% \text{ CI} = [.55, 1.02]$).

The expressive duel also was seen as providing greater opportunity for self-expression than the less expressive duel ($M_{\text{less exp. duel}} = 3.67$; $t(459) = 6.30, p < .001, d = .79$), which also drove the effect on donation likelihood ($ab = .60, 95\% \text{ CI} = [.38, .85]$). This result underscores the role of self-expression, and not the presence of choice alone, in explaining the effectiveness of the dueling preferences approach.

Also, as expected, the expressive nonchoice appeal was seen as more self-expressive than the standard appeal ($M_{\text{exp. NC}} = 4.42$; $t(459) = 4.72, p < .001, d = .66$), and this drove its positive effect on donation likelihood ($ab = .44, 95\% \text{ CI} = [.26, .63]$). Thus, even without the presence of dueling options, providing people with a chance to self-express can boost giving. The expressive nonchoice appeal also boosted self-expressiveness ($t(459) = 2.86, p = .004, d = .37$) and, in turn, giving (marginally; $ab = .26, 90\% \text{ CI} = [.08, .45]$), relative to the less expressive duel.

Most importantly, and critical to our theory, the expressive duel was perceived as the most self-expressive (vs. expressive nonchoice appeal: $t(459) = 3.66, p < .001, d = .45$), and this difference drove the effect on donation likelihood ($ab = .33, 95\% \text{ CI} = [.14, .54]$). In other words, holding the act of expression constant, the dueling format amplifies self-expressiveness and, in turn, giving. Thus, the expressive duel is best able to boost giving versus all other appeals.

Mediation results on donation amount were identical and will thus not be discussed for the sake of brevity.

Discussion

Experiment 4 further demonstrates self-expression as the mechanism underlying this effect and underscores the value of the dueling preferences format in amplifying this mechanism. As with prior studies, the expressive duel increased donation likelihood relative to the standard appeal. Moreover, consistent with the notion that this effect is driven by self-expression, the expressive duel also outperformed a duel containing less expressive options. This result further underscores that the presence of dueling options (i.e., choice) alone cannot fully explain the pattern of results.

We also found that an expressive nonchoice appeal, which allowed givers to express a liking for the beach or mountains, increased giving compared with the standard appeal—again supporting the powerful and motivating role of self-expression. Importantly though, and key to the present research, the dueling format generated the greatest perceived

self-expressiveness and, thus, the greatest levels of prosocial giving. Notably, across the expressive nonchoice appeal and the expressive duel, participants were engaging in the exact same act of expression (i.e., stating that they like the beach or mountains, depending on their preference), and we varied only whether this act was situated in the form of a duel (i.e., choice). These results demonstrate that although duels are not the only way to provide self-expression and enhance giving, they are a privileged type of appeal that, through their structure, can uniquely boost expression and, thus, prosocial giving.

Experiment 5: Moderation by Individual Differences in Domain Self-Expressiveness

Thus far, we have shown that duels can be effective because they provide a heightened opportunity for self-expression relative to standard appeals. While Experiment 4 varied duel content (i.e., contrasting duels that were more vs. less self-expressive), in Experiment 5 we hold the duel constant and leverage individual differences to test our theory.

For any given duel, individuals should differ in the extent to which they perceive the duel's domain as self-expressive. While many people find pet preferences (e.g., whether they prefer cats or dogs) self-expressive, for instance, others may find them less so. In this study, we test the proposed mechanism by measuring individual differences in perceived self-expressiveness of the duel's domain and predict that it will moderate the effects on prosocial giving. Specifically, we predicted that the effectiveness of dueling preferences would be amplified among those who perceive the duel's domain to be more self-expressive and attenuated among those who perceive the duel's domain to be less self-expressive.

Method

One hundred twenty-one laboratory participants at the University of Pennsylvania (36.4% male; $M_{\text{age}} = 24.6$ years) were randomly assigned to one of two appeal types (standard appeal vs. duel) in a 2 (appeal type) \times continuous (duel domain self-expressiveness) between-subjects design.

First, all participants imagined ordering a beverage at a café and approaching the cash register to pay. Second, we manipulated the appeal type using a standard appeal and a duel (cats vs. dogs), depending on condition, similar to those presented to participants in Experiment 1 (Web Appendix B).

Third, we collected the dependent measures. We asked participants if they would tip (1 = yes, 0 = no), and if so, how much (open ended). One participant indicated that they would tip \$150 (+5 SD from mean) and was thus removed from all analyses. We also asked participants how likely they would be to tip (1 = "not at all," and 9 = "extremely"). The likelihood and amount measures showed identical results to the incidence measure and thus are not discussed further, for the sake of brevity.

Fourth, using three items ($\alpha = .77$; averaged to create a domain self-expressiveness index) we measured the expressiveness of the duel domain as an individual difference: (1)

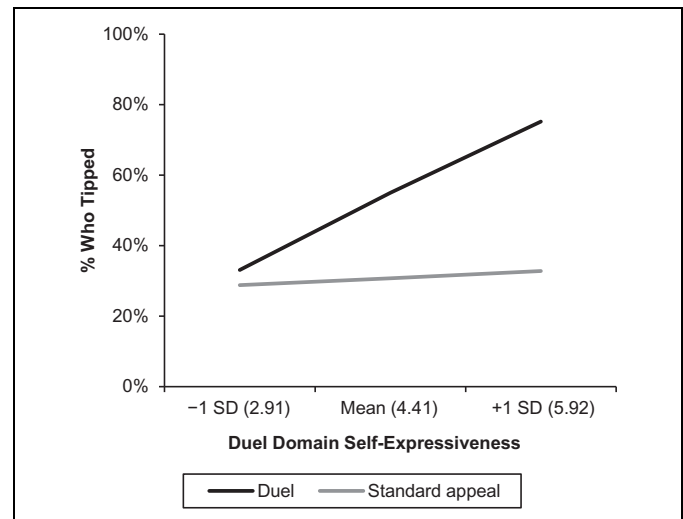


Figure 2. Duel domain expressiveness moderates the effect (Experiment 5).

