

A Social Identity Threat Perspective on being  
the Target of Generosity from a Higher Status Other

Gillian M. Sandstrom<sup>1\*</sup>, Toni Schmader<sup>2\*</sup>, Alyssa Croft<sup>3</sup>, Navio Kwok<sup>4</sup>

<sup>1</sup>University of Essex, United Kingdom, [gsands@essex.ac.uk](mailto:gsands@essex.ac.uk),

<sup>2</sup>University of British Columbia, Canada, [tschmader@psych.ubc.ca](mailto:tschmader@psych.ubc.ca),

<sup>3</sup>University of Arizona, United States, [alyssac@email.arizona.edu](mailto:alyssac@email.arizona.edu)

<sup>4</sup>University of Waterloo, Canada, [nkkwok@uwaterloo.ca](mailto:nkkwok@uwaterloo.ca)

\* The two first authors contributed equally to this article.

Corresponding Author:

Gillian M. Sandstrom, [gsands@essex.ac.uk](mailto:gsands@essex.ac.uk),

Department of Psychology, University of Essex,

Wivenhoe Park, Colchester, England, CO4 3SQ

**Author Note**

The authors would like to acknowledge the following people for assistance collecting data:

Mariam Aamir, Richard Abasta, Georgia Bradley, Lysandra Chan, Carrie Cheung, Alyssa Chow, Amanda Chui, Ashton Hung, Audrey Kim, Stephanie Kwong, Victoria Lau, Amber Lum, Caitlin Mooney, Margaret Mrcic, Sophia Ng, Anna Podolsky, Helen Schweitzer, Jael van Bentum, Tess Walker, Jen Won, Fontayne Wong, Jennifer Wong, Kimberly Wong, Helen You, Anthea Yung.

Thanks also to Jaden Lu, Negah Mortazavi and Pegah Mortazavi for help with data checking, and to William M. Hall for help with the working memory task and the meta-analysis.

This research was supported in part by a grant from the Social Sciences and Humanities Research Council of Canada [grant number 435-2013-1587].

### Abstract

Both giving and receiving money have emotional benefits, but when gifts of value are made in the context of socioeconomic differences, there might also be emotional costs. Four studies (and an internal meta-analysis) tested the idea that receiving a generous gift from someone higher in perceived socioeconomic status (SES) signals social identity threat. In Study 1 ( $N = 218$ ), participants on average, but especially those with relatively lower SES, reported experiencing more self-conscious negative affect when receiving a generous amount of money (vs. an even split) from a higher status giver in a dictator game. This effect was mediated by feeling pitied by the giver. Studies 2 ( $N = 331$ ) and 3 ( $N = 426$ ) revealed similar effects with recalled real-world experiences of receiving a generous gift from higher SES givers. Studies 3 and 4 ( $N = 142$ ) revealed evidence for serial mediation, with lower relative SES predicting status awareness, status awareness predicting attributions of pity, and attributions of pity in turn predicting self-conscious negative affect. Effects were not significantly moderated by needing or requesting the money, suggesting that acts of generosity across the status divide readily signal social devaluation for those with lower perceived status. Findings have practical and conceptual implications for prosocial giving in a system of social and economic inequality.

Keywords: social identity threat, prosocial behavior, socioeconomic status, self-conscious emotion, attributions

Income inequality in the U.S. recently reached its highest level since the Great Depression (Saez & Zucman, 2016), and even those who have quite fiscally conservative views believe that current levels of inequality should be reduced (Norton & Ariely, 2011).

Redistribution of resources from those who *have* to those who *have not* is one way to balance inequality. In interpersonal contexts, individuals who have more resources may feel a desire to share some of their wealth with those who have less, perhaps motivated by a sense of fairness (Baumeister, Stillwell, & Heatherton, 1994; Fehr & Schmidt, 1999). However, aspects of the psychology of status differences are likely to influence how those in need feel about receiving generous gifts from those with higher status (Fisher, Nadler, & Whitcher-Alagna, 1982; Nadler & Fisher, 1986; Nadler & Halabi, 2015). In the current research, we investigated the affective consequences experienced by someone of lower socioeconomic status (SES) when they receive a generous gift from someone of relatively higher SES. Four studies test the idea that being the target of generosity elicits social identity threat for those with relatively lower SES than the giver, making them feel pitied and self-conscious and, as a result, disrupting the hedonic benefits that normally come from receiving gifts.

An identity threat perspective contrasts with a rational approach to understanding the experience of receiving gifts. From a rational perspective, money is inherently rewarding and thus people typically feel good about receiving money and feel better the more they receive (Thut et al., 1997). In addition, acts of generosity are generally perceived positively (Barclay, 2010), and can have affective benefits for the givers, who typically feel good about helping others in need (Aknin, Dunn, Sandstrom, & Norton, 2013; Aknin, Dunn, Whillans, Grant, & Norton, 2013; Dunn, Aknin, & Norton, 2008). This rational perspective on generosity, however, fails to take into account the broader meaning that prosocial acts have within a social context.

Our goal in the current research was, specifically, to understand the affective reactions to generous gifts of monetary value (defined as reactions to receiving more than would be expected given the prevalent norms for a situation) that might otherwise inspire only happiness and gratitude. We examine this question primarily from a social identity threat perspective (Tajfel & Turner, 1986; Steele, Spencer, & Aronson, 2002), and use this approach to extend prior theory and evidence on other threat-based models of helping (Fisher et al., 1982; Nadler, 2002; Nadler & Fisher, 1986; Nadler & Halabi, 2015). As we will discuss, these threat-based approaches point to the ways in which receiving aid from people higher in status can unintentionally signal and reinforce existing social hierarchies, disrupting the hedonic benefits that would rationally be expected upon receiving a generous gift.

### **SES as a Source of Social Identity Threat**

The feeling of being socially devalued in the broader society, by virtue of some attribute or shared group membership, is encompassed by the term social identity threat (Tajfel & Turner, 1986; Steele, Spencer, & Aronson, 2002). Social identity threat is most often studied in terms of definable social groups based on gender, race, and ethnicity. SES also holds the potential to elicit social identity threat, because a person's social class and socioeconomic status are important sources of personal identity (Stephens et al., 2012). However, in contrast to consensually held social categories with clearly defined boundaries (e.g., gender, race, and ethnicity), one's SES is perceived as a malleable individual-level characteristic and people sustain the hope that their status can be increased in a meritocratic system (Major & Townsend, 2010). But regardless of the perceived malleability of SES, real-time instances of SES-based threats are likely to function similarly to other social identity threats. Drawing from a multi-threat framework (Shapiro &

Neuberg, 2007), reminders of lower SES are then likely to be experienced as a threat of being personally devalued in the eyes of those with higher status.

One's own perception of one's SES is to a large extent subjective, and shaped through processes of social comparison (e.g., Crosby, 1976; Sweeney, McFarlin, & Inderrieden, 1990). For example, only 12% of Americans surveyed describe themselves as being upper or upper-middle class, even though 40% would receive this designation based on their objective income levels (Pew Research Center, 2015).<sup>1</sup> Thus, even those who are objectively more affluent often feel that they have subjectively lower status than their peers. For example, in an elite university setting, middle-class students experience social identity threat when comparing themselves to students from more economically privileged backgrounds, and these feelings of threat predict a reduced sense of academic belonging and self-efficacy (Johnson, Richeson, & Finkel, 2011; Walton & Cohen, 2007). In other research, situational reminders of having relatively lower SES can induce threat and impair cognitive performance (Croizet & Millet, 2012; John-Henderson, Rheinschmidt, Mendoza-Denton, & Francis, 2014; Régner, Huguet, & Monteil, 2002; Stephens, Markus, & Fryberg, 2012). Recent research also indicates that people perceive others' SES automatically (Kraus, Park, & Tan, 2017), suggesting that people can be quite sensitive to detecting SES differences between themselves and others.

Despite the salience of SES as a function of social comparison, and the motivations for those with greater economic resources to give generously to those with less, research has not examined real instances of prosocial generosity through the lens of social identity threat theory. In addition to genuine prosocial motivations, individuals or groups with higher SES might help those with lower SES because they are motivated to bolster their own reputation, assert their control, follow prevalent norms, or assuage their guilt (Nadler & Halabi, 2015). However, given

these social psychological motivations for those higher in SES to share their resources, lower SES targets of generosity might see such acts as a signal of the ways in which their social identity has lower status (Fisher et al., 1982; Nadler & Fisher, 1986). Thus, we sought to test the hypothesis that in instances of generous giving, cues of status differences might prevent lower SES recipients from enjoying the hedonic benefits of generosity, even as they acknowledge the good intentions of the giver.

### **Reactions to Assumptive Help**

Our general hypothesis, that there can be hedonic costs to receiving help from someone higher in status, aligns with past theory on targets' reactions to aid (Fisher et al., 1982; Nadler & Fisher, 1986 for reviews). Of greatest relevance is research on assumptive help, which suggests that people experience reduced self-esteem when they are recipients of unsolicited task-specific help from more advantaged others (Fisher et al., 1982; Nadler & Fisher, 1986; Nadler & Halabi, 2015). Such effects have been found for a Black student receiving academic help from a White student (Schneider, Major, Luhtanen, & Crocker, 1996), a physically disabled person receiving instrumental help from their spouse (Newsom & Schulz, 1998), and a person with fewer tokens receiving help from a person with more tokens in a mock investment game (Fisher & Nadler, 1976). To our knowledge, prior research in this literature has not specifically investigated SES as a source of a giver's higher status.

Nonetheless, research in this literature on targets' reactions to aid suggests that individuals show lower self-esteem when unsolicited help on a task signals an assumption that they cannot complete a task independently (e.g., Halabi, Nadler, & Dovidio, 2011). Such effects are stronger when help is given in a performance domain that is ego-defining to the target

(Nadler, 1987; Nadler, Fisher, & Ben-Itzhak, 1983), and comes from a donor who otherwise seems to have similar attitudes and is thus a salient source of social comparison (Fisher, Harrison, & Nadler, 1978; Fisher & Nadler, 1974; Nadler, Fisher, & Streufert, 1976). According to this self-esteem threat view, the upward social comparison to advantaged others (or groups) triggers negative self-evaluations, resentment toward the giver, and feelings of dependency.

### **Lower Status Targets' Reactions to Generosity**

Given this prior theory and evidence, we similarly assumed that acts of financial generosity, when carried out in the context of salient SES differences between the giver and the recipient, would not be perceived as purely positive events. However, there are also important ways in which gifts of monetary value could be theoretically distinct from the task-focused help that has been traditionally studied in this past literature. Most notably, the fungible nature of money makes it less clear whether generous gifts are dependency-oriented (and thus threatening) or autonomy-supportive (and thus non-threatening) according to threat-based models of helping (Nadler, 2002; Nadler & Halabi, 2015).

In addition, the uncertainty of a giver's motives might exacerbate attributional ambiguity (Crocker, Voelkl, Testa, & Major, 1991). While most, if not all, individuals might experience this attributional ambiguity upon being the recipient of an unexpectedly generous gift, when aid is given in the context of a salient status difference, we expect that the lower status recipient will be more likely to experience social identity threat. That is, they will experience the giver's generosity as a signal of their lower status and as motivated by pity, rather than simply by generosity or fairness. Furthermore, we hypothesized that interpreting acts of generosity as motivated by pity would predict the experience of self-conscious negative emotions, such as



shame and humiliation (Nadler & Halabi, 2015). These emotions serve as an affective signal of one's lower status within a broader social hierarchy (Gilbert & McGuire, 1998; Keltner & Haidt, 1999) and have been linked to the experience of social identity threat in past research (Schmader, Block, & Lickel, 2015).

These predictions were informed by, but are conceptually distinct from, threat-based models of targets' reactions to help. First, threat-based models have largely focused on how being the target of dependency-oriented help triggers self-threatening upward social comparisons to the giver, and becomes internalized into one's self-evaluation, manifesting as lower self-esteem. Because it was not clear to us that generous gifts necessarily signal a strong sense of dependency versus autonomy, we did not identify general self-esteem as our primary outcome of interest. From a social identity threat perspective, contextual reminders of social devaluation are not always internalized in ways that reduce self-esteem (Crocker & Major, 1989). And yet subtle social cues that make status differences salient can still signal identity-based devaluation and carry emotional costs that, when accumulated over time, can be detrimental to health and well-being (Major & Schmader, 2018). Thus, after isolating key effects of generosity on affective responses in Studies 1 and 2, Studies 3 and 4 aimed to assess the degree to which acts of generosity from higher status givers trigger a salience of one's lower status in ways that are distinct from feeling relatively incompetent (a threat to competence self-esteem) or socially rejected (a threat to social self-esteem).

A second conceptual advance from the prior threat-based research on reactions to aid is to assess negative self-conscious emotions and positive emotions on separate scales to better assess the mixed emotions one might experience in these situations. Past research on reactions to help has typically assessed a general affective reaction rather than specifically assessing self-

conscious emotions as distinct from a positive affective response. We expected that being a target of generosity from a higher status giver would elicit self-conscious emotions that taint the affective experience, even if one appreciates and is grateful for the gift.

We tested these core hypotheses in a series of experimental and narrative-recall studies that focus on real experiences of receiving generous gifts from higher status others. The only prior study to specifically examine targets' reactions to receiving resources from a higher status giver was a clever experiment conducted over 40 years ago by Fisher and Nadler (1976) using a token investment game. In this study, people with only a few remaining tokens reported lower self-esteem (operationalized as lower intelligence and self-confidence) and self-evaluations (operationalized as less nice, good and bright) after receiving aid from a participant with many more tokens, compared to receiving aid from a similarly disadvantaged participant. This finding informed the predictions made here, but the current set of studies aimed to test our social identity threat approach to this phenomenon by making several important ecological and methodological advances over this earlier work.

First, this earlier study (and many other similar studies carried out during this time) included fewer than 20 participants per condition and interpreted non-significant pairwise comparisons as effects. Given current concerns about replicability in science, we felt it was important to carry out more highly powered tests of our hypotheses that are also informed by contemporary research on social identity threat. Second, instead of creating a situational indicator of status by manipulating resource differences within a token economy game, we examined participants' perceptions of their actual SES relative to a real donor, and reactions to gifts of real money or value, which should elicit more authentic social identity threat and negative affect, given the real-world relevance to people's lived experiences. Finally, we sought

to establish the reliability of the core predicted effects using a multi-method approach that combined both controlled laboratory experiments using a dictator game paradigm, and narrative-recall methods that sampled a broader range of real-world experiences. Together, the present studies represent a more realistic test of the affective consequences of receiving generosity from relatively higher status others in an era of extreme income inequality.