"How much do you care about the choice of cats versus dogs?"; (2) "How strong is your preference for one over the other?"; and (3) "How much does your choice of pets say something about who you are?" (1 = "not at all," and 7 = "very much"). This index did not vary by condition ($t(119) = 1.50, p = .14$).

Finally, we collected a memory check. All participants responded to the question "How many tip jars did you see in the tipping situation?" (0, 1, 2). Those in the standard appeal condition who responded "0" or "2" and those in the duel conditions who responded "0" or "1" were coded as failing the memory check.³

Results

First, a binary logistic regression regressing tip incidence on appeal type ($-1 =$ standard appeal, $1 =$ duel), domain self-expressiveness (mean-centered), and their interaction revealed the predicted effect of appeal type ($b = .51$, Wald $\chi^2(1, N = 121) = 6.40, p = .011$). Consistent with the other experiments, compared with a standard appeal, dueling preferences increased willingness to engage in prosocial giving ($P_{\text{duel}} = 52.4\%$ vs. $P_{\text{standard}} = 31.0\%$), further confirming H_1 .

Second, and more importantly, this effect was qualified by the predicted (marginal) interaction ($b = .27$, Wald $\chi^2(1, N = 121) = 3.42, p = .065$, Johnson–Neyman point at 4.06; Spiller et al. 2013). Spotlight analysis provides more insight into the pattern of effects (Figure 2). As we predicted, among people who found the domain highly self-expressive (+1 SD), dueling preferences increased tipping ($P_{\text{duel}} = 75.2\%$ vs. $P_{\text{standard}} = 32.8\%$; $b = .94$, Wald $\chi^2(1, N = 121) = 9.90, p = .002$). Consistent with the underlying role of self-expressiveness,

³ We also collected a measure of the proposed mediator and used this to test for moderated mediation, although this was not the central focus of this study. Results were consistent with our theory. For measures and moderated mediation results, see Web Appendix F.

however, dueling preferences no longer garnered greater tipping likelihood among people who found the duel's domain less self-expressive (-1 SD: $P_{\text{duel}} = 33.1\%$ vs. $P_{\text{standard}} = 28.8\%$; $b = .13$, Wald $\chi^2(1, N = 121) = .18, p = .67$).

Discussion

Experiment 5 uses process by moderation to further underscore how dueling preferences shapes prosocial giving. Consistent with the hypothesized role of self-expression, the effect of the duel was moderated by individual differences in perceived expressiveness of the duel's domain. Among people for whom the duel domain felt more self-expressive, the duel increased willingness to tip. Among people for whom the duel felt less self-expressive, however, the duel did not increase willingness to tip.

This moderation also casts further doubt on several alternative explanations. While one might argue that the beneficial effects of dueling preferences are driven by characteristics inherent to most duels (e.g., they are novel, they feature competition and choice), such alternatives cannot easily explain why domain self-expressiveness would moderate the effect.

Experiment 6a: Moderation by Individual Differences in the Value of Self-Expression

Our final two experiments further test the hypothesized underlying process by moderating the second link in our proposed causal chain. We have suggested that duels can enhance prosocial giving by providing an additional opportunity for self-expression (H_2). Experiments 4 and 5 tested the "a-link" of this theoretical process, or whether duels are more effective when they are seen as providing more of an opportunity for expression. Experiments 6a and 6b test moderation on the "b-link," or the extent to which enhanced self-expressiveness motivates greater levels of giving.

Although we have argued and research demonstrates that people generally have an intrinsic desire to express themselves (He, Melumad, and Pham 2019; Tamir and Mitchell 2012), there is some variation in this desire or need. People can vary, either chronically, as an individual difference, or situationally, in the degree to which they value (Kim and Markus 2002; Kim and Sherman 2007) or need self-expression (Chernev, Hamilton, and Gal 2011; Grewal, Stephen, and Verrochi Coleman 2019). This variation should impact people's responses to a self-expression opportunity. If our theorizing about the underlying role of self-expressiveness is correct, dueling preferences should have a stronger (weaker) effect on giving among people who value self-expression to a greater (lesser) extent, both as an individual difference and situationally. In other words, both individual and situational variation in value for self-expression should affect how intrinsically desirable the self-expression opportunity is, thus influencing how much people give to an appeal that incorporates such an opportunity. In Experiment 6a, we measured how much people chronically

value self-expression and test whether it moderates our effect. In Experiment 6b, we manipulated need for self-expression.

Method

Five hundred thirty-four MTurk workers (52.1% male; $M_{\text{age}} = 36.9$ years) were randomly assigned to one of two appeal types (standard appeal vs. duel) in a 2 (appeal type) \times continuous (value of self-expression) between-subjects design. First, we measured how much each participant values self-expression using five items ($\alpha = .90$; averaged to create a value of self-expression [VSE] index) adapted from the Value of Expressiveness Questionnaire (Kim and Sherman 2007; Web Appendix B). Second, to create distance between the individual difference measure and the main experiment, all participants completed a brief filler task similar to the one used in Experiment 4.

Third, we manipulated the appeal type. Participants imagined that they were browsing social media and came upon a local animal shelter's recent post "regarding their yearly fundraising campaign." All participants viewed a fictional post that contained the shelter's name ("Smile Animal Shelter"), two images of cats and dogs, and the focal caption, "Donate today by clicking here!" In the standard appeal condition, this was the entirety of the post. In the duel condition, two additions were made: Above the cats and dogs images, text was added that said, "Which do you like more: Cats or Dogs?" and the focal caption read, "Share your preference and donate today by clicking here!" (Web Appendix B).

Fourth, we collected the dependent measure, donation likelihood (1 = "not at all," and 9 = "extremely"). Fifth, we collected the mediator using the items from Experiments 3 and 4 ($r = .79$).⁴ Finally, we collected a memory check that assessed whether participants recalled seeing a prompt to express their preference between cats and dogs, similar to the one used in Experiment 3.

Results

Likelihood. First, regressing donation likelihood on appeal type ($-1 =$ standard appeal, $1 =$ duel), VSE (mean-centered), and their interaction revealed the predicted effect of appeal type ($b = .28, t(530) = 3.46, p = .001$). Consistent with the first five experiments, compared with a standard appeal, dueling

⁴ Tests of discriminant validity demonstrate that the mediator was distinct from the moderator. Bagozzi, Yi, and Phillips (1991, p. 436) suggest that "discriminant validity among traits is achieved when the trait correlation differs significantly from 1.0." Significant difference from 1.0 is assessable by running a correlation between the supposed constructs and collecting a 95% confidence interval, and discriminant validity between constructs is suggested when the confidence interval does not include 1.0. This method suggests that VSE (the moderator) and self-expressiveness (the mediator) are distinct constructs (i.e., feature discriminant validity; $r = .18, 95\% \text{ CI} = [.09, .28]$). Principal axis factor analysis with direct oblimin rotation corroborates that the mediator and moderator items load onto two distinct factors (Eigenvalue for factor 2 = 1.68).

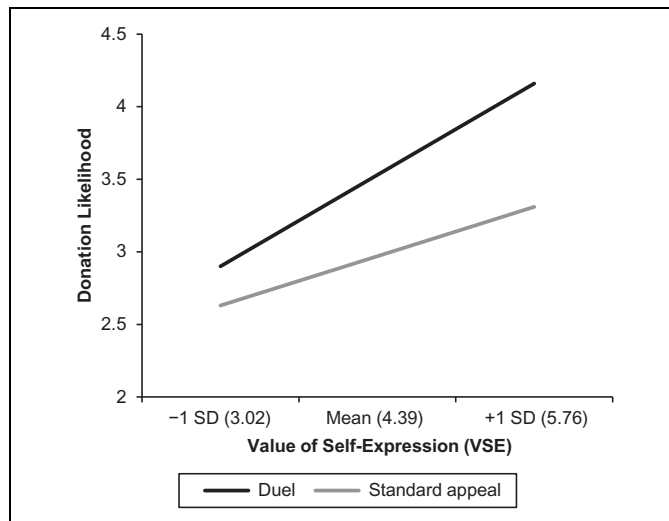


Figure 3. Value of self-expression moderates the effect (Experiment 6a).

preferences increased the likelihood of prosocial giving ($M_{\text{duel}} = 3.52$ vs. $M_{\text{standard}} = 2.98$), again confirming H_1 .

Second, and more importantly, this effect was qualified by the predicted (marginal) interaction ($b = .11$, $t(530) = 1.80$, $p = .072$, Johnson–Neyman point at 3.53; Figure 3). As we predicted, among people who highly value self-expression (+1 SD), dueling preferences increased willingness to donate ($M_{\text{duel}} = 4.16$ vs. $M_{\text{standard}} = 3.31$; $b = .43$, $t(530) = 3.73$, $p < .001$). Among people who value self-expression to a lesser extent (–1 SD), however, the effect was attenuated ($M_{\text{duel}} = 2.89$ vs. $M_{\text{standard}} = 2.63$; $b = .13$, $t(530) = 1.15$, $p = .251$). Examining the simple slopes provides further insight into this interaction: The relationship between valuing self-expression and donation likelihood was greater in the dueling preferences condition ($b = .46$, $t(530) = 6.05$, $p < .001$) than in the standard appeal condition ($b = .25$, $t(530) = 2.72$, $p = .007$).

Moderated mediation by self-expressiveness. We conducted a similar regression on self-expressiveness. As we predicted, there was an effect of appeal type ($b = .50$, $t(530) = 5.86$, $p < .001$). As in prior experiments, compared with the standard appeal, dueling preferences increased the perceived self-expressiveness of the giving opportunity ($M_{\text{duel}} = 5.55$ vs. $M_{\text{standard}} = 4.56$).⁵

⁵ There was also an interaction ($b = .15$, $t(530) = 2.33$, $p = .020$) of appeal type and VSE on self-expressiveness, suggesting that the duel was viewed as more self-expressive than the standard appeal only among those who valued self-expression at least a small amount (Johnson–Neyman point at 2.76; 88% of participants were at and above this point). Because only a small percentage of our sample (12%) had low-enough VSE to undermine the perceived self-expressiveness of the duel, we do not focus on a-link moderation in our discussion of the results. Of potential interest, however, we do find that this interaction indeed drives the effect of dueling preferences (Hayes 2013; Model 7 with 5,000 bootstraps index of moderated mediation = .07, 95% CI = [.01, .14]). This result further supports our theory that seeing the duel as self-expressive is crucial in driving the effect of dueling preferences.

Finally, a moderated mediation analysis (Hayes 2013; Model 14 with 5,000 bootstraps) using VSE as the “b-link” moderator supports the hypothesized underlying process. Results demonstrated that the effect of dueling preferences on donation likelihood was driven by self-expressiveness (H_2), and that this effect was stronger (weaker) for individuals who place greater (lesser) value on self-expression (index of moderated mediation = .04, 95% CI = [.02, .07]). Specifically, while the self-expressiveness of the donation opportunity mediated the effects at all levels of VSE (at –1 SD: $ab = .16$, 95% CI = [.10, .24]; at +1 SD: $ab = .28$, 95% CI = [.18, .38]), the size of the indirect effect is amplified among people who value self-expression to a greater extent. In other words, because they provide a greater opportunity for self-expression than standard appeals, duels exert a stronger (weaker) positive influence on prosocial giving among individuals who strongly (weakly) value self-expression.

Discussion

Experiment 6a further underscores the underlying role of self-expressiveness. As we predicted (H_2), the effect on prosocial giving was both mediated by the self-expressiveness of the donation opportunity and moderated by the importance an individual chronically places on self-expression. While the duel featured in this experiment was generally perceived to be a greater opportunity for self-expression (relative to the standard appeal), people’s willingness to give money for that opportunity depended on how strongly they chronically valued self-expression. Among people who strongly value self-expression, dueling preferences’ effects were amplified, and among people who weakly value it, the effects were attenuated.