### **Current Research**

We tested our hypotheses across four studies that used a mix of experimental (Studies 1 and 4) and survey-based methods that sampled people's real-life experiences (Studies 2 and 3). Because some effects vary from study to study, we also included an internal meta-analysis to provide a more precise estimate of effect sizes. We report all measures, manipulations, and exclusions in these studies, either in the main text or in the Supplementary Materials (SOM). Sample sizes for all studies were determined before any data analysis. Materials, data sets and analysis scripts for all studies are available online: <https://osf.io/yh7wu/>.

In Study 1, university student participants received either a generous (\$8 out of \$10) or equitable (\$5) amount of money in a dictator game from a confederate who was portrayed as being higher than or similar in SES to the participant. We hypothesized an interaction effect whereby participants would feel the most self-conscious negative affect (and perhaps less positive affect) when they received a surprisingly generous amount from a higher status giver. In Studies 2 and 3, adults recalled and rated a personal experience of receiving a generous gift in the past. Because we focused specifically on self-identified acts of generosity (analogous to looking at only the \$8 condition in Study 1), we hypothesized a main effect of participants' self-reported SES relative to the giver as a predictor of greater attributions to pity and more negative

affective reactions. By sampling a broad range of people's lived experiences as recipients of generosity in Studies 2 and 3, we also tested whether effects were moderated by factors such as needing the money, having requested the money, the receiver's relationship with the giver, and whether or not the gift was exchanged in person. In Study 4, we used the same experimental method as in Study 1 to test whether the effect is reduced, if not eliminated, when SES differences are not made salient to the recipient. Across the set of studies, we tested indirect effects, whereby the affective reactions to receiving a generous gift from a higher SES giver were mediated by attributing the act to pity, and whether such attributions were predicted by an awareness of one's relatively lower status (in Studies 3 and 4).

## **Study 1**

### **Method**

#### **Participants**

Participants were 218 university students (37 males and 181 females;  $M_{\text{age}} = 19.88$ ,  $SD = 2.24$ ) recruited from the psychology department participant pool. We excluded three additional students due to experimenter error (the condition was not recorded) and six who were suspicious about the confederate posing as the giver ( $n_{\text{high-SES},\$5} = 4$ ,  $n_{\text{high-SES},\$8} = 1$ ,  $n_{\text{low-SES},\$8} = 1$ ). Analyses combined across two samples that were run with a very similar paradigm and yielded parallel effects.<sup>2</sup> In both samples, students received course credit and \$8 for completing the study. This study was run in 2011/2012 and, based on conventions at that time, we aimed to collect 25 participants for each condition (there were 4 conditions, and two samples, therefore a target of 200; Simmons, Nelson, & Simonsohn, 2011). A sensitivity analysis ( $1 - \beta = .80$ ,  $\alpha = .05$ ) using

G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) suggests that our sample of 218 can detect effects of  $f \geq .19$  (partial  $\eta^2 \approx .20$ ).

### **Procedure**

Participants were run individually along with a confederate. The experimenter described the study as an investigation of how economic decisions are affected by knowledge about one's partner. To that end, both parties filled out and exchanged a "biographical sheet" that included several questions about personality traits and common activities and interests. The actual purpose of this exchange of information, however, was to make the participant's relative SES salient. Based in part on their own self-reported SES, participants were assigned to either the low-SES condition, in which their partner appeared to be relatively higher in status, or the high-SES condition, in which their partner appeared to have about the same status as them. Specifically, the last question on the biographical sheet asked participants to rate their socioeconomic status relative to other undergraduate students at the same institution on a ladder, where 1 was the lowest rung and 10 was the highest rung (see Kilpatrick & Cantril, 1960). To achieve roughly equal groups in each condition, participants were assigned to the low-SES condition if their own response was 6 or lower ( $n = 103$ ), and were assigned to the high-SES condition if their response was 7 or higher ( $n = 115$ ).

Although participants were assigned to condition based on their self-reported SES relative to other undergraduate students, we also boosted the participants' perceptions of their SES relative to the confederate by emphasizing the confederate's ostensibly high SES. In Sample 1a, the confederate always circled 9 on the ladder measure, whereas in Sample 1b, the confederate's SES was yoked to be three points higher than that of participants in the low-SES

condition and the same as that of participants in the high-SES condition. To make it extremely obvious to the participants that their partner was relatively high in SES, the confederate's sheet indicated that his/her parents both had post-graduate degrees and professional jobs, and that he or she enjoyed various costly activities, but had no need for a job while attending school (adapted from Croizet & Claire, 1998; Régner et al., 2002).

After completing the biographical sheet, the participant was ostensibly randomly assigned to act as the receiver during the economic game (thereby making the confederate the giver by default). The completed biographical sheets were exchanged (enabling the participant to assess their SES relative to the confederate's), and the confederate was taken to another room to "make her/his monetary decision". The participant was told that the study was actually about how much money the giver (i.e., the confederate) decided to give and how it made them feel, but that the receiver would be asked to fill out the same emotion questionnaire for comparison purposes. In actuality, the confederate randomly selected an envelope containing either \$5 (an equitable split of the \$10) or \$8 (an overly generous amount) and delivered it in person to the participant with a neutral facial expression. After the confederate left the room, the participant completed the final emotion questionnaire (including a manipulation check question), was carefully debriefed, and was always paid \$8.

## Measures

**Manipulation check of perceived relative SES.** As a manipulation check at the end of the study, participants rated their perceived SES relative to their partner's on a single item (1 = *much lower*, 5 = *much higher*).

**Attributions for the giver's behavior.** Participants made ratings of the giver, and reported their attributions for the amount he/she gave. Of greatest interest were attributions to: *pity* (“She feels sorry for me”, “She thinks I need the money”;  $r(214) = .75, p < .001; M = 2.79, SD = 1.64$ ), and *fairness* (“She was trying to be fair”;  $M = 5.72, SD = 1.55$ ), rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Participants also rated the giver's *generosity* on a single item (“indicate how well each of the traits describes your partner: generous”; 1 = *not at all descriptive*, 7 = *extremely descriptive*;  $M = 5.71, SD = 1.22$ ), as part of a set of questions about perceptions of the partner.<sup>3</sup>

**Affective responses.** Participants used a 7-point scale (1 = *not at all*, 7 = *very much*) to rate the extent to which they felt each of 25 emotions after receiving money in the dictator game (adapted from Diener et al., 2010; Watson, Clark, & Tellegen, 1988). Participants' responses were grouped into conceptual composites of *self-conscious negative affect* (embarrassed, guilty, disgraced, sorry, ashamed, regret, humiliated, remorseful;  $\alpha = .86; M = 1.68, SD = .85$ ) and *positive affect* (proud, content, good, satisfied, happy, excited, connected, calm;  $\alpha = .88; M = 4.29, SD = 1.21$ ).

See Supplementary Materials for a full list of all measures used in all studies (or see the materials, posted online here: <https://osf.io/yh7wu/>) and more detail on procedural differences in the two samples in this study.

## Results

### Manipulation Check – Perceived Relative SES

An independent samples *t*-test confirmed that the manipulation was successful; participants in the low-SES condition reported feeling significantly lower in SES compared to

the confederate ( $M = 1.80$ ,  $SD = 1.01$ ) than did participants in the high-SES condition ( $M = 2.61$ ,  $SD = .66$ ),  $t(214) = 7.07$ ,  $p < .001$ ,  $d = .95$ . Moreover, a one sample  $t$ -test against the scale midpoint (3 = *about the same*) confirmed that participants in the low-SES condition believed their SES to be significantly lower than the confederate's,  $t(101) = -12.02$ ,  $p < .001$ ,  $d = 1.20$  (see Rosnow & Rosenthal, 2003 for effect size formula). However, it is important to point out that participants in the high-SES condition (i.e., who perceived their SES to be high relative to other students), also reported feeling significantly lower in SES than their partner,  $t(113) = -6.26$ ,  $p < .001$ ,  $d = .59^4$ .

### **Attributions for the Giver's Behavior**

A 2 (SES: low-SES vs. high-SES) x 2 (money: \$5 vs. \$8) ANOVA on receivers' attributions yielded two significant main effects that were qualified by a significant interaction predicting attributions of *pity* (means and a summary of results for all variables are provided in Table 1). Simple main effect analyses revealed that, as hypothesized, when people received the more generous \$8 gift, participants in the low-SES condition attributed the giver's behavior more to pity than did participants in the high-SES condition,  $F(1, 212) = 35.22$ ,  $p < .001$ , partial  $\eta^2 = .14$ . When participants received the even split of \$5, participants in the low-SES condition also attributed the giver's behavior more to pity than did participants in the high-SES condition,  $F(1, 212) = 4.10$ ,  $p = .04$ , partial  $\eta^2 = .02$ , but the difference was considerably smaller.

<Insert Table 1 here>

In contrast to this hypothesized interaction effect on attributions to pity, attributions to *generosity* and *fairness* were predicted by the amount of money given, but not by SES condition



or the interaction. Unsurprisingly, people who received \$8 deemed the giver as more generous and the gift as less fair than did people who received \$5 (see Table 1).

### **Affective Responses**

Two 2 (SES condition) x 2 (money) ANOVAs on self-conscious and positive affect revealed only two significant main effects (see Table 1). People who received \$8 felt significantly more *self-conscious negative affect* (NA) and significantly less *positive affect* (PA) than did participants who received \$5. More relevant to our predictions, participants in the low-SES condition felt significantly more *self-conscious NA* and significantly less *PA* after receiving money than participants in the high-SES condition. Although the hypothesized SES by money interaction was not significant on either affective variable, these additive main effects highlight that participants in the low-SES condition who received the generous \$8 amount had the most negative affective consequences among the four conditions.

### **Indirect Effects of Relative SES on Affective Responses**

Finally, we tested the hypothesis that receiving \$8 rather than \$5 elicits negative affective reactions because the gift seems motivated by pity (and not by fairness or generosity)<sup>5</sup>. We expected this indirect effect of generosity on affective reactions via pity to be significantly larger among participants in the low-SES condition. To test these hypotheses, we conducted moderated mediational analyses using bias-corrected bootstrap analyses (with 10,000 resamples) in model 7 of PROCESS (Hayes, 2013). Two analyses were conducted to estimate effects on self-conscious affect and positive affect (both z-scored) separately. In each analysis, pity, fairness, and generosity (all z-scored) were included as simultaneous mediators.

**Self-conscious affect.** Consistent with our hypotheses, these analyses revealed that SES condition only moderated the indirect effect of money on *self-conscious affect* via *pity*,  $b = -.04$  ( $SE = .02$ ),  $CI_{95} = [-.10, -.01]$ , but not via *generosity*,  $b = .001$  ( $SE = .01$ ),  $CI_{95} = [-.01, .01]$  or *fairness*,  $b = .003$  ( $SE = .01$ ),  $CI_{95} = [-.01, .04]$  (see Figure 1). As predicted, the indirect effect of money on self-conscious affect via *pity* was stronger for people in the low-SES condition,  $b = .10$  ( $SE = .04$ ),  $CI_{95} = [.03, .18]$ , than for people in the high-SES condition,  $b = .06$  ( $SE = .02$ ),  $CI_{95} = [.02, .11]$ . Among those in the low-SES condition, receiving the more generous amount (\$8 vs. \$5) led to higher ratings of *pity*,  $b = .45$  ( $SE = .06$ ),  $CI_{95} = [.33, .56]$ , which predicted greater self-conscious negative affect.

<Insert Figure 1 here>

**Positive affect.** Similarly, SES condition significantly moderated the indirect effect of money on *positive affect* via attributions to *pity*,  $b = .04$  ( $SE = .02$ ),  $CI_{95} = [.01, .10]$ , but not via *generosity*,  $b = -.01$  ( $SE = .04$ ),  $CI_{95} = [-.10, .07]$  or *fairness*,  $b = -.01$  ( $SE = .01$ ),  $CI_{95} = [-.04, .02]$  (see Figure 2). The indirect effect via *pity* was stronger for people in the low-SES condition,  $b = -.10$  ( $SE = .04$ ),  $CI_{95} = [-.18, -.04]$ , than for people in the high-SES condition,  $b = -.06$  ( $SE = .02$ ),  $CI_{95} = [-.11, -.02]$ .

<Insert Figure 2 here>

## Discussion

Although receiving a generous gift of money might rationally be considered a positive outcome, the results of this study provide evidence that receiving money from a partner who is perceived to be higher in SES can carry an emotional cost. The affective experience of receiving \$8 (instead of \$5 – an even 50/50 split of the money) varied depending on one's SES relative to

the giver. If one's SES was perceived to be lower than that of the giver, this unexpected act of generosity was attributed to pity, which predicted more self-conscious negative affect and less positive affect as a result. Together, these results suggest that those who perceive themselves to be lower in SES relative to a giver are less able to reap the emotional benefits of a generous gift, to the extent that they feel pitied by a giver perceived to be higher status. Although there was a general tendency across the sample to feel worse after receiving a generous monetary gift, those who were induced to feel relatively lower in status compared to their partner felt the least positive (and the most negative) after receiving a generous gift.

These findings are consistent with past evidence of self-esteem decrements when people feel they are the recipient of aid during a token economy game (Fisher & Nadler, 1976). Using a much larger sample than that earlier study, we find that emotional costs occur even when real money is exchanged in the context of perceptible socioeconomic status differences. We also extend the earlier results by showing that the affective responses can be explained by recipients' attributions; heightened self-conscious emotions are mediated by recipients' feelings that the giver pitied them. In fact, whereas the self-esteem threat explanation proposed by Fisher et al. (1982) predicts that targets of aid would suffer lower self-esteem and would perceive the giver negatively, we did not find clear evidence that lower SES targets who received a generous gift reported a reduction in self-esteem or perceived the giver negatively (see SOM for details).

One limitation to the current study is that although we were able to manipulate relative differences in status between the two conditions, we were not successful in creating a condition where participants felt they were equal in status to the giver. Rather, across the conditions, participants (even those who at baseline rated their SES as high) felt somewhat lower in SES than the confederate (albeit to varying degrees). This may be because the concrete, objective SES

information provided about the confederate (i.e., their parents' education and occupations) tended to make all participants feel lower in relative SES. As a result, we observed two main effects rather than the predicted interaction on affective response. Nonetheless, the moderated mediation analysis provides evidence that the observed effects are driven more by those in the low SES condition. In Study 4, we were more successful in manipulating a sense of equal status by using a status salience manipulation.

A second limitation of the methods in Study 1 is the somewhat contrived nature of the dictator game paradigm. Although this economic paradigm allowed us to control the context to better isolate the affective costs of being the target of generosity, one might question the generalizability of these effects to naturalistic contexts of receiving monetary gifts. For example, in real life situations of interpersonal giving, the gift received might result from a specific request or otherwise meet a clear need in the person's life. Perhaps the effects identified in Study 1 only occur in a narrow range of experiences where generous gifts are a surprise and seem symbolic of status differences. Alternatively, giving across the status divide might more generally signal status differences in ways that easily trigger these affective costs. A goal of Study 2 was to study this phenomenon with real life experiences and test several possible moderators of effects.