Experiment 6b: Moderation by Satiating the Need for Self-Expression

Experiment 6b experimentally manipulates the need for self-expression. We leveraged a satiation manipulation (Chernev, Hamilton, and Gal 2011) in which participants were given the opportunity to express themselves prior to a donation scenario, thereby temporarily reducing their need for self-expression. We predicted that the effect of dueling preferences would be attenuated when the need for self-expression was reduced.

Method

Three hundred twenty-four participants on Prolific Academic (49.1% male; $M_{\text{age}} = 33.7$ years) were randomly assigned to condition in a 2 (appeal: standard vs. duel) \times 2 (need for expression: baseline vs. satiated) between-subjects design.

First, participants in the satiated condition completed a self-expression task adapted from Chernev, Hamilton, and Gal (2011) shown to satiate consumers’ need to self-express. Specifically, participants were asked to report several their favorite things, including their favorite sports teams, musical artist,

color, hobby, subject in school, television show, book, and movie (Web Appendix B). Participants in the baseline condition did not complete this task, meaning their baseline need to self-express, which we have leveraged in prior studies, was not satiated. A separate test ($N = 141$ on Prolific Academic) using the manipulation check items from Chernev, Hamilton, and Gal (2011; Experiment 5) confirmed that the satiation condition does indeed decrease participants' need to express ($M_{\text{baseline}} = 4.84$ vs. $M_{\text{satiated}} = 4.36$; $t(139) = 2.46$, $p = .016$, $d = .42$).

Second, we manipulated the appeal type. To do so, we used the same hypothetical donation scenario for the EIA as in Experiment 4. Participants were shown a standard appeal or a mountains versus beach duel, depending on condition.

Third, we collected our dependent variables. Participants were asked to report their donation likelihood using the two measures from Experiment 4 ($r = .78$) as well as whether they would donate (0 = no, 1 = yes). The incidence measure showed substantively similar results to the likelihood measure and thus will not be discussed further.

Finally, we also collected a memory check using the same measure from Experiment 4. Those who recalled seeing a different appeal than the one they actually saw were coded as failing the memory check.

Results

A two-way ANOVA including the need for self-expression and appeal type on donation likelihood revealed the predicted (marginal) interaction ($F(1, 320) = 2.95$, $p = .087$). First, consistent with the prior experiments, in the baseline condition, participants reported a greater likelihood to donate to the duel versus the standard appeal ($M_{\text{duel}} = 3.10$ vs. $M_{\text{standard}} = 2.17$; $F(1, 320) = 18.21$, $p < .001$, $d = .64$). Second, and consistent with the proposed underlying role of self-expression, when the need for expression was previously satiated, this effect was attenuated ($M_{\text{duel}} = 2.51$ vs. $M_{\text{standard}} = 2.11$; $F(1, 320) = 3.40$, $p = .07$, $d = .30$).

Examining the simple effects within appeal condition yields further insight. Participants' likelihood to give in the standard appeal condition was equal across baseline and satiation conditions ($F(1, 320) = .08$, $p = .78$, $d = .05$). In the duel condition, however, previously satiating the desire for self-expression reduced participants' reported likelihood to engage in prosocial giving ($F(1, 320) = 7.44$, $p = .007$, $d = .40$). In other words, attenuating the need to self-express reduced participants' response to the duel appeal only.

Discussion

Using a process-by-moderation design, Experiment 6b provides convergent support for the underlying role of self-expressiveness. Satiating the need for expression moderated the effect of dueling preferences. As with prior studies, dueling preferences enhanced prosocial giving in the baseline condition (i.e., when we leveraged people's natural desire to express themselves). When participants

had the chance to express themselves prior to the giving opportunity, however, this effect was attenuated.

These results also provide a final argument against several of the alternative explanations discussed in this work. While our satiation manipulation reduced participants' need for self-expression (thereby attenuating dueling preferences' effects), the manipulation seems less likely to have influenced participants' responses to aforementioned possibilities such as choice, gamification, or novelty.

General Discussion

Marketing academics and practitioners have long been interested in motivating prosocial giving—developing better marketing tactics for a better world. While several identity-based techniques exist, many suffer from either constraints of scope or difficulty of implementation. This paper explores whether a novel technique, dueling preferences, can alleviate some of these challenges by using choice to leverage the motivating power of self-expression.

Seven experiments illustrate that dueling preferences increases prosocial giving. Across real (Experiments 1–3) and imagined (Experiments 4–6b) donations (Experiments 2–4, 6a–b) and tips (Experiments 1 and 5), dueling preferences increased the rate of giving and the total amount raised for the entity in need. Importantly, this approach does not require a public display to increase giving: Not only do we show robust results in both in-person (i.e., relatively public) and online (i.e., relatively private) settings across studies, but a supplemental study (Web Appendix G) also provides initial evidence to suggest that the effect of duels is not moderated by whether the appeal was encountered in private (with no observers) or public (with observers). Together, these results demonstrate the intrinsic appeal of dueling preferences.

The experiments also illustrate the process underlying this effect. Dueling preferences encourages giving by increasing the perceived opportunity to self-express valued identities and preferences (Experiments 3–6b). As such, the strategy is more effective when duels are seen as more self-expressive (Experiments 4–5) and among those who strongly value self-expression chronically or situationally (Experiments 6a–b).

In addition, the findings cast doubt on a range of alternative explanations (i.e., feeling of choice, novelty, competition, and gamification) as the crucial drivers of this effect. These alternatives do not mediate the effect to the extent that self-expression does (Experiment 3) and have trouble explaining why the self-expressiveness of the duel (Experiments 4–5) and the value of/need for self-expression (Experiments 6a–6b) moderate the effects.