## **Study 2**

In Study 2 we solicited people's idiosyncratic experiences of receiving generous gifts of money, extending past experimental research by examining these effects more naturalistically in terms of people's lived experiences. After recounting such an experience, participants rated their affective reactions to the gift and their perceived SES relative to the giver. Because all participants were asked to recall a gift they considered to be generous (i.e., there was no "fair"

condition as in Study 1), we predicted a main effect of relative SES on pity attributions and affective reactions. We measured and tested several potentially relevant moderating variables (e.g., need, closeness to the giver, in-person vs. anonymous giving, requested vs. unrequested gift). This correlational event-sampling method allowed us to gain a better sense of whether this phenomenon is something most people have experienced in their lives, or is something quite specific to the constrained set of circumstances created by the dictator game paradigm.

## **Method**

### **Participants and Procedure**

A total of 565 American adults were recruited via Amazon's Mechanical Turk and were paid \$0.20. In the end, 477 participants provided complete data. Respondents were asked to think about a time when they had personally received a generous gift or charitable donation with no expectation that they would reciprocate (e.g., "A friend offers to pay for a movie ticket for another friend who worries that they couldn't really afford the expense"; see SOM for complete instructions). In the prompt, we did not direct participants to consider the status of the giver. Instead, after rating several aspects of the experience, including their attributions and affective reactions, we measured participants' perceived SES relative to the giver's. This study was run in 2014, thus our sample size was based on conventions at that time (Simmons et al., 2011); given that we wanted to test moderation by several possible variables, we aimed to collect a large sample of 500 participants.

Of the 477 participants who provided complete data, the majority of respondents ( $N = 363$ ; 76%) were able to recall an episode of receiving that met our criteria<sup>6</sup>, suggesting that such experiences are not uncommon. Among these events, the vast majority of participants described

experiences of receiving a generous gift from someone of equal or higher status ( $N = 331$ ; 91%). Because our aim was to replicate the effects of Study 1 in a more naturalistic set of experiences, these 331 participants constituted our final sample. A sensitivity analysis ( $1 - \beta = .80$ ,  $\alpha = .05$ ) suggests that our sample of 331 can detect effects where  $f^2 \geq .03$ .

Participants (55% female) were predominantly White (79%) adults ( $M_{\text{age}} = 34.10$ ,  $SD = 12.18$ ) with at least some post-secondary education (92%). They considered themselves somewhat below average with respect to socioeconomic advantages ( $M = 4.73$ ,  $SD = 1.76$ ; on a 10-point scale; range = 1 – 9) and reported an average household income of \$49,213 (on a single, open-ended question: “What is your yearly household income (before taxes)?”;  $SD = \$52,960$ ; range = \$0 - \$750,000). As shown in the SOM, this sample is fairly representative of (although more educated than) United States averages.

## Measures

**Perceived relative SES.** Participants were asked to indicate their perceived financial situation relative to “the situation of the person (people) who made this gift/donation” (using a 7-point scale: 1 = *Much lower*, 4 = *Equal*, 7 = *Much higher*; final sample  $M = 2.17$ ,  $SD = 1.09$ , range = 1 – 4 after retaining only examples of cross-status receiving).

**Core measures of attribution and affect.** The same core measures used in Study 1 were again included in this study. These included *attributions to pity* (on the same two items as in Study 1), *fairness* (on the same single-item as in Study 1), and *generosity* (on a single-item measure, “He/she is a generous person”). Measures of both *self-conscious negative affect* and *positive affect* were also the same as those used in Study 1. See Table 2 for means, standard deviations, and measures of reliability.

<insert Table 2 here>

We added an attribution: “He/she expected that I would pay them back or reciprocate,” to act as a compliance check, because participants were asked to think about a gift with no expectations of reciprocation. The low mean on this scale suggested that participants were able to recall gifts that required little to no reciprocation ( $M = 1.45$ ,  $SD = 1.12$ , on a 7-point scale).

**Moderators.** In order to test possible moderating factors, we asked participants to rate whether the gift was made directly *in person* ( $n = 226$ ) or indirectly from either a person or group ( $n = 105$ ), the *relationship* between them and the giver (dichotomized during analysis as either friend/family,  $n = 205$ , or acquaintance/stranger/group/organization,  $n = 126$ ), whether the gift was *requested* ( $n = 32$ ) or not ( $n = 298$ ), whether the gift was *expected* ( $n = 135$ ) or not ( $n = 196$ ), and for the subsample who expected the gift, the extent to which the gift *exceeded expectations* (rated on a scale from 1 = *much less than what was expected* to 7 = *much more than was expected*;  $M = 5.82$ ,  $SD = 1.37$ ). Participants also rated on a 7-point scale (1 = *not at all* to 7 = *extremely*) their *similarity to the giver* ( $M = 4.76$ ,  $SD = 1.59$ ), and the extent to which the gift *filled a need* (“To what degree did you feel like you really needed this gift/donation”, “To what degree did the gift/donation allow you to meet some important need”;  $r(331) = .71$ ,  $p < .001$ ;  $M = 4.81$ ,  $SD = 1.93$ ). We coded the *type of gift* as non-monetary (e.g., concert tickets, paying for dinner;  $n = 172$ ), money not intended for anything specific ( $n = 58$ ), money intended for something specific (e.g., groceries;  $n = 78$ ), both monetary and non-monetary ( $n = 19$ ), or unclear ( $n = 4$ ). Because open-ended ratings of the *monetary value* of received gifts were positively skewed (range = \$1.25 – \$150,000,  $Mdn = \$100$ ), they were log transformed ( $M = 2.22$ ,  $SD = 0.96$ ; range = 0.10 – 5.18).

## Results

### **Descriptive Statistics**

Because one concern from Study 1 was that the dictator game might constitute a rather rare experience of giving, we first compared the features of the recalled gift-receiving occasions to the context created by the laboratory paradigm in Study 1. In the lab situation, the gift was unrequested and received in person from a relatively similar stranger (a fellow student). In the current study, participants often recalled receiving unrequested gifts (90%) in person (68%) from similar others ( $M = 4.76$ ,  $SD = 1.59$  on a 7-point scale). Although the remembered gifts were usually from close others (62%), there were a substantial proportion from more distant others (38%). This descriptive evidence reveals variability in people's experiences, but also suggests that the artificial lab scenario shared many features in common with real-world examples of receiving gifts/donations. For bivariate correlations between measures of interest, see Table 2.

### **Analytic Strategy**

Recall that because we focused only on sampling what participants self-identified as acts of generosity, our primary goal was to test the main effect relationship between the naturalistic range of measured status differences and reactions to acts of generosity. However, all analyses controlled for variability in the monetary value of the gift, which predicted positive affect (see SOM for results without monetary value as a covariate). Except in one case (footnoted below), monetary value did not moderate effects. Thus, key outcomes were regressed onto the gift's monetary value (log-transformed, z-scored) in step 1 as a covariate, and relative SES (z-scored) in step 2, in a hierarchical regression analysis.

### **Attributions for the Giver's Behavior**



As hypothesized, and replicating the \$8 (i.e., generous) condition of Study 1, results of the regression analysis revealed that the lower participants were in perceived SES compared to the giver, the more they attributed the generous gift to the giver's feelings of *pity*,  $b = -.28$  ( $SE = .11$ ),  $t(315) = -2.54$ ,  $p = .01$ ,  $CI_{95} = [-.50, -.06]$ . Monetary value was not a significant covariate,  $b = .10$  ( $SE = .11$ ),  $t(316) = 0.95$ ,  $p = .34$ ,  $CI_{95} = [-.11, .32]$ . Attributions to *generosity* and *fairness* were not predicted by relative SES, and thus could not mediate effects on recipients' affective responses (see SOM for detailed statistics).

### **Affective Responses**

Using the same approach, regression analyses revealed that, as hypothesized, the lower participants were in perceived SES compared to the giver, the more *self-conscious NA* they reported feeling,  $b = -.16$  ( $SE = .07$ ),  $t(315) = -2.13$ ,  $p = .03$ ,  $CI_{95} = [-.30, -.01]$ . A parallel analysis on *positive affect* found no significant effect of relative SES,  $b = .10$  ( $SE = .07$ ),  $t(315) = 1.31$ ,  $p = .19$ ,  $CI_{95} = [-.05, .24]$ . When receiving gifts of higher perceived value, people generally experienced more positive affect,  $b = .15$  ( $SE = .07$ ),  $t(316) = 2.03$ ,  $p = .04$ ,  $CI_{95} = [.004, .29]$ , but not more or less self-conscious negative affect,  $b = -.06$  ( $SE = .07$ ),  $t(316) = -0.87$ ,  $p = .39$ ,  $CI_{95} = [-.20, .08]$ <sup>7</sup>.

### **Indirect Effects of Relative SES on Affective Responses**

Across both negative self-conscious affect and attributions to *pity*, we observed a significant main effect of relative SES. Our next step was to use model 4 of PROCESS to test for indirect effects of relative SES (z-scored; X) on negative self-conscious affect (z-scored; Y), via attributions to *pity* (z-scored; M), with monetary value (log-transformed, z-scored) included as a covariate. We also conducted a parallel analysis on positive affect given that it is possible for

indirect effects to be significant and meaningful even in the absence of a significant direct effect (Kenny & Judd, 2014).

**Self-conscious affect.** Consistent with Study 1, there was an indirect effect of relative SES on negative self-conscious affect via attributions to *pity*,  $b = -.06$  ( $SE = .03$ ),  $CI_{95} = [-.12, -.01]$ . Those with lower SES relative to the giver reported greater attributions to *pity*,  $b = -.15$  ( $SE = .06$ ),  $t(315) = -2.54$ ,  $p = .01$ ,  $CI_{95} = [-.26, -.03]$ , which was in turn, related to negative self-conscious affect, controlling for relative SES and money,  $b = .38$  ( $SE = .05$ ),  $t(313) = 7.31$ ,  $p < .001$ ,  $CI_{95} = [.28, .49]$ .

**Positive affect.** Although the direct effect of relative SES on positive affect was not significant, the indirect effect of relative SES on positive affect via *pity* was significant,  $b = .03$  ( $SE = .02$ ),  $CI_{95} = [.01, .07]$ . Higher attributions to *pity* made by those with lower relative SES were related to experiencing less positive affect, controlling for relative SES and monetary value,  $b = -.22$  ( $SE = .06$ ),  $t(314) = -3.98$ ,  $p < .001$ ,  $CI_{95} = [-.33, -.11]$ .

### **Moderation by Gift-giving and Recipient Characteristics**

Thus far, analyses have collapsed across the features of the giving situation, providing a conceptual replication of Study 1 over a broader range of experiences. To test whether any of the measured variables moderated effects, we next used model 1 of PROCESS to test each potential moderator on self-conscious NA, and PA. In each analysis, we used relative SES (z-scored; X), and the moderator variable (dummy-coded or z-scored; M) to predict affect (z-scored; Y), controlling for money given (log-transformed, z-scored). See SOM for a table of detailed results.

These analyses showed no evidence that the relationships between relative SES and either affect measure were moderated by any of the variables tested: *gender* of the recipient, *gift type*

(non-specific monetary vs. non-monetary), whether the gift was received *in person*, the receiver's *relationship* with the giver, whether the gift was in response to a *request, expected*, from a *similar giver*, or was perceived as *filling a need*. The lack of significant moderation in this fairly large sample provides some indication that the negative affective costs associated with receiving gifts from a higher status giver are not constrained to a narrow range of experiences. Interestingly, the negative affective sting of a generous gift from a higher status giver is felt even when one has requested the gift and it fills an important need; in fact, both of these variables were associated with feeling more self-conscious NA in general, regardless of one's relative SES.

### Discussion

In both the lab experiment of Study 1 and with actual recalled experiences of receiving in Study 2, generous gifts were associated with greater self-conscious negative affect to the extent that the recipient perceived themselves to be lower in SES than the giver. Tests of indirect effects in Study 2 revealed a pattern consistent with our theory that perceiving oneself as having lower SES than a giver is associated with a more negative affective reaction to a generous gift, to the extent that this gift seems motivated by pity. Furthermore, by replicating the general phenomena using people's recalled experiences, we have greater confidence that the effects in Study 1 were not specific to the somewhat contrived nature of a dictator game. Importantly, the event-sampling method used in Study 2 suggests that such experiences of being the recipient of generosity from higher status others are not unusual (of those who provided complete data and a valid example of receiving, 91% recalled events of cross-status giving), and the negative affective costs were not exclusive to certain types of events (e.g., unexpected or unneeded gifts, or giving that occurred in person, both of which were the case in the dictator game of Study 1).

### Study 3

In Study 3, we sought to replicate the Study 2 findings with some modifications to the survey. First, we were concerned that using the term ‘charitable donation’ in our instruction prompt might have inadvertently primed negative connotations and/or called to mind very specific types of experiences confounded with having lower SES. In addition, in Study 2, many participants recalled receiving gifts from family members, which might trigger different psychological reactions than gifts from less close others, due to expectations of kin reciprocity (Stewart-Williams, 2007). Thus, in Study 3, we used a modified recall prompt asking participants to recall a gift (but NOT a charitable donation) from someone other than a close family member.

The second key goal of Study 3 was to provide a clearer test of our hypothesis that the effects observed are a result of making status differences salient, in line with a social identity threat interpretation. Alternatively, a self-esteem threat perspective would predict that individuals with relatively lower status would be more prone to evaluate themselves negatively relative to higher status others (e.g., see themselves as less competent or feel a lower sense of belonging), and feel bad and pitied as a result of that disempowering upward social comparison. To test these explanations, we included measures of status awareness, perceived competence, and perceived social belonging. We tested the hypothesis that receiving a generous gift from a higher status giver makes status differences salient, which then predicts the receiver attributing the gift to the giver’s pity, and feeling worse about receiving a generous gift.

### Method

#### Participants and Procedure

To estimate the needed sample size, we conducted an *a priori* power analysis using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007). This analysis (with  $1 - \beta = .95$ ,  $\alpha = .05$ ) suggested a minimum sample of 444 participants to detect a small effect of  $f^2 = .05$  (we powered this study for small effects given the exploratory tests of the higher order interactions which tend to be smaller in magnitude than other effects). Because 80% of participants in Study 2 were able to remember a receiving event, we aimed to recruit at least 600 participants, anticipating that about 500 of those would be able to remember an event meeting our criteria.

Out of 1007 American adults who were recruited via Amazon's Mechanical Turk and paid \$0.20, 641 participants provided complete, non-duplicate data<sup>8</sup>. Respondents received the same instructions as in Study 2, except that they were asked to think about a time when they had personally received a generous gift (charitable donations were not mentioned), from someone who was NOT a member of the participant's immediate family (see SOM for complete instructions).

Of the 641 participants who provided complete, non-duplicate data, the majority of respondents ( $N = 488$ ; 76%) were able to recall an experience of receiving a gift of the type we described, suggesting that such experiences are not uncommon. Among these events, the vast majority of participants described experiences of receiving a gift from someone of equal or higher status ( $N = 426$ ; 87%). These 426 participants constituted our final sample, which was only slightly smaller than our target sample size of 444. A sensitivity analysis ( $1 - \beta = .80$ ,  $\alpha = .05$ ) suggests that our sample of 426 can detect effects in multiple regression analysis where  $f^2 \geq .03$ . The demographics of the participants were very similar to those of Study 2 (see SOM for details on sample comparisons to national averages).

## Measures

**Perceived relative SES.** Participants were asked to indicate their financial situation relative to “the situation of the person (people) who gave you this gift” using the same scale as in Study 2 (final sample  $M = 2.63$ ,  $SD = 1.18$ , range = 1 – 4 after retaining only examples of cross-status receiving).

**Core measures of attribution and affect.** The same core measures used in Studies 1 and 2 were again included in this study. These included *attributions to pity* (on the same two items as in Studies 1 and 2), *generosity* (the same single-item as in Study 2), and *fairness* (the same single-item as in Studies 1 and 2). We also included the same *self-conscious negative emotions*, and *positive emotions* as in Studies 1 and 2. See Table 3 for means, standard deviations, and measures of reliability.

<insert Table 3 here>

**Status awareness, perceived competence, and belonging.** *Status awareness* was assessed by asking participants to rate how the money they received made them feel about themselves relative to the person who gave them the gift, on three 7-point semantic differentials (“aware of my social class: unaware of my social class,” “lower in status: higher in status,” “submissive: dominant”). In addition to these status-specific items, as part of the same prompt we also assessed participants’ perceived *competence* relative to the giver with four items (“incapable: capable,” “unintelligent: intelligent,” “doubtful: confident,” “incompetent: competent”), and their feelings of perceived *belonging* with four items (“devalued: valued,” “like an outsider: like I belong,” “rejected: accepted,” “disrespected: respected”). Status awareness was only moderately correlated with perceived competence and belonging, which were highly

correlated with one another (see Table 3).<sup>9</sup> Nonetheless, we analyzed all three as conceptually distinct possible mediators. Results are similar if we instead combine competence and belonging as an overall measure of self-evaluation relative to the giver.

**Moderators.** In order to test possible moderating factors, we asked participants to indicate the *relationship* between them and the giver (dichotomized as in Study 2: friend/family,  $n = 200$ , or acquaintance/stranger/group/organization,  $n = 226$ ). Consistent with the change in the instructions eliciting the memory of receiving money, which said the giver should not be a member of the participant's immediate family, participants remembered fewer instances of receiving from a family member in Study 3 (3%) vs. Study 2 (32%). We added a new question to go beyond the coarse measure of relationship type; participants rated how *close* they were to the giver ( $M = 4.09$ ,  $SD = 2.06$ ). As in Study 2, participants also indicated their *similarity to the giver* ( $M = 4.54$ ,  $SD = 1.62$ ), whether the gift was *requested* ( $n = 23$ ) or not ( $n = 402$ ), and the extent to which the gift *filled a need* (on the same two items as in Study 2;  $r(426) = .77$ ,  $p < .001$ ;  $M = 4.57$ ,  $SD = 2.00$ ), all on a 7-point scale (1 = *not at all* to 7 = *extremely*). We again coded the gift type: non-monetary ( $n = 280$ ), money not intended for anything specific ( $n = 57$ ), money intended for something specific (e.g., groceries;  $n = 60$ ), both monetary and non-monetary ( $n = 13$ ), or unclear ( $n = 14$ ). Open-ended ratings of the monetary value of received gifts were again positively skewed (range = \$0.02 – \$100,000,  $Mdn = \$100$ ) and thus log transformed ( $M = 1.98$ ,  $SD = 0.83$ ; range = -1.70 – 5.00).

## Results

### Descriptive Statistics

As in Study 2, the real-world examples of receiving gifts shared many features in common with the artificial lab scenario in Study 1: participants often recalled receiving unrequested gifts (94%) from similar others ( $M = 4.54$ ,  $SD = 1.62$ ). Given that this study excluded gifts from members of the immediate family, the recalled scenarios were even more similar to the lab scenario than those in Study 2. For bivariate correlations between measures of interest, see Table 3.

### **Attributions for the Giver's Behavior**

We used the same analytic approach employed in Study 2 to regress relative SES on key outcome variables, controlling for variation in the monetary value of the gift. In this study, we again found that the lower participants were in perceived SES compared to the giver, the more they attributed the gift (controlling for its value) to the giver's feelings of *pity*,  $b = -.43$  ( $SE = .10$ ),  $t(422) = -4.38$ ,  $p < .001$ ,  $CI_{95} = [-.62, -.24]$ . Monetary value was a significant covariate on the first step of the analysis: gifts of higher perceived value were also more likely to be attributed to *pity*,  $b = .32$  ( $SE = .10$ ),  $t(424) = 3.26$ ,  $p = .001$ ,  $CI_{95} = [.13, .52]$ . Attributions to *generosity and fairness* were unrelated to relative SES (consistent with Study 2; see SOM for detailed statistics). See SOM for results without monetary value as a covariate.

### **Affective Responses**

In contrast to the earlier studies that revealed significant direct effects of relative SES on *self-conscious NA*, the direct effect of relative SES on self-conscious negative affect was not significant in Study 3,  $b = -.08$  ( $SE = .06$ ),  $t(422) = -1.36$ ,  $p = .18$ ,  $CI_{95} = [-.21, .04]$ . However, relative SES did have a significant direct effect on *positive affect* that was in line with hypotheses: People lower in relative SES recalled less PA after receiving a generous gift,  $b = .19$



( $SE = .06$ ),  $t(422) = 3.16$ ,  $p = .002$ ,  $CI_{95} = [.07, .31]$ . As in Study 2, people who received gifts with a higher monetary value recalled experiencing more PA,  $b = .15$  ( $SE = .06$ ),  $t(423) = 2.44$ ,  $p = .02$ ,  $CI_{95} = [.03, .26]$ , but not less or more self-conscious NA,  $b = .02$  ( $SE = .06$ ),  $t(423) = 0.35$ ,  $p = .73$ ,  $CI_{95} = [-.10, .14]$ .

### Indirect Effects of Relative SES on Attributions and Affective Responses

**Attributions of pity.** A unique goal of Study 3 was to test whether those with lower relative SES made greater attributions to pity due to an increased awareness of status differences (consistent with a social identity threat approach), and/or due to people evaluating themselves negatively in terms of either perceived competence or belonging (consistent with an upward comparison or self-esteem threat approach). Initial analyses revealed that people who were lower in relative SES reported higher *status awareness*,  $b = -.23$  ( $SE = .05$ ),  $t(422) = -5.16$ ,  $p < .001$ ,  $CI_{95} = [-.32, -.14]$ , lower perceived *competence*,  $b = .26$  ( $SE = .06$ ),  $t(422) = 4.47$ ,  $p < .001$ ,  $CI_{95} = [.14, .37]$ , and a lower sense of *belonging*,  $b = .15$  ( $SE = .06$ ),  $t(422) = 2.65$ ,  $p = .01$ ,  $CI_{95} = [.04, .26]$ . Monetary value was not a significant covariate in any of these analyses:  $b = .01$  ( $SE = .05$ ),  $t(423) = 0.11$ ,  $p = .92$ ,  $CI_{95} = [-.09, .10]$ ;  $b = .10$  ( $SE = .06$ ),  $t(423) = 1.79$ ,  $p = .08$ ,  $CI_{95} = [-.01, .22]$ ;  $b = .02$  ( $SE = .06$ ),  $t(423) = 0.26$ ,  $p = .79$ ,  $CI_{95} = [-.10, .13]$ . Given these effects, status awareness, perceived competence, or belonging could each potentially mediate the indirect effect of relative SES on attributions to pity and affective responses.

However, when we used model 4 in PROCESS to examine which of these three variables uniquely mediates the relationship between relative SES and attribution to pity in a simultaneous mediation model controlling for monetary value, only status awareness showed a significant indirect effect,  $b = -.03$  ( $SE = .02$ ),  $CI_{95} = [-.07, -.01]$ . Neither the indirect effect for perceived

competence  $b = -.03$  ( $SE = .02$ ),  $CI_{95} = [-.07, .001]$ , nor belonging,  $b = .01$  ( $SE = .01$ ),  $CI_{95} = [-.004, .04]$  was significant. Thus, only status awareness was retained as a mediator of the relationship between relative SES and pity in the following serial mediation.

**Serial mediation.** Our next step was to test a serial path model, where having relatively lower SES predicts greater status awareness, and in turn attributions to pity, and finally affective outcomes. To present analyses consistent with Study 2, we modeled the relationships to both self-conscious and positive affect (in two separate models). We tested these indirect effects in model 6 of PROCESS, predicting affect (z-scored; Y) from relative SES (z-scored; X), status awareness, and pity (both z-scored; M). We controlled for monetary value (log-transformed, z-scored) and measures of perceived competence and belonging (both z-scored). In line with our hypotheses, the test of the full serial mediational model for *self-conscious negative affect* was significant,  $b = -.01$  ( $SE = .003$ ),  $CI_{95} = [-.02, -.002]$  (see Figure 3). In addition, the indirect effect of relative SES on self-conscious affect via only *pity* was significant,  $b = -.04$  ( $SE = .02$ ),  $CI_{95} = [-.08, -.02]$  (replicating Study 2), as was the indirect effect via only *status awareness*,  $b = -.03$  ( $SE = .01$ ),  $CI_{95} = [-.06, -.01]$ .

<Insert Figure 3 here>

The test of the full serial mediational model for *positive affect* was also significant,  $b = .003$  ( $SE = .002$ ),  $CI_{95} = [.001, .01]$  (see Figure 4). Replicating Study 2, the indirect effect via only *pity* was significant,  $b = .02$  ( $SE = .01$ ),  $CI_{95} = [.01, .05]$ , although the indirect via only *status awareness* was not significant,  $b = -.01$  ( $SE = .01$ ),  $CI_{95} = [-.03, .01]$ .

<Insert Figure 4 here>

Together, these results suggest that the indirect effects are unique to status awareness. There was no clear evidence that effects are better explained by lower SES participants feeling relatively less competent compared to a higher SES giver, or less belonging.

### **Moderation by Gift-Giving and Recipient Characteristics**

Finally, as in Study 2, we used model 1 of PROCESS to test each potential moderator of the relationship between relative SES and affective responses (z-scored; Y). In a series of moderated regression analysis, we entered relative SES (z-scored; X), the moderator variable (dummy-coded or z-scored; M), and monetary value (log-transformed, z-scored) as a covariate. A table of detailed results are summarized in the SOM.

As in Study 2, these analyses showed little evidence that the relationships between relative SES and negative self-conscious affect were moderated by any of the following variables tested: *recipient gender*, *gift type* (non-specific monetary vs. non-monetary), what the relationship was with the gift giver (both the *relationship type* and the *closeness*, and *similarity*), whether the gift was in response to a *request*, or was perceived as *filling a need*. As in Study 2, need was associated with feeling more self-conscious NA, regardless of one's relative SES and controlling for the monetary value of the gift. It is interesting that across both Studies 2 and 3, there is no evidence that one's affective reactions to generosity are muted by having a need fulfilled.

For positive affect, the only significant moderation was an interaction between relative SES and *similarity*,  $b = .12$  ( $SE = .05$ ),  $CI_{95} = [.02, .21]$ . The conditional effects suggested that being lower in relative SES was associated with less positive affect especially when receiving a

gift from a similar,  $b = .23$  ( $SE = .07$ ),  $CI_{95} = [.10, .37]$ , rather than a less similar other,  $b = -.002$  ( $SE = .07$ ),  $CI_{95} = [-.14, .13]$ .<sup>10</sup>

### Discussion

The results of Study 3 provide additional evidence that when recalling past experiences of being the target of generosity, those with lower relative status are more likely to attribute the gift to pity, and subsequently feel less positive affect (as a direct effect) and more self-conscious negative affect (as an indirect effect). Although the observed effects on negative and positive affective outcomes have varied somewhat from study to study (but see meta-analysis later), the overall results align with the general model that when receiving a generous gift from a higher status giver, recipients see these gifts as motivated not only by generosity or fairness, but also as a signal of their lower status and being pitied.

Tests of serial mediation yielded evidence consistent with a social identity threat perspective, but revealed no clear evidence consistent with a self-esteem threat (or upward comparison) perspective. Although those with relatively lower SES reported feeling lower belonging and less competent relative to a higher SES giver, neither of these variables uniquely predicted participants' tendency to attribute the gift to pity after controlling for status awareness. In contrast, those with lower SES reported feeling aware of those status differences after receiving a generous gift, which predicted attributions to pity and affective responses. Thus, one key theoretical nuance of these findings is to show that the emotional sting of being the recipient of a generous gift is better explained by status salience than by social rejection or a strong sense of disempowerment.

Interestingly, across two large samples where people were reflecting on their own real-world experiences, we observed no evidence that these relationships were moderated by the degree to which the gift was requested or fulfilled an important need; generous gifts to lower status others were associated with status differences regardless of the practical utility of those gifts. There was also some evidence in this study (but not in Study 2), that effects might be stronger when people feel similar to the giver. This might seem to conceptually replicate earlier experimental findings based on much smaller samples suggesting that receiving aid from a similar (vs. dissimilar) other is most damaging to self-esteem (Fisher et al., 1978; Fisher & Nadler, 1974; Nadler et al., 1976). Given that this effect did not replicate in Study 2, we hesitate to draw a strong conclusion. Keep in mind, however, that disallowing gifts from close family in Study 3 may have enabled this relationship to become more apparent. Also, with respect to the wording changes between Studies 2 and 3, the direct effects on self-conscious negative affect were perhaps weaker in Study 3 because we eliminated mention of ‘charitable donations.’ We believe, however, that the consistency in the indirect effects on both negative and positive affective measures suggests that we are capturing a broader phenomenon across these studies.

Having found some evidence in this correlational paradigm that status awareness is one key mechanism by which these effects occur, we designed a final study to experimentally manipulate status awareness in order to isolate its causal effects on downstream attributional and affective outcomes.