Finally, demonstrating these effects across multiple duels (cats vs. dogs, vanilla vs. chocolate ice cream, summer vs. winter, mountains vs. beach), operationalizations (side-by-side jars, online appeals, and captioned social media posts), samples (café-goers, students, and online panels), and giving behaviors (cash tips and small online donations) underscores the generalizability of the effect.

Theoretical Contributions

This work makes several theoretical contributions. First, we contribute to the research on self-expression. While prior work has shown that evoking specific identities (e.g., helper) can motivate congruent behavior (e.g., helping; Bryan, Master, and Walton 2014; Oyserman 2009), we demonstrate that an evoked identity need not be congruent with a desired behavior to have motivating power. Across our experiments, we consistently show that prosocial behavior can be motivated by identities not traditionally associated with prosociality (e.g., cat person, chocolate ice cream lover). This provides new insight into the appeal of self-expression, demonstrating an increased scope of identities that may motivate prosocial behavior.

Second, we shed additional light on the behavioral consequences of self-expressive choice. Prior work has shown that more (vs. less) self-expressive choices lead people to make different types of selections (e.g., more variety; Kim and Drolet 2003). Building on this work, we demonstrate that enhanced self-expressiveness, elicited especially effectively through preference duels, also influences whether people choose (e.g., to donate or tip) in the first place.

Third, we contribute to the ongoing discussion about the benefits of providing choice. For instance, while consumers generally like choice, it can become overwhelming (e.g., Iyengar and Lepper 2000) or make people selfish (Savani and Rattan 2012; Savani, Stephens, and Markus 2011). Adding to this discussion, we show that specific types of choice—choices that provide an opportunity for self-expression—can promote prosocial behaviors. We also add to this literature by demonstrating dueling preferences' effects in situations where a giver's "choice" has no actual influence on the outcome of the prosocial gift (cf. choice of charity; Robinson, Irmak, and Jayachandran 2012) and by directly imbuing self-expressive choice into the giving appeal, rather than making self-expression salient in advance (cf. priming comparative mindsets; Xu and Wyer 2008).

Managerial Implications

This work also has practical implications for managers interested in increasing prosocial giving. While some cafés and organizations have started using this approach, its actual effectiveness and underlying mechanism remains undetermined. We demonstrate that dueling preferences can boost prosocial giving while alleviating some of the practical challenges with prior approaches. Rather than expending resources to build a connection between givers and the organization, firms can leverage what potential givers already care about by creating an appropriate preference duel. By employing a tailored preference duel for only a single day, for instance, our field experiment more than doubled a local café's tips (Experiment 1). Similarly, rather than limiting communication to people who have organization-linked identities, the dueling preferences approach leverages a variety of existing identities, which need not be associated with prosociality, to be effective.

Essential to its managerial relevance, our research not only reveals the effectiveness of dueling preferences, but it also illustrates several considerations that can make this strategy more or less effective. As documented across experiments, dueling preferences has a more positive impact on behavior when it provides people the opportunity to express themselves in important domains, among individuals that value self-expression, and in situations where the need to self-express is relatively high. Perhaps most importantly, our results suggest that opportunities to self-express will be most effective at eliciting giving when situated within an either/or choice. Consequently, managers interested in using dueling preferences should consider what choice options their targets see as expressive, the extent to which their retail setting sparks a need for self-expression, and the extent to which their target audience values self-expression. Cafés in college towns, for instance, could leverage important rivalries or sports events to craft identity-relevant duels that will increase tipping.

Finally, we note that dueling preferences could be understood by managers as an implementation of "task unification" (Goldenberg et al. 2003). Task unification occurs when an existing product feature or component is designed to accomplish a second feature or task, making a single feature do "double duty" (p. 6). By layering the opportunity for self-expression onto a giving appeal, dueling preferences can be thought of as one instance of task unification—unifying the action of giving with the action of self-expression. Importantly, though, this novel instance of task unification differs from existing examples in two key ways: first, it does not economize on production or materials costs; second, the tasks being unified are not product features, they are consumer actions (giving and expression).

Future Directions

Several directions deserve future study. A first direction to explore is when and why dueling preferences can be ineffective or even backfire (i.e., elicit less giving than a standard appeal). The results of Experiments 4 and 5 suggest that less expressive duels fail to increase giving versus a standard appeal; however, future work might explore whether and when duels reduce giving. We speculate that this may occur when duels are seen as invasive, such as if they ask potential givers to express private, embarrassing, or taboo aspects of themselves, or if they are seen as gimmicky attempts at persuasion or overly trivial in light of the cause.

The number of dueling options could also lead to backfiring, thus warranting future research. We focused on two options, as that is what is most commonly seen in the field, but future work might explore the effects of providing additional dueling options. While more dueling options might enhance the perceived opportunity for self-expression, it might also induce a feeling of choice overload (e.g., Iyengar and Lepper 2000; Schwartz 2004; Scheibehenne, Greifeneder, and Todd 2010), thereby undermining dueling preferences' benefits.

A second area to explore in the future is the over-time and downstream consequences of the dueling preferences effect. Two questions seem particularly relevant: First, how well does this strategy work if employed repeatedly over time? Managers may be concerned that dueling preferences would cease to be effective if employed repeatedly. We asked this question to a barista at a café in Milwaukee, Wisconsin, that uses dueling preferences daily to elicit tips and gleaned one major insight: He believes that dueling preferences can remain effective over time if the content periodically changes. In fact, the barista we interviewed changes the content of the duel every morning when he opens the café. To contrast his approach, he described a different local business that also uses dueling preference to elicit tips but, unlike him, infrequently changes their duel content. He said that, upon seeing a commonly repeated duel involving the local sports teams at this other business, he thinks to himself, “I already told you that I like the [Milwaukee] Brewers.” His reaction to this repeated duel suggests that potential givers may feel that their desire to express is satiated when they repeatedly encounter the same content. In support of this possibility, we find that when self-expression is previously satiated, dueling preferences is less effective at increasing giving (Experiment 6b). To avoid this issue of satiation, we suggest that firms and employees mimic the practice of the barista who we interviewed, regularly rotating the content of their duels. The question of how often the content needs to be rotated to maintain an optimal effect, though, remains open for future research.