#### **Study 4**

In Study 4, we returned to the dictator paradigm used in Study 1. Because our focus was on reactions to generosity, all participants in this study received \$8 (out of \$10) from a confederate. The key manipulation was whether or not participants were made aware of relative

status differences before receiving a generous gift from a stranger (i.e., the confederate). We assessed the same measures of attributions and affective reactions used in Study 1. We also added the measures of status awareness, perceived competence, and belonging from Study 3, to test our hypothesis that the status salience manipulation would uniquely manipulate status awareness and not these two other self-threats. We predicted that the status salience manipulation would have a significant main effect on status awareness which would, in turn, predict greater attributions to pity and more negative (and less positive) affective reactions to receiving \$8.

## Method

### Participants

Participants were 194 university students recruited through the psychology department participant pool, who received research credit (and \$8) for their time. Participants were randomly assigned to complete information about their SES either before (SES-salient) or after (SES-not-salient) receiving money from their partner in a dictator game. To manipulate the perception of having lower SES than the confederate, we decided *a priori* to exclude participants with extremely high SES (i.e., whose response on the SES ladder was 8, 9, or 10;  $n = 47^{11}$ ). We also excluded one participant who reported knowing the confederate (SES-not-salient condition) and four participants who encountered procedural errors (they either did not receive or did not count their money before completing the dependent variables;  $n_{SES-salient} = 2$ ;  $n_{SES-not-salient} = 2$ ). This left us with a final sample of 142 participants ( $n_{SES-salient} = 67$ ,  $n_{SES-not-salient} = 75$ ). The sample was 76% female, mostly East Asian (58%) and Caucasian (20%), with a mean age of 19.97 ( $SD = 2.04$ ). This study was run in 2015 and, based on conventions at that time, we aimed to collect 200 participants (planning the sample as if there were 4 conditions with 50 per condition, since

we were testing for moderation; Simmons et al., 2011). A sensitivity analysis ( $1 - \beta = .80$ ,  $\alpha = .05$ , two-tailed) suggests that our sample of 142 can detect main effects where  $d \geq .47$ .

### **Procedure**

The procedure was quite similar to that of Study 1. Participants arrived at the lab individually along with a female confederate, and completed a biographical sheet. For each participant, page one of this sheet included age, gender, major, year in school, and a personality measure. Participants who were randomly assigned to the SES-not-salient condition completed only this first page, whereas those randomly assigned to the SES-salient condition completed a second page that included SES-related questions (their parents' education and occupation, their own preferred activities, their SES relative to other students). The participant then exchanged their biographical sheet with the confederate, who also completed either both pages (in the SES-salient condition), or only the first page (in the SES-not-salient condition). For participants in the SES-salient condition, the biographical sheet from their partner suggested someone from a relatively higher SES background, as her SES ladder response was always 3 points higher than the participant's own rating. Participants in the SES-not-salient condition eventually completed the same SES-related questions after they received the money from the confederate, and after completing the main outcome variables.

After exchanging the biographical sheets, the participant was ostensibly randomly assigned to be the receiver in the dictator game. All other procedures were the same as in Study 1, except that the confederate (who was always female) was instructed to smile when delivering the money to the participant (vs. a neutral facial expression in Study 1). This change was made to

address a concern that a neutral face in this context of handing someone an envelope of money might seem unusually negative.

## Measures

**Core measures of perceived relative SES, attribution and affect.** The same measures were included in this study: *relative SES* compared to the confederate (on the same item as in Study 1;  $M = 2.50$ ,  $SD = 0.86$ ); *attributions to pity* (on the same two items as in Studies 1-3;  $r(142) = .66$ ,  $p < .001$ ;  $M = 3.01$ ,  $SD = 1.54$ ), *generosity* (on the same item as in Study 1;  $M = 6.06$ ,  $SD = 1.08$ ), and *fairness* (on the same item as in Studies 1-3;  $M = 4.53$ ,  $SD = 1.45$ ); *positive emotions* (on the same items as in Studies 1-3;  $\alpha = .81$ ;  $M = 3.90$ ,  $SD = 1.03$ ), and *self-conscious negative emotions* (on the same items as in Studies 1-3;  $\alpha = .83$ ;  $M = 1.89$ ,  $SD = 0.92$ ).

**Status awareness, perceived competence and belonging.** We included measures of *status awareness* ( $\alpha = .80$ ;  $M = 4.37$ ,  $SD = 1.01$ ), *perceived competence* ( $\alpha = .80$ ;  $M = 4.40$ ,  $SD = 0.92$ ), and *belonging* ( $\alpha = .76$ ;  $M = 4.88$ ,  $SD = 0.95$ ), on the same items used in Study 3.<sup>12</sup> These potential mediators were moderately correlated,  $.48 < |p's| < .68$ .

## Results

### Manipulation Check of Perceived Relative SES

Analysis of participants' ratings of status relative to the confederate revealed the expected condition difference,  $t(89.33) = 7.91$ ,  $p < .001$ ,  $d = 1.35$ .<sup>13</sup> Participants felt relatively lower in SES compared to the confederate when SES information had been collected and exchanged prior to the dictator game (i.e., in the SES-salient condition;  $M = 1.99$ ,  $SD = .93$ ) rather than after the dictator game ( $M = 2.96$ ,  $SD = .42$ ). This finding is not the result of an actual difference between



conditions in self-reported SES; there was no condition difference in perceived SES relative to other students,  $t(140) = .58, p = .57, d = .10$ .

When relative SES was made salient in advance, participants judged their relative SES to be significantly lower than the scale midpoint (3 = *about the same*),  $t(66) = -8.94, p < .001, d = 1.10$ . However, when participants were not primed to think about their relative SES (and had no reason to believe the confederate would know their SES) before they received the money or completed any outcomes, they expected their own SES to be the same as that of the confederate (comparison to scale midpoint of 3),  $t(74) = -.83, p = .41, d = .10$ . Thus, in this paradigm (in contrast to Study 1), we were better able to create a control condition where people assumed they had equal status to the confederate.

### **Manipulation Check of Status Awareness**

As hypothesized, analyses revealed that participants felt significantly more *aware of status differences* between themselves and their partner in the SES-salient condition ( $M = 4.73, SD = .97$ ), than in the SES-not-salient condition ( $M = 4.04, SD = .93$ ),  $t(140) = -4.30, p < .001, d = .72$ .

There was no clear evidence in this study that participants felt lower in perceived *competence* in the SES-salient condition ( $M = 4.35, SD = .83$ ), compared to the SES-not-salient condition ( $M = 4.46, SD = .99$ ),  $t(140) = .71, p = .48, d = .12$ , or lower *belonging* in the SES-salient condition ( $M = 4.77, SD = .97$ ), compared to the SES-not-salient condition ( $M = 4.98, SD = .93$ ),  $t(140) = 1.28, p = .20, d = .22$ . These results suggest that we effectively manipulated status salience as distinct from these other possible sources of self-threat. Because the

manipulation had no significant effect on perceived competence or belonging ratings, they were not examined as having potential indirect effects on affective responses.

### **Attributions for the Giver's Behavior**

Consistent with Study 1 and our central hypothesis, participants in the SES-salient condition were significantly more likely to attribute their partner's generous gift to *pity* ( $M = 3.72$ ,  $SD = 1.62$ ) compared to those in the SES-not-salient condition ( $M = 2.37$ ,  $SD = 1.13$ ),  $t(116.53) = -5.72$ ,  $p < .001$ ,  $d = .97$ .<sup>14</sup>

There were no significant condition effects on perceptions of the giver's *generosity* ( $M_{SES-salient} = 6.09$ ,  $SD_{SES-salient} = 1.03$ ;  $M_{SES-not-salient} = 6.04$ ,  $SD_{SES-not-salient} = 1.13$ ),  $t(140) = -0.27$ ,  $p = .79$ ,  $d = .05$ . However, the \$8 gift did seem somewhat more *fair* in the SES-salient condition ( $M = 4.78$ ,  $SD = 1.34$ ) than in the SES-not-salient condition ( $M = 4.31$ ,  $SD = 1.52$ ),  $t(140) = -1.95$ ,  $p = .05$ ,  $d = .33$ , whereas there was no effect of SES condition on fairness in Study 1.

### **Affective Responses and Indirect Effects of Attributions on Affective Responses**

Contrary to our hypotheses, there were no significant direct effects of the manipulation on either self-conscious negative affect,  $t(140) = 0.13$ ,  $p = .89$ ,  $d = .02$ , or positive affect,  $t(140) = 0.24$ ,  $p = .81$ ,  $d = .04$ . The lack of direct effects was surprising given the results in the earlier studies and the significant effects found on our mediating variables. However, because indirect effects can still be significant and meaningful even in the absence of a significant direct effect, we conducted serial mediation analyses similar to those we ran in Study 3. That is, we used model 6 in PROCESS to test a path model whereby SES salience (dummy-coded; X) elevates status awareness, which in turn predicts attributions to pity (both z-scored; M), and finally

affective outcomes (z-scored;  $Y$ ). Again, to present consistent effects, we carried out parallel analyses for both self-conscious negative affect and positive affect.

**Self-conscious affect.** The test of the full serial indirect model for self-conscious affect was significant,  $b = .04$  ( $SE = .03$ ),  $CI_{95} = [.002, .12]$  (see Figure 5). More specifically, the indirect effect of the status salience manipulation on self-conscious affect via only *pity* was significant,  $b = .22$  ( $SE = .08$ ),  $CI_{95} = [.09, .41]$  (replicating studies 1-3), but via only *status awareness* was not,  $b = .11$  ( $SE = .07$ ),  $CI_{95} = [-.01, .29]$ .

<Insert Figure 5 here>

Interestingly, with these two mediators in the model, the direct effect of the manipulation was significant,  $b = -.38$  ( $SE = .18$ ),  $p = .04$ ,  $CI_{95} = [-.75, -.02]$ , suggesting that suppressor effects might have precluded condition effects on negative affect (more on this below).

**Positive affect.** When the same analysis was repeated for positive affect, the serial indirect effect was not significant,  $b = .02$  ( $SE = .02$ ),  $CI_{95} = [-.002, .07]$  (see Figure 6). The specific indirect effect of condition on positive affect via *status awareness* was significant,  $b = -.14$  ( $SE = .07$ ),  $CI_{95} = [-.31, -.02]$ , but the specific indirect effect via *pity* was not,  $b = .09$  ( $SE = .07$ ),  $CI_{95} = [-.03, .27]$ .

<Insert Figure 6 here>

**Moderation by status salience.** The lack of direct effects of the status salience manipulation on affective outcomes combined with the suppressor effect in the serial indirect model for negative self-conscious affect led us to consider the possibility that measured status awareness might only be related to making an attribution to pity, and feeling bad about the

money received, if one believed that the giver knew one's SES before deciding how much to give (i.e., in the SES-salient condition). Without this status information, receiving \$8 might still elicit a negative self-conscious response, but one that has little to do with feeling pitied or having lower status. In other words, a moderated mediation pattern could account for the lack of direct effect on affective outcomes and for a suppressor effect when controlling for status salience.

To test this possibility, we used model 7 in PROCESS to test whether the indirect effect of status awareness on self-conscious negative affect via pity was significantly stronger for those in the status salient (vs. non-salient) condition. This model revealed a significant moderated mediation for self-conscious negative affect,  $b = .09$  ( $SE = .06$ ),  $CI_{95} = [.01, .25]$ . The conditional indirect effect of status awareness on self-conscious negative affect via pity was significant in the SES-salient condition,  $b = .08$  ( $SE = .06$ ),  $CI_{95} = [.01, .23]$ , but not in the SES-not-salient control condition, when participants assumed they had equal status to the giver,  $b = -.004$  ( $SE = .03$ ),  $CI_{95} = [-.05, .05]$ . A parallel analysis for positive affect did not yield evidence of significant moderated mediation,  $b = .05$  ( $SE = .04$ ),  $CI_{95} = [-.01, .17]$ . These results suggest that participants in both conditions felt somewhat self-conscious receiving \$8 out of \$10 from a stranger, but these negative emotions were predicted by status salience and attributions to pity only for those who were made aware of their SES being lower than the giver's.

### **Meta-Analysis Across Studies**

The results of these four studies have revealed consistent patterns of relative SES: direct effects on attributions to pity (across all four studies); direct effects on status awareness (in Studies 3 and 4, which were the only ones to include the measure); indirect effects via pity on self-conscious negative affect (all four studies). Tests of direct effects on affective outcomes

have been less consistent. In order to estimate the size of these direct effects on affective outcomes, we conducted an internal meta-analysis across these four studies (the only studies conducted by our lab investigating the effects of SES on targets of generosity), following procedures described by Goh, Hall, and Rosenthal (2016). For the purpose of these analyses, we focused specifically on the effect of relative SES (as manipulated in Study 1, measured in Studies 2 and 3, or made salient in Study 4) on attributions to pity, self-conscious negative affect, and positive affect. Across all studies, the relative SES variable was scaled to range from 0 (equally high SES) to 1 (relatively lower SES). In other words, condition variables in the dictator game studies were dummy coded 0 (high-SES in Study 1; SES-not-salient in Study 4) or 1 (low-SES in Study 1; SES-salient in Study 4), whereas in the recall studies, the 4-point relative SES measure was converted to a 0 to 1 scale (with 4, 3, 2, 1 corresponding to values = 0, .333, .666, 1).

To test the direct effects of relative SES on pity, self-conscious negative affect, and positive affect, we employed a random-effects model, taking an unweighted mean of effect sizes across the four studies. Correlations were converted to  $d$ 's (Borenstein, Hedges, Higgins, & Rothstein, 2009), and then meta-analyzed using Cumming's (2013) meta-analysis module in the Exploratory Software for Confidence Intervals (see computations online here: <https://osf.io/yh7wu/>). Results of these analyses yielded significant average effects of relative SES on all three variables (see Figure 7). The average estimated effect of relative SES on *pity* was  $d = .63$ ,  $CI_{95} = [.33, .93]$ . The average effects of relative SES on *self-conscious negative affect*,  $d = .17$ ,  $CI_{95} = [.02, .31]$ , and *positive affect* were also significant,  $d = -.20$ ,  $CI_{95} = [-.39, -.02]$ . Thus, despite the fact that some studies did not yield significant direct effects on affective reactions, across this line of research there is evidence that those with lower relative SES feel

more pitied and experience more affective costs and fewer affective benefits when receiving generous gifts from higher status others.

<Insert Figure 7 here>

### **General Discussion**

Money is society's clearest metric of value. People generally feel happy both when receiving money from others, and when giving money to others. The present set of studies, however, reveals important boundary conditions that differentiate when the exchange of money (or other gifts of value) has hedonic benefits and when it triggers feelings of negative self-consciousness. Specifically, when differences in social status are salient, what would otherwise be experienced as an interpersonal act of generosity is seen by the recipient as an awkward act of pity that dampens the joy of receiving money. These negative emotional consequences are felt even when the recipient needs the money or requests it. Such results are consistent with the notion that giving across the status divide triggers social identity threat among lower SES recipients, similar to concerns found in interactions of majority and minority groups more generally (Bergsieker, Shelton, & Richeson, 2010).

Taken together, these studies yield several novel theoretical insights about the nature of prosocial giving across the status divide. The findings reported here integrate prior research on the psychological costs of being a target of helping or aid with more contemporary research on the hedonic benefits of prosocial giving, and are interpreted within a framework of social identity threat. By integrating these quite distinct literatures, the current studies make advances to each.

In line with a social identity threat view, we found that targets of generosity from higher status others become aware of status differences, feel pitied, and experience negative self-

conscious affect. These effects are somewhat distinct from the way assumptive help has been studied in the past. Research in the 1970's and 80's aimed to show that receiving help from advantaged others lowers a person's self-esteem by making salient painful upward comparisons or eroding a sense of self-efficacy (Fisher et al., 1982; Nadler & Fisher, 1986; Nadler & Halabi, 2015). Although such effects might be likely when assumptive help is given on a performance task that is ego-relevant, we found no clear evidence that the affective consequences measured here are better explained by threats to one's sense of competence or belonging (vs. status awareness). The effects in the present studies have less to do with making targets feel bad about themselves, but rather highlighting for them the status devaluation they face as someone with relatively lower SES.

In addition, the self-esteem threat perspective on reactions to aid suggests that targets would not only feel bad about themselves, but would also evaluate the giver in a more negative light (Fisher et al., 1982). Findings from the current studies instead reveal that receiving money from someone higher in status is perceived with mixed emotions. Lower SES recipients feel badly receiving a generous gift of money from a higher status person who is seen as taking pity on them, but they do not seem to hold this against the giver. Instead, they recognize the giver's intentions to be generous and often experience some positive affect as well, even if those positive emotions are more muted. Because these episodes are not only experienced in a negative way, they constitute subtle forms of identity threat that are attributionally ambiguous. Such experiences can take a toll on health and well-being if they accumulate over time (Major & Schmader, 2018).

Together, the current studies also expose how reminders of socioeconomic differences in interpersonal interactions might be a cue to social identity threat (Croizet & Millet, 2012;

Johnson et al., 2011; Stephens et al., 2012). The fact that relative status was made salient even among objectively well-off university students highlights the fundamental ease with which perceived status differences can create a divide, and cue social identity threat (Johnson et al., 2011). Indeed, the expectation of similarity among peers, punctured by a clear signal of the status hierarchy, might be integral to the phenomenon studied here (Fisher, Harrison, & Nadler, 1978; Fisher & Nadler, 1974; Nadler et al., 1976). In contrast, when differences in status are accepted and legitimized, the emotional costs to generosity might be minimized, if not eliminated.

Because gifts of monetary value are generally positive in nature, the current research also highlights that experiences of social identity threat are not limited to objectively negative events. Positive experiences can also be a signal of social devaluation, even when the target acknowledges that the giver's behavior might have been well-intentioned. Although research on prosocial giving has tended to emphasize the hedonic benefits to givers when they are generous to those in need (Dunn, Aknin, & Norton, 2014), the current research suggests that targets themselves might have complex reactions to generosity across the status divide. This general finding connects to other ways in which members of a disadvantaged minority can feel a sense of threat and uncertainty when they are suspicious of the motives of majority group members who act positively toward them (Major et al., 2016).

### **Limitations and Future Directions**

Although these studies are unique in examining the affective consequences to receivers when giving happens in the context of status differences, there are several limitations to acknowledge. First, there were some inconsistencies across the studies: relative SES predicted self-conscious negative affect directly in Studies 1 and 2, but not Studies 3 and 4, and positive



affect in Studies 1 and 3, but not Studies 2 and 4. However, in all studies we find that individuals whose status is lower than the giver's are more likely (than individuals whose status is more equal to the giver's) to attribute a generous gift to pity, and these feelings of being pitied relate to self-conscious negative affect. Because it is not unusual to find a variable pattern of effects across a set of studies (Lakens & Etz, 2017), we conducted an internal meta-analysis to better estimate the true effect size and found reliable direct effects of relative SES on pity, negative self-conscious affect, and positive affect. Thus, despite some inconsistency of specific effects across two very different study paradigms, there is a general pattern of support for the broader phenomenon we discuss.

Importantly, the experimental studies did not include participants who were objectively very low in socioeconomic status. At an extreme level of economic disadvantage, hedonic benefits of receiving aid might be more readily realized; if one is dying of thirst, it is hard to imagine that one would feel anything but thrilled at receiving a gift of water. However, results of Studies 2 and 3, which provided relatively representative samples of the general population (albeit somewhat more educated), suggest that having a clear need does not moderate the negative affective experience of receiving a generous gift from a higher status other. Thus, in the context of typical acts of generosity, we might expect to observe these acts of giving to elicit social identity threat. Theoretically, moderators that implicate status awareness could be potentially fruitful avenues for future research. For example, recipients' identification with their social class could yield complex results. On the one hand, class identification could make one feel less similar to financial donors of higher SES which might reduce the emotional sting of generous gifts. However, a social identity threat approach would suggest that higher

identification might increase the salience of status differences in a way that would instead magnify effects.

A key limitation to these findings is our inability to know how long these emotional effects might last. In the experimental studies, people reported how they were feeling immediately after receiving a gift, providing no information about longer term effects. Participants in the recall studies, however, reported how they remembered feeling after receiving a gift in the past. Although we did not ask how long ago the gift occurred, some of the descriptions did include a timeframe (e.g., “Approximately 15 years ago...”, “A few years ago...”, “There was a time many years ago...”), suggesting that the experience of receiving a gift can be quite memorable. Prospective longitudinal studies would be needed to map the duration of these affective consequences and how they affect other outcomes, such as one’s relationship to the giver, or motivation to avoid such gifts in the future.

The main goal of the current research was to investigate the affective consequences when the recipient of a generous gift was lower in SES relative to the giver. Another interesting direction for future research might be to investigate the consequences of this phenomenon when recipients of gifts are *higher* in SES relative to the donor. For example, when individuals lower in SES provide help or a generous gift to individuals higher in SES, this behavior may be perceived by higher SES individuals as an attempt for lower SES individuals to attain parity in social standing (i.e., status threat; Tajfel & Turner, 1986). As such, individuals higher in SES may respond with behaviors to restore their status (e.g., defensive help, Nadler, Harpax-Gorodeisky, & Ben-David, 2009).

The studies reported here focus on interpersonal giving. The applicability to intergroup contexts or system-level resource distribution is unknown. Prosocial giving to those in need frequently involves gifts to charitable organizations that distribute these resources to needy individuals. In addition to providing an efficient mechanism for resource distribution, such agencies might also launder these monetary resources of their emotional stain. Future studies could extend the current paradigms to examine whether the emotional costs of generosity can be alleviated by the insertion of a charitable organization or social program that increases the psychological distance between the giver and the receiver. Social programs such as welfare and unemployment insurance are public programs designed to address income inequality. However, to the extent that receiving money from social programs and charities triggers status awareness, and thus a sensitivity to being pitied, it might also be important to understand variations to programs that mitigate these effects. A social identity threat approach might support the premise that non-paternalistic helping that provides recipients with more spending choice or opportunities for reciprocity (e.g., through community service) might have more positive emotional consequences (Schroeder et al., 2017).

## **Conclusions**

In sum, the current set of studies investigated the affective consequences for the receiver in a status-salient personal giving context. Taken together, these studies suggest that when recipients of generosity feel relatively lower in SES than the giver, they feel pitied and experience more self-conscious negative affect in response. These emotional costs might be a limiting factor for acts of generosity directed toward those who would benefit the most.

### References

- Aknin, L. B., Barrington-Leigh, C. P., Dunn, E. W., Helliwell, J. F., Burns, J., Biswas-Diener, R., Kemeza, I., Nyende, P., Ashton-James, C., & Norton, M. I. (2013a). Prosocial spending and well-being: Cross-cultural evidence for a psychological universal. *Journal of Personality and Social Psychology, 104*, 635–652. doi: 10.1037/a0031578
- Aknin, L. B., Dunn, E. W., Sandstrom, G. M., & Norton, M. I. (2013). Does social connection turn good deeds into good feelings?: The value of putting the "social" in prosocial spending. *International Journal of Happiness and Development, 1*, 155–171. doi: 10.1504/IJHD.2013.055643
- Aknin, L. B., Dunn, E. W., Whillans, A. V., Grant, A. M., & Norton, M. I. (2013). Making a difference matters: Impact unlocks the emotional benefits of prosocial spending. *Journal of Economic Behavior & Organization, 88*, 90–95. doi:10.1016/j.jebo.2013.01.008
- Barclay, P. (2010). Altruism as a courtship display: Some effects of third-party generosity on audience perceptions. *British Journal of Psychology, 101*, 123–135. doi:10.1348/000712609X435733
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin, 115*, 243–267. doi:10.1037/0033-2909.115.2.243
- Bergsieker, H. B., Shelton, J. N., & Richeson, J. A. (2010). To be liked versus respected: Divergent goals in interracial interactions. *Journal of Personality and Social Psychology, 99*, 248–264. doi: 10.1037/a0018474
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to Meta-Analysis*. Chichester, UK: John Wiley & Sons, Ltd

- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, *96*, 608–630.
- Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective consequences of attributional ambiguity. *Journal of Personality and Social Psychology*, *60*, 218–228.
- Croizet, J.-C., & Claire, T. (1998). Extending the concept of stereotype threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin*, *24*, 588–594.  
doi:10.1177/0146167298246003
- Croizet, J.-C., & Millet, M. (2012). Social class and test performance: From stereotype threat to symbolic violence and vice versa. In M. Inzlicht, & T. Schmader (Eds.), *Stereotype Threat: Theory, Process, and Application* (pp. 188-201). New York: Oxford University Press.
- Crosby, F. (1976). A model of egoistical relative deprivation. *Psychological review*, *83*(2), 85.
- Cumming, G. (2013). *Understanding the New Statistics: Effect Sizes, Confidence Intervals, and Meta-Analysis*. New York, NY: Taylor & Francis Group, L.L.C.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, *97*, 143–156. doi:10.1007/s11205-009-9493-y
- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending money on others promotes happiness. *Science*, *319*, 1687–1688. doi:10.1126/science.1150952

- Dunn, E. W., Aknin, L. B., & Norton, M. I. (2014). Prosocial spending and happiness: Using money to benefit others pays off. *Current Directions in Psychological Science*, 23(1), 41–47.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191.
- Fehr, E., & Schmidt, K. M. (1999). A theory of fairness, competition, and cooperation. *The Quarterly Journal of Economics*, 114, 817–868. doi:10.1162/003355399556151
- Fisher, J. D., & Nadler, A. (1974). The effect of similarity between donor and recipient on recipient's reactions to aid. *Journal of Applied Social Psychology*, 4, 230–243. doi:10.1111/j.1559-1816.1974.tb02643.x
- Fisher, J. D., & Nadler, A. (1976). Effect of donor resources on recipient self-esteem and self-help. *Journal of Experimental Social Psychology*, 12, 139–150. doi:10.1016/0022-1031(76)90065-2
- Fisher, J. D., Nadler, A., & Witcher-Alagna, S. (1982). Recipient reactions to aid. *Psychological Bulletin*, 91(1), 27.
- Fisher, J. D., Harrison, C. L., & Nadler, A. (1978). Exploring the generalizability of donor-recipient similarity effects. *Personality and Social Psychology Bulletin*, 4, 627–630. doi:10.1177/014616727800400428
- Gilbert P., & McGuire, M. (1998). Shame, social roles and status: The psychobiological continuum from monkey to human. In P. Gilbert, & B. Andrews (Eds.), *Shame: Interpersonal Behavior, Psychopathology* (pp. 99–125). New York: Oxford University Press.

- Goh, J. X., Hall, J. A., & Rosenthal, R. (2016). Mini meta-analysis of your own studies: Some arguments on why and a primer on how. *Social and Personality Psychology Compass*, *10*, 535–549. doi:10.1111/spc3.12267
- Halabi, S., Nadler, A., & Dovidio, J. F. (2011). Reactions to receiving assumptive help: The moderating effects of group membership and perceived need for help. *Journal of Applied Social Psychology*, *41*, 2793–2815. doi:10.1111/j.1559-1816.2011.00859.x
- Hayes, Andrew F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: The Guilford Press
- John-Henderson, N. A., Rheinschmidt, M. L., Mendoza-Denton, R., & Francis, D. D. (2014). Performance and inflammation outcomes are predicted by different facets of SES under stereotype threat. *Social Psychological and Personality Science*, *5*(3), 301–309.
- Johnson, S. E., Richeson, J. A., & Finkel, E. J. (2011). Middle class and marginal? Socioeconomic status, stigma, and self-regulation at an elite university. *Journal of Personality and Social Psychology*, *100*, 838–852. doi:10.1037/a0021956
- Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition & Emotion*, *13*, 505–521. doi:10.1080/026999399379168
- Kenny D. A., Judd C. M. (2014). Power anomalies in testing mediation. *Psychol. Sci.* *25*, 334–339. doi:10.1177/0956797613502676
- Kilpatrick, F. P., & Cantril, H. (1960). Self-anchoring scaling: A measure of individuals' unique reality worlds. *Journal of Individual Psychology*, *16*, 158–173.
- Kraus, M. W., Park, J. W., & Tan, J. J. X. (2017). Signs of social class: The experience of economic inequality in everyday life. *Perspectives on Psychological Science*, *12*, 422–435. doi: 10.1177/1745691616673192

- Lakens, D., & Etz, A. J. (2017). Too true to be bad: When sets of studies with significant and nonsignificant findings are probably true. *Social Psychological and Personality Science*, 8, 875–881. doi: 10.1177/1948550617693058
- Major, B., Kunstman, J. W., Malta, B. D., Sawyer, P. J., Townsend, S. S., & Mendes, W. B. (2016). Suspicion of motives predicts minorities' responses to positive feedback in interracial interactions. *Journal of Experimental Social Psychology*, 62, 75–88. doi:10.1016/j.jesp.2015.10.007
- Major, B., & Schmader, T. (2018). Stigma as identity threat: Implications for health. In B. Major, J. Dovidio, & B. Link (Eds.), *Oxford Handbook of Stigma, Discrimination, and Health*. Oxford University Press.
- Major, B. & Townsend, S. (2010). Coping with prejudice, stereotyping, and discrimination. In J.F. Dovidio, M. Hewstone, P. Glick & V. M. Esses (Eds.) *Handbook of Prejudice and Discrimination*. (pp. 410–425). Thousand Oaks, CA: Sage.
- Nadler, A. (1987). Determinants of help seeking behaviour: The effects of helper's similarity, task centrality and recipient's self esteem. *European Journal of Social Psychology*, 17, 57–67. doi:10.1002/ejsp.2420170106
- Nadler, A. (2002). Inter-group helping relations as power relations: Maintaining or challenging social dominance between groups through helping. *Journal of Social Issues*, 58, 487–502. doi:10.1111/1540-4560.00272
- Nadler, A., & Fisher, J. D. (1986). The role of threat to self-esteem and perceived control in recipient reaction to help: Theory development and empirical validation. *Advances In Experimental Social Psychology*, 19, 81–94. doi: 10.1016/S0065-2601(08)60213-0