Second, how might giving to a preference duel at one point in time shape future support for the organization? On the one hand, some work suggests that self-oriented benefits can “taint” altruistic acts (Newman and Cain 2014; Savary, Li, and Newman 2020) and discourage future prosocial behavior (Kristoferson, White, and Peloza 2013), suggesting that giving to a preference duel may fail to promote future support for an organization. On the other hand, it is also possible that a single act of giving might create a foot-in-the-door effect. Given that people are motivated to act consistently with prior actions (Bem 1972; Festinger 1957), an initial act of self-expression (i.e., giving to a preference duel) may ultimately engender ongoing support for the organization.

A third area for future research to explore is whether these effects extend to other outcomes. Rather than soliciting small gifts, as we have done in this work, would duels succeed at garnering larger monetary gifts? It is unclear whether consumers would pay much more than a nominal amount to self-express something relatively trivial, such as a preference for chocolate or vanilla ice cream. Certain larger sums of money may serve as a boundary condition to this effect, only eliciting donations from those few who perceive the duel as extremely self-expressive. For instance, if a fundraising director were trying to garner \$100 donations, they may need to employ dueling options that are extremely significant to the target population.

Similarly, might duels encourage giving not only money but also time or other prosocial behaviors? Organizations may be able to encourage volunteerism by framing sign-ups as a preference duel between identity-relevant options. Similarly,

some people might be more likely to recycle if they are given the opportunity to drop their items in either a Red Sox or Yankees bin. Indeed, BallotBin, a U.K.-based company, designs custom preference duels for the disposal of cigarette butts (<https://ballotbin.co.uk/>). For instance, one recent “ballot bin” in London asks smokers whether flying or invisibility is the better superpower, allowing them to express their preference by depositing their cigarette butts in one of two labeled compartments.

Dueling preferences might motivate behavior even outside of prosocial domains. If Nikon wants to engage consumers on social media, for example, they could ask, “Will you use your Nikon on a beach vacation or a mountain vacation?” By turning consumers’ responses into an opportunity for self-expression, such messaging might strengthen engagement.

Finally, future work might test duels against other kinds of giving appeals, such as an “urgent plea” for donations or a statement that donations will help an organization make progress to reach some target goal. This future direction would allow researchers to directly test the strength of self-expression as a motivating factor relative to other known motivating factors.

In conclusion, this research explores a novel technique to motivate prosocial giving. By framing the act of giving as a choice between two identity-relevant options and leveraging the inherent appeal of self-expression, dueling preferences can encourage greater rates of giving. By understanding what consumers value, organizations may be able to earn a penny for their preferences and, ultimately, get one step closer to building a better world.