- Nadler, A., Fisher, J. D., & Ben-Itzhak, S. (1983). With a little help from my friend: Effect of single or multiple act aid as a function of donor and task characteristics. *Journal of Personality and Social Psychology, 44*(2), 310–321.
- Nadler, A., Fisher, J. D., & Streufert, S. (1976). When helping hurts: Effects of donor-recipient similarity and recipient self-esteem on reactions to aid. *Journal of Personality, 44*, 392–409. doi:10.1111/j.1467-6494.1976.tb00129.x
- Nadler, A., & Halabi, S. (2015). Helping relations and inequality between individuals and groups. In J. F. Dovidio & J. Simpson (Eds.), *The APA Handbook of Personality and Social Psychology*. Washington, DC, USA: APA Press.
- Nadler, A., Harpaz-Gorodeisky, G., & Ben-David, Y. (2009). Defensive helping: Threat to group identity, ingroup identification, status stability, and common group identity as determinants of intergroup help-giving. *Journal of Personality and Social Psychology, 97*, 823–834.
- Newsom, J. T., & Schulz, R. (1998). Caregiving from the recipient's perspective: Negative reactions to being helped. *Health Psychology, 17*, 172–181. doi:10.1037/0278-6133.17.2.172
- Norton, M. I., & Ariely, D. (2011). Building a better America—One wealth quintile at a time. *Perspectives on Psychological Science, 6*, 9–12. doi:10.1177/1745691610393524
- Pew Research Center (2015). The American middle class is losing ground. Washington, DC. Retrieved at <http://www.pewsocialtrends.org/2015/12/09/the-american-middle-class-is-losing-ground/>.
- Régner, I., Huguet, P., & Monteil, J.-M. (2002). Effects of socioeconomic status (SES) information on cognitive ability inferences: When low-SES students make use of a self-

- threatening stereotype. *Social Psychology of Education*, 5, 253–269.  
doi:10.1023/A:1016313908667
- Rosnow, R. L., & Rosenthal, R. (2003). Effect sizes for experimenting psychologists. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale*, 57(3), 221.
- Saez, E. & Zucman, G. (2016). Wealth inequality in the United States since 1913: Evidence from capitalized income tax data. *The Quarterly Journal of Economics*, 131, 519–578. doi: 10.1093/qje/qjw004
- Schmader, T., Block, K., & Lickel, B. (2015). Social identity threat in response to stereotypic film portrayals: Effects on self-conscious emotion and implicit ingroup attitudes. *Journal of Social Issues*, 71, 54–72. doi:10.1111/josi.12096
- Schneider, M. E., Major, B., Luhtanen, R., & Crocker, J. (1996). Social stigma and the potential costs of assumptive help. *Personality and Social Psychology Bulletin*, 22, 201–209.  
doi:10.1177/01461672962222009
- Schroeder, J., Waytz, A., & Epley, N. (2017). Endorsing help for others that you oppose for yourself: Mind perception alters the perceived effectiveness of paternalism. *Journal of Experimental Psychology: General*, 146, 1106–1125. doi:10.1037/xge0000320
- Shapiro, J. R., & Neuberg, S. L. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences, and interventions. *Personality and Social Psychology Review*, 11(2), 107–130.
- Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant.

- Psychological Science*, 22(11), 1359–1366. <http://doi.org/10.1177/0956797611417632>
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology*, 34, 379–440. doi:10.1016/S0065-2601(02)80009-0
- Stephens, N.M., Markus, H.R., & Fryberg, S.A. (2012). Social class disparities in health and education: Reducing inequality by applying a sociocultural self model of behavior. *Psychological Review*, 119, 723–744.
- Stewart-Williams, S. (2007). Altruism among kin vs. nonkin: effects of cost of help and reciprocal exchange. *Evolution and Human Behavior*, 28, 193–198.  
doi.org/10.1016/j.evolhumbehav.2007.01.002.
- Sweeney, P. D., McFarlin, D. B., & Inderrieden, E. J. (1990). Using relative deprivation theory to explain satisfaction with income and pay level: A multistudy examination. *Academy of Management Journal*, 33(2), 423–436.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & WG Austin (Eds.), *Psychology of intergroup relations: 7–24*. Chicago: Nelson-Hall.
- Thut, G., Schultz, W., Roelcke, U., Nienhusmeier, M., Missimer, J., Maguire, R. P., & Leenders, K. L. (1997). Activation of the human brain by monetary reward. *Neuroreport*, 8, 1225–1228.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82–96.  
doi:10.1037/0022-3514.92.1.82

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070. doi:10.1037/0022-3514.54.6.1063

### Footnotes

<sup>1</sup> Because there are no clear and consensually held socio-economic categories, we focus on the experience of individuals who feel they are being judged through the lens of their perceived SES. It would be an interesting, but separate question, to examine predictions stemming from the intergroup helping as status relations model (Nadler, 2002), where acts of generosity from upper class groups to lower class groups could be seen as trying to pacify or disempower the lower class in society.

<sup>2</sup> Study 1 combined samples from two experiments using similar paradigms that yielded strikingly consistent results. The studies differed in some characteristics of the samples, the operationalization of relative SES, and one design element added to the second sample. See Supplementary Online Materials (SOM) for more details.

<sup>3</sup> We also included an attribution to the giver's goodwill (*She is nice, She was in a good mood, She likes me*;  $\alpha = .73$ ). Because this measure was far less reliable in Study 2, we did not include it in Study 3, and thus only discuss this measure in the SOM. To provide more consistency across studies, we instead present participants' ratings of the giver's generosity, in order to assess the degree to which participants simply interpret the giver's behavior at face value: as an act of generosity.

<sup>4</sup> This was true in both samples despite the fact that in Sample 1b, we matched the giver's SES on the relative SES ladder measure directly to the participant's own response.

<sup>5</sup> In this and all studies, we also carried out supplemental tests of reverse mediation: perhaps people first have an affective response to the gift that then predicts, for example, their attribution

to pity. There was less consistent evidence across the four studies for this reverse mediation. See SOM.

<sup>6</sup> A total of 88 participants (out of 565) did not complete the survey: 7 stopped before providing consent, 16 stopped after providing consent, but without providing any additional information; 65 stopped after providing partial information. Of the 114 participants (out of 477) who were unable to recall an experience of receiving a gift of the type we described, 90 participants said they couldn't recall such an experience, and 24 participants provided responses that did not conform to our specifications regarding the type of gift: 5 did not provide a description of the gift, 7 were examples of giving rather than receiving, 1 was a gift given to an individual on behalf of an organization/charity they represented, 2 were gifts received by someone else, 3 described impersonal gifts (draw prizes/contests), 3 described gifts with no monetary value (a place to stay, a dog, a ride), and 3 descriptions were incoherent. These exclusions were made prior to data analysis.

<sup>7</sup> Self-conscious negative affect was the one analysis that revealed a significant relative SES by monetary value interaction,  $b = -.16$  ( $SE = .07$ ),  $CI_{95} = [-.30, -.02]$ . Simple slopes analyses revealed that when the gift was of higher perceived value (+1 SD), having lower SES relative to the giver was associated with feeling more self-conscious NA,  $b = -.34$  ( $SE = .11$ ),  $CI_{95} = [-.55, -.13]$ , but when the gift was of lower perceived value (-1 SD), relative SES was not associated with self-conscious NA,  $b = -.01$  ( $SE = .10$ ),  $CI_{95} = [-.20, .18]$ .

<sup>8</sup> The recruitment total of 1007 does not include 107 non-American participants (who were inadvertently able to complete the survey due to an error when setting up the MTurk study). Of the total 1007, 346 participants did not complete the survey and thus were excluded from

analyses: 142 stopped before providing consent, 90 stopped after providing consent, but without providing any additional information, 114 stopped after providing partial information. An additional 20 responses were duplicates (based on IP address, gender, and age), resulting in 641 complete, non-duplicate responses. After data were collected on the first 629 participants, events were coded to identify the percentage of valid giving experiences so that we could estimate how many more participants would need to be recruited to approximate our desired sample size. Of the 153 participants who were unable to recall an experience of receiving a gift of the type we described, 146 participants said they could not recall such an experience, and 7 participants provided responses that did not conform to our specifications regarding the type of gift: 1 did not provide a description of the gift, 1 was an example of giving rather than receiving, 2 were gifts given to an individual on behalf of an organization/charity they represented, 1 described an impersonal gift (a draw prize), and 2 descriptions were incoherent. All exclusions were made prior to data analysis.

<sup>9</sup> An additional item (“inferior: superior”), originally intended to assess status awareness, correlated negatively with the other items on this scale, and thus was not included in the status awareness composite.

<sup>10</sup> In exploratory analyses testing monetary value as a predictor rather than as a covariate, it also moderated this effect resulting in a significant relative SES x money x closeness interaction. Relative SES had a stronger positive relationship with positive affect when people received a low-cost gift (-1 SD) from a close other (+1 SD),  $b = .36$ , ( $SE = .11$ ),  $CI_{95} = [.14, .57]$ , rather than a distant other (-1 SD),  $b = -.02$  ( $SE = .08$ ),  $CI_{95} = [-.19, .14]$ . When the gift was worth more money (+1 SD), the relationship between relative SES and positive affect was weak but positive

(though non-significant) regardless of whether the giver was close,  $b = .16$  ( $SE = .10$ ),  $CI_{95} = [-.03, .34]$ , or distant,  $\beta = .17$  ( $SE = .11$ ),  $CI_{95} = [-.04, .38]$ .

<sup>11</sup> Although this is a sizeable percentage of the sample (24%), the percentage with these high SES scores did not vary by condition ( $n_{SES-salient} = 22$ ,  $n_{SES-not-salient} = 25$ ) and was similar to the 22% of participants in sample 1b of Study 1 who rated their SES as 8 or higher.

<sup>12</sup> Unlike in Study 3, all four status awareness items formed a reliable measure, and were averaged together.

<sup>13</sup> The degrees of freedom were adjusted because there was significantly higher variation in this attribution within the SES-salient condition compared to the SES-not-salient condition,  $F(140) = 20.50$ ,  $p < .001$ .

<sup>14</sup> The degrees of freedom were adjusted because there was significantly higher variation in this attribution within the SES-salient condition compared to the SES-not-salient condition,  $F(140) = 15.69$ ,  $p < .001$ .



Table 1. Means (Standard deviations) and ANOVA results for Study 1.

Variable	Means (SD)				F test from ANOVA ( $\eta_p^2$ )		
	\$8, low relative SES n = 62	\$5, low relative SES n = 41	\$8, high relative SES n = 51	\$5, high relative SES n = 64	Main Effect \$	Main effect relative SES	Interaction: \$ x relative SES
<b>Giver attributions</b>							
Pity	4.33 (1.49)	2.13 (1.19)	2.92 (1.35)	1.63 (.88)	102.31*** (.33)	30.78*** (.13)	6.80* (.03)
Generosity	6.13 (.93)	5.10 (1.51)	6.24 (.79)	5.27 (1.21)	42.18*** (.17)	0.79 (.004)	0.04 (.001)
Fairness	5.02 (1.47)	6.73 (.74)	4.69 (1.63)	6.57 (.98)	104.93*** (.33)	1.95 (.01)	0.23 (.001)
<b>Affective response to receiving money</b>							
Negative self- conscious affect	2.14 (.98)	1.40 (.63)	1.98 (.84)	1.16 (.34)	58.44*** (.22)	3.89* (.02)	0.17 (.001)
Positive affect	3.82 (1.12)	4.23 (1.25)	4.42 (1.09)	4.67 (1.24)	4.27* (.02)	10.36** (.05)	0.25 (.001)

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 2. Means (SDs) and bivariate correlations between measures of interest for Study 2.

Variable	1	2	3	4	5	6	7
1. Relative SES	-	-.25***	-.14**	-.11*	.09	-.10	.03
2. Money (log-transformed)		-	.05	.13*	-.10	-.05	.11*
3. Pity			-	.09	.17**	.39***	-.23***
4. Generous				-	.01	-.02	.16**
5. Fairness					-	.09	.11*
6. Self-conscious Negative Affect						-	-.45***
7. Positive Affect							-
<i>M</i>	2.17	2.22	4.34	6.29	4.02	1.99	4.55
<i>SD</i>	1.09	.96	1.91	1.16	2.04	1.28	1.28
Reliability	n/a	n/a	$r(328) = .55,$ $p < .001$	n/a	n/a	$\alpha = .93$	$\alpha = .85$

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 3. Means (SDs) and bivariate correlations between measures of interest for Study 3.

Variable	1	2	3	4	5	6	7	8	9	10
1. Relative SES	-	-.18****	-.23****	-.06	.06	-.07	.13**	-.24****	.20****	.13**
2. Money (log-transformed)		-	.16**	-.01	.06	.02	.12*	.01	.09	.01
3. Pity			-	.003	.23****	.33****	-.19****	.20****	-.14**	-.08
4. Generous				-	.13**	-.17**	.36****	.04	.20****	.43****
5. Fairness					-	.05	.15**	-.001	.16**	.12*
6. Self-conscious Negative Affect						-	-.47****	.34****	-.37****	-.32****
7. Positive Affect							-	-.24****	.57****	.54****
8. Status Awareness								-	-.41****	-.34****
9. Competence									-	.72****

10. Belonging										-
<i>M</i>	2.63	1.98	4.09	6.36	4.10	2.05	5.02	4.37	4.82	5.64
<i>SD</i>	1.18	.83	2.06	1.03	2.00	1.25	1.23	0.94	1.19	1.17
Reliability	n/a	n/a	$r(423) = .62,$ $p < .001$	n/a	n/a	.92	.87	.57	.86	.87

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

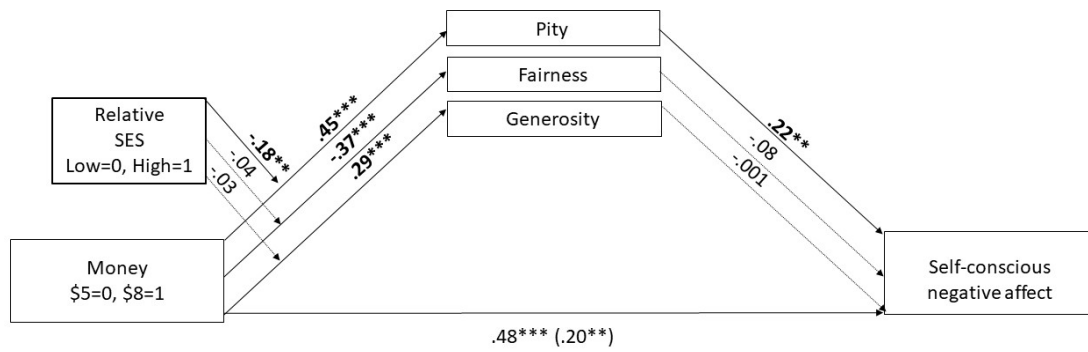


Figure 1. Moderated mediation results for self-conscious affect in Study 1. Standardized coefficients ( $\beta$ ) are presented.  $\beta$  in parentheses is the direct effect with mediators in the model. Only the indirect effect via pity was significant and was moderated by relative SES.