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References

- Aaker, Jennifer L. and Satoshi Akutsu (2009), "Why Do People Give? The Role of Identity in Giving," *Journal of Consumer Psychology*, 19 (3), 267–70.
- Arnett, Dennis B., Steve D. German, and Shelby D. Hunt (2003), "The Identity Salience Model of Relationship Marketing Success: The Case of Nonprofit Marketing," *Journal of Marketing*, 67 (2), 89–105.
- Bagozzi, Richard P., Youjae Yi, and Lynn W. Phillips (1991), "Assessing Construct Validity in Organizational Research," *Administrative Science Quarterly*, 36 (3), 421–58.
- Batson, C. Daniel and Adam A. Powell (2003), "Altruism and Prosocial Behavior," in *Handbook of Psychology*, Vol. 5, Theodore Millan and Melvin J. Lerner, eds. Hoboken, NJ: John Wiley & Sons, 463–84.
- Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (2), 139–68.
- Bem, Daryl J. (1972), "Self-Perception Theory," in *Advances in Experimental Social Psychology*, Vol. 6, Leonard Berkowitz, ed. New York: Academic Press, 1–62.
- Bénabou, Roland and Jean Tirole (2011), "Identity, Morals, and Taboos: Beliefs as Assets," *Quarterly Journal of Economics*, 126 (2), 805–55.
- Berger, Jonah and Chip Heath (2007), "Where Consumers Diverge from Others: Identity Signaling and Product Domains," *Journal of Consumer Research*, 34 (2), 121–34.
- Berger, Jonah and Chip Heath (2008), "Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes," *Journal of Personality and Social Psychology*, 95 (3), 593–607.
- Berger, Jonah and Devin Pope (2011), "Can Losing Lead to Winning?" *Management Science*, 57 (5), 817–27.
- Biberdorf, Jeremy (2017), "Why Charity Is More Important than Ever," *International Policy Digest* (July 11), <https://intpolicydigest.org/2017/07/11/charity-important-ever/>.
- Bodner, Ronit and Drazen Prelec (2003), "Self-Signaling and Diagnostic Utility in Everyday Decision Making," in *The Psychology of Economic Decisions*, Vol. 1, Isabelle Brocas and Juan D. Carrillo, eds. Oxford, UK: Oxford University Press, 105–23.
- Botti, Simona and Sheena S. Iyengar (2004), "The Psychological Pleasure and Pain of Choosing: When People Prefer Choosing at the Cost of Subsequent Outcome Satisfaction," *Journal of Personality and Social Psychology*, 87 (3), 312–26.
- Bryan, Christopher J., Allison Master, and Gregory M. Walton (2014), "'Helping' Versus 'Being a Helper': Invoking the Self to Increase Helping in Young Children," *Child Development*, 85 (5), 1836–42.
- Bryan, Christopher J., Gregory M. Walton, Todd Rogers, and Carol S. Dweck (2011), "Motivating Voter Turnout by Invoking the Self," *Proceedings of the National Academy of Sciences*, 108 (31), 12653–56.
- Catholic Charities USA (2006), "Catholic Charities Network Helps 300,000 Victims of Hurricanes Katrina and Rita," *ReliefWeb* (February 22), <https://reliefweb.int/report/united-states-america/catholic-charities-network-helps-300000-victims-hurricanes-katrina-and>.
- Chernev, Alexander, Ryan Hamilton, and David Gal (2011), "Competing for Consumer Identity: Limits to Self-Expression and the Perils of Lifestyle Branding," *Journal of Marketing*, 75 (3), 66–82.
- Darley, John M. and Daniel C. Batson (1973), "'From Jerusalem to Jericho': A Study of Situational and Dispositional Variables in Helping Behavior," *Journal of Personality and Social Psychology*, 27 (1), 100–108.
- Deshpandé, Rohit and Douglas M. Stayman (1994), "A Tale of Two Cities: Distinctiveness Theory and Advertising Effectiveness," *Journal of Marketing Research*, 31 (1), 57–64.
- Dhar, Ravi and Klaus Wertenboch (2012), "Self-Signaling and the Costs and Benefits of Temptation in Consumer Choice," *Journal of Marketing Research*, 49 (1), 15–25.
- Duclos, Rod and Alixandra Barasch (2014), "Prosocial Behavior in Intergroup Relations: How Donor Self-Construal and Recipient Group Membership Shape Generosity," *Journal of Consumer Research*, 41 (1), 93–108.
- Escalas, Jennifer E. and James R. Bettman (2003), "You Are What They Eat: The Influence of Reference Groups on Consumers' Connection to Brands," *Journal of Consumer Psychology*, 13 (3), 339–48.
- Escalas, Jennifer E. and James R. Bettman (2005), "Self-Construal, Reference Groups, and Brand Meaning," *Journal of Consumer Research*, 32 (3), 378–89.
- Festinger, Leon (1957), *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Gal, David (2015), "Identity-Signaling Behavior," in *The Cambridge Handbook of Consumer Psychology*, Michael I. Norton, Derek D. Rucker, and Cait Lamberton, eds. Cambridge, UK: Cambridge University Press, 257–81.
- Gergen, Kenneth J., Mary M. Gergen, and Kenneth Meter (1972), "Individual Orientations to Prosocial Behavior," *Journal of Social Issues*, 28 (3), 105–30.
- Goldenberg, Jacob, Roni Horowitz, Amnon Levav, and David Mazursky (2003), "Finding Your Innovation Sweet Spot," *Harvard Business Review*, 81 (3), 120–29.
- Gould, Elise and David Cooper (2018), "Seven Facts About Tipped Workers and the Tipped Minimum Wage," *Economic Policy Institute* (May 31), <https://www.epi.org/blog/seven-facts-about-tipped-workers-and-the-tipped-minimum-wage/>.
- Grewal, Lauren, Andrew T. Stephen, and Nicole Verocchi Coleman (2019), "When Posting About Products on Social Media Backfires: The Negative Effects of Consumer Identity Signaling on Product Interest," *Journal of Marketing Research*, 56 (2), 197–201.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.
- He, Daniel, Shiri Melumad, and Michel Tuan Pham (2019), "The Pleasure of Assessing and Expressing Our Likes and Dislikes," *Journal of Consumer Research*, 46 (3), 545–63.
- Hirschman, Elizabeth C. (1980), "Innovativeness, Novelty Seeking, and Consumer Creativity," *Journal of Consumer Research*, 7 (3), 283–95.
- Huang, Szu-chi, Jordan Etkin, and Liyin Jin (2017), "How Winning Changes Motivation in Multiphase Competitions," *Journal of Personality and Social Psychology*, 112 (6), 813–37.

- Iyengar, Sheena S. and Mark R. Lepper (2000), "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology*, 79 (6), 995–1006.
- Kaikati, Andrew M., Carlos J. Torelli, Karen Page Winterich, and Maria A. Rodas (2017), "Conforming Conservatives: How Salient Social Identities Can Increase Donations," *Journal of Consumer Psychology*, 27 (4), 422–34.
- Kessler, Judd B. and Katherine L. Milkman (2016), "Identity in Charitable Giving," *Management Science*, 64 (2), 1–16.
- Kim, Heejung S. and Aimee Drolet (2003), "Choice and Self-Expression: A Cultural Analysis of Variety-Seeking," *Journal of Personality and Social Psychology*, 85 (2), 373–82.
- Kim, Heejung S. and Aimee Drolet (2009), "Express Your Social Self: Cultural Differences in Choice of Brand-Name Versus Generic Products," *Personality and Social Psychology Bulletin*, 35 (12), 1555–66.
- Kim, Heejung S. and Hazel Rose Markus (2002), "Freedom of Speech and Freedom of Silence: An Analysis of Talking as a Cultural Practice," in *Engaging Cultural Differences: The Multicultural Challenge in Liberal Democracies*, Richard A. Shweder, Martha Minow, and Hazel Rose Markus, eds. New York: Russell Sage Foundation, 432–52.
- Kim, Heejung S. and David K. Sherman (2007), "'Express Yourself': Culture and the Effect of Self-Expression on Choice," *Journal of Personality and Social Psychology*, 92 (1), 1–11.
- Kleine, Rober E., Susan Schultz Kleine, and Jerome B. Kernan (1993), "Mundane Consumption and the Self: A Social-Identity Perspective," *Journal of Consumer Psychology*, 2 (3), 209–35.
- Kristofferson, Kirk, Katherine White, and John Peloza (2013), "The Nature of Slacktivism: How The Social Observability of an Initial Act of Token Support Affects Subsequent Prosocial Action," *Journal of Consumer Research*, 40 (6), 1149–66.
- Levy, Sidney J. (1959), "Symbols for Sale," *Harvard Business Review*, 37 (4), 117–24.
- Malhotra, Naresh K. (1988), "Self-Concept and Product Choice: An Integrated Review," *Journal of Economic Psychology*, 9 (1), 1–28.
- Meyvis, Tom and Stijn M.J. Van Osselaer (2018), "Increasing the Power of Your Study by Increasing the Effect Size," *Journal of Consumer Research*, 44 (5), 1157–73.
- Newman, George E. and Daylian M. Cain (2014), "Tainted Altruism: When Doing Some Good Is Evaluated as Worse Than Doing No Good At All," *Psychological Science*, 25 (3), 648–55.
- Nonprofit Finance Fund (2018), "State of the Nonprofit Sector Survey 2018," <https://nff.org/surveydata>.
- O'Reilly, Charles A. and Jennifer Chatman (1986), "Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior," *Journal of Applied Psychology*, 71 (3), 492–99.
- Oyserman, Daphna (2009), "Identity-Based Motivation: Implications for Action-Readiness, Procedural-Readiness, and Consumer Behavior," *Journal of Consumer Psychology*, 19 (3), 250–60.
- Reed, Americus, II (2004), "Activating the Self-Importance of Consumer Selves: Exploring Identity Salience Effects on Judgments," *Journal of Consumer Research*, 31 (2), 286–95.
- Reed, Americus, II, Mark R. Forehand, Stefano Puntoni, and Luk Warlop (2012), "Identity-Based Consumer Behavior," *International Journal of Research in Marketing*, 29 (4), 310–21.
- Robinson, Stefanie Rosen, Caglar Irmak, and Satish Jayachandran (2012), "Choice of Cause in Cause-Related Marketing," *Journal of Marketing*, 76 (4), 126–39.
- Savani, Krishna and Aneeta Rattan (2012), "A Choice Mind-Set Increases the Acceptance and Maintenance of Wealth Inequality," *Psychological Science*, 23 (7), 796–804.
- Savani, Krishna, Nicole M. Stephens, and Hazel Rose Markus (2011), "The Unanticipated Interpersonal and Societal Consequences of Choice: Victim Blaming and Reduced Support for the Public Good," *Psychological Science*, 22 (6), 795–802.
- Savary, Jennifer and Kelly Goldsmith (2020), "Unobserved Altruism: How Self-Signaling Motivations and Social Benefits Shape Willingness to Donate," *Journal of Experimental Psychology: Applied* (published online January 9), DOI:10.1037/xap0000261
- Savary, Jennifer, Charis X. Li, and George E. Newman (2020), "Exalted Purchases or Tainted Donations? Self-Signaling and the Evaluation of Charitable Incentives," *Journal of Consumer Psychology*, (published online January 18), DOI:10.1002/jcpy.1157.
- Scheibehenne, Benjamin, Rainer Greifeneder, and Peter M. Todd (2010), "Can There Ever Be Too Many Options? A Meta-Analytic Review of Choice Overload," *Journal of Consumer Research*, 37 (3), 409–25.
- Schwartz, Barry (2004), *The Paradox of Choice: Why More Is Less*. New York: Ecco.
- Shavitt, Sharon (1990), "The Role of Attitude Objects in Attitude Functions," *Journal of Experimental Social Psychology*, 26 (2), 124–48.
- Shavitt, Sharon, Carlos J. Torelli, and Jimmy Wong (2009), "Identity-Based Motivation: Constraints and Opportunities in Consumer Research," *Journal of Consumer Psychology*, 19 (3), 261–66.
- Shefska, Zach (2016), "Fundraising Nightmare: The Cost of Donor Acquisition," *Fundraising Report Card* (August 26), <https://fundraisingreportcard.com/donor-acquisition-cost/>.
- Sirgy, M. Joseph (1982), "Self-Concept in Consumer Behavior: A Critical Review," *Journal of Consumer Research*, 9 (3), 287–300.
- Spector, Nicole (2018), "Dollars and Sense: Why Are Millennials Tipping Less Than Older Generations?" *NBC News* (June 27), <https://www.nbcnews.com/better/business/dollars-sense-why-are-millennials-tipping-less-older-generations-ncna886966>.
- Spiller, Stephen A., Gavan J. Fitzsimons, John G. Lynch Jr., and Gary H. McClelland (2013), "Spotlights, Floodlights, and The Magic Number Zero: Simple Effects Tests in Moderated Regression," *Journal of Marketing Research*, 50 (2), 277–88.
- Tamir, Diana I. and Jason P. Mitchell (2012), "Disclosing Information About the Self Is Intrinsically Rewarding," *Proceedings of the National Academy of Sciences*, 109 (21), 8038–43.
- Triplet, Norman (1898), "The Dynamogenic Factors in Pacemaking and Competition," *American Journal of Psychology*, 9 (4), 507–33.
- United States Public Interest Research Group (2019), "Small Donors Driving 2020 Presidential Race," *United States Public Interest Research Group* (November 7), <https://uspirg.org/reports/usp/small-donors-driving-2020-presidential-race>.

- White, Katherine and Darren W. Dahl (2006), "To Be or Not to Be? The Influence of Dissociative Reference Groups on Consumer Preferences," *Journal of Consumer Research*, 16 (4), 404–14.
- White, Katherine and Darren W. Dahl (2007), "Are All Out-Groups Created Equal? Consumer Identity and Dissociative Influence," *Journal of Consumer Research*, 34 (4), 525–36.
- White, Katherine, Rishad Habib, and Darren W. Dahl (2020), "A Review and Framework for Thinking About the Drivers of Prosocial Consumer Behavior," *Journal of the Association for Consumer Research*, 5 (1), 2–18.
- Winterich, Karen Page, Vikas Mittal, and Karl Aquino (2013), "When Does Recognition Increase Charitable Behavior? Toward a Moral Identity-Based Model," *Journal of Marketing*, 77 (3), 121–34.
- Wohlfeill, Gary (2018), "Why Micro-Donations Are the Future of Fundraising," *Philanthropy Journal* (July 2), <https://pj.news.chass.ncsu.edu/2018/07/02/why-micro-donations-are-the-future-of-fundraising/>.
- Xu, Alison Jing and Robert S. Wyer Jr. (2008), "The Comparative Mind-Set: From Animal Comparisons to Increased Purchase Intentions," *Psychological Science*, 19 (9), 859–64.