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

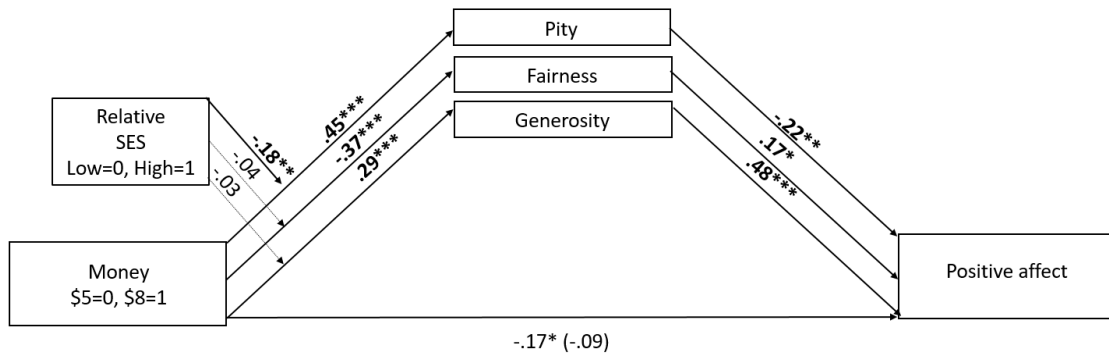


Figure 2. Moderated mediation results for positive affect in Study 1. Standardized coefficients ( $\beta$ ) are presented.  $\beta$  in parentheses is the direct effect with mediators in the model. Only the moderated mediation via pity was significant.

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

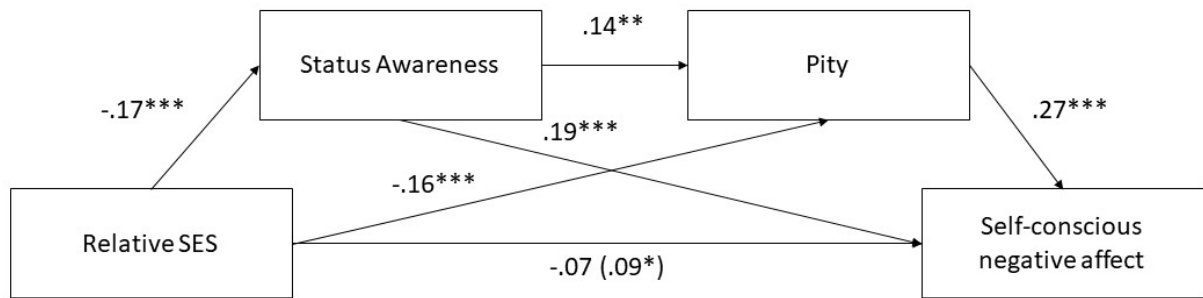


Figure 3. PROCESS results for test of serial mediation on self-conscious negative affect in Study 3. Standardized coefficients ( $\beta$ ) are presented.  $\beta$  in parentheses is the direct effect with mediators in the model. Monetary value, perceived competence, and belonging were entered in the model as covariates.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

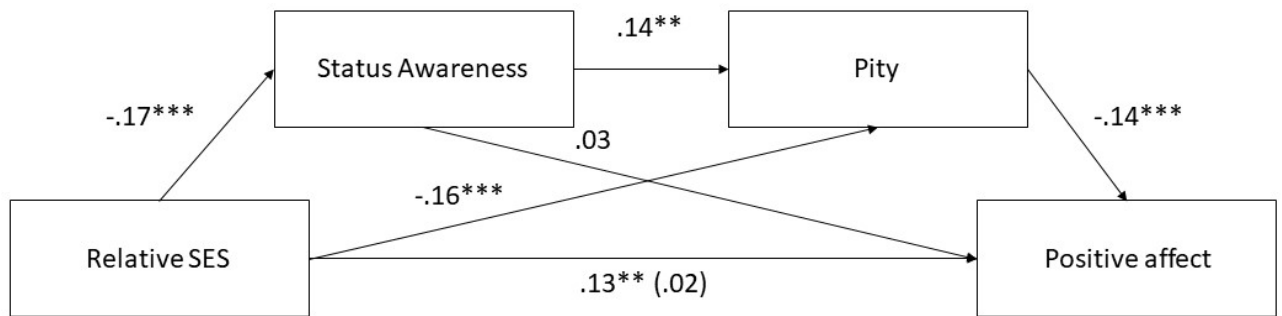


Figure 4. PROCESS results for test of serial mediation on positive affect in Study 3.

Standardized coefficients ( $\beta$ ) are presented.  $\beta$  in parentheses is the direct effect with mediators in the model. Monetary value, perceived competence, and belonging were entered in the model as covariates.

\*\*  $p < .01$ , \*\*\*  $p < .001$



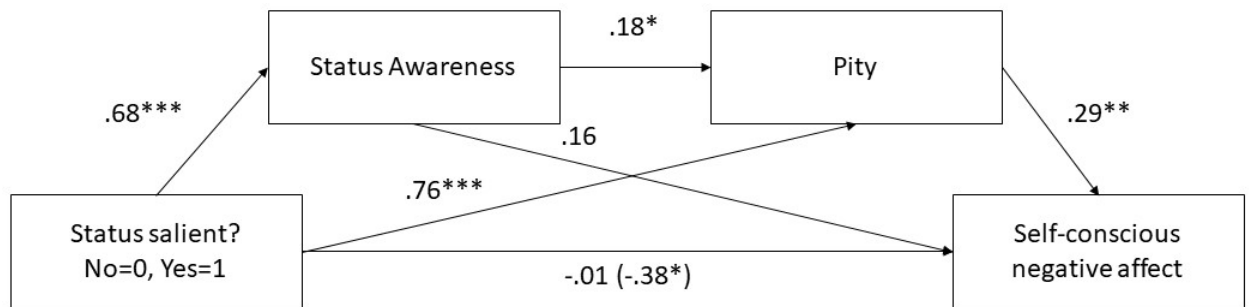


Figure 5. PROCESS results for test of serial mediation on self-conscious negative affect

in Study 4. Standardized coefficients ( $\beta$ ) are presented.  $\beta$  in parentheses is the direct effect with mediators in the model.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

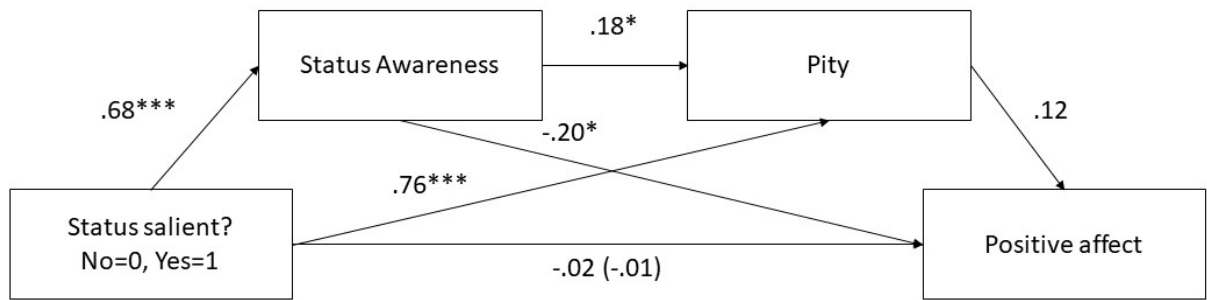
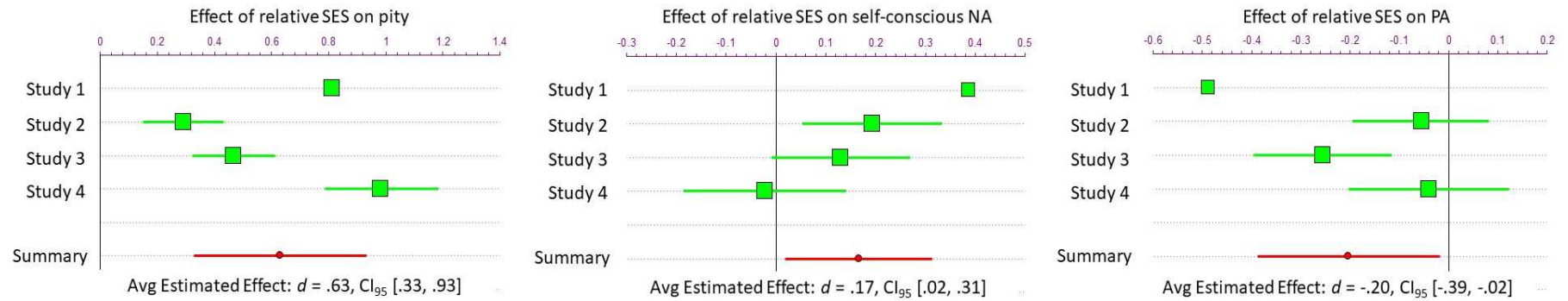


Figure 6. PROCESS results for test of serial mediation on positive affect in Study 4.

Standardized coefficients ( $\beta$ ) are presented.  $\beta$  in parentheses is the direct effect with mediators in the model.

\*  $p < .05$ , \*\*\*  $p < .001$

Figure 7. Internal meta-analysis for direct effect of relative SES on pity, self-conscious negative affect, and positive affect when receiving a generous gift.



### **Supplementary Materials**

Here we report additional details about the methods and results of each of the studies reported in the manuscript. These details were not included either because they were tangential to our specific research questions or because supplementary analyses did not contribute any additional information relevant to tests of hypotheses. Materials, data sets and analysis scripts for all studies are available online: <https://osf.io/yh7wu/>.

## Table of Contents

Study 1		
Method		
Participants: Differences Between Samples 1a and 1b		3
Procedure: Differences Between Samples 1a and 1b		3
SES manipulation		4
Additional Measures		5
Results		
Self-Esteem and Self-Evaluation		6
Testing Reverse Mediation: Predictor → Affect → Mediator		7
Table S1 (Reverse Mediation)		8
Study 2		
Method		
Participants: Representativeness		9
Table S2 (Demographics vs. Census)		9
Procedure: Instructions		9
Measures: Changes from Study 1		10
Results		
Detailed Results for Attributions		11
Table S3 (No Monetary Value covariate)		11
Detailed Results for Tests of Moderation		12
Table S4 (Moderation results)		13
Study 3		
Method		
Participants: Representativeness		14
Procedure: Instructions		14
Measures: Changes from Study 2		15
Results		
Detailed Results for Attributions		16
Detailed Results for Tests of Moderation		16
Table S5 (Moderation results)		18
Study 4		
Method		
Procedure: Differences Compared to Study 1		19
Measures: Changes from Study 1		19
Results		
Tests of Moderation		20
References		21

## **Study 1**

### **Method**

#### **Participants: Differences Between Samples 1a and 1b**

Study 1 of the manuscript represents two separate samples which, for the sake of parsimony and increased statistical power, were combined. In Sample 1a, we recruited only female students, and employed only female research assistants to ensure that status differentials between males and females did not confound the results. In order to increase our pool of participants, we eliminated this restriction when we collected Sample 1b.

In Sample 1a, students were eligible to participate in the study only if they had rated themselves as either low (1 through 4) or high (8 through 10) in SES relative to other undergraduate students at the same university, on a pre-screening questionnaire at the beginning of the semester (though, when they answered the same question in the lab, we classified participants who rated themselves from 1 through 6 as low-SES, and participants who rated themselves from 7 through 10 as high-SES). In contrast, in Sample 1b all students were eligible to participate, and in both samples their SES responses (relative to other undergraduate students at the same university) within the study session were used to determine their assignment to the low-SES or high-SES condition. Indeed, Sample 1b was collected in part to provide a more precise manipulation of lower vs. similar SES after the results of Sample 1a revealed that all participants felt somewhat lower in SES than the confederate.

#### **Procedure: Differences Between Samples 1a and 1b**

In Sample 1a, the confederate (always female in Sample 1a, but not in Sample 1b) always indicated on the biographical sheet that they would fall on the 9<sup>th</sup> rung of the SES ladder (relative to other undergraduate students at the same university); we reasoned that

the low-SES participants would see the confederate as higher in SES than them, and the high-SES participants would see the confederate as having an SES similar to their own. In Sample 1b, the experimenter surreptitiously filled in the confederate's SES to yoke that response to the one provided by the participant. If the participant rated themselves as being of lower SES (6 or lower), the experimenter indicated that the confederate's SES was three points higher than that of the participant. However, if the participant rated themselves as high SES (7 or higher), the experimenter indicated that the confederate's SES was the same as that of the participant.

Initially, the study with Sample 1b was designed to also examine whether the giver's motivation for giving would moderate receivers' responses. The design included an additional manipulation of the confederate's (giver's) agentic or communal orientation, conveyed through additional responses on the biographical sheet. We had hypothesized that a low SES participant might feel less threatened receiving \$8 from a high SES partner who is communally rather than agentially motivated. However, initial analyses of our manipulation checks revealed that participants did not view the confederate who gave a communal response as being more communally motivated,  $t(102) = .30, p = .76$ , though they did view the communal confederate as more concerned with others,  $t(101) = 2.00, p = .05$ . Given that this manipulation failed to adequately shift participants' views of the confederate's motives, and did not moderate effects on key outcome variables, we collapsed across the agentic and communal conditions in all of the reported analyses.

### **SES manipulation**

Participants were asked to report their father's and mother's education ("end of primary school", "end of junior high school", "end of high school", "some

college/university”, “college/university graduate”, “post-graduate study”), and occupation. They also reported whether or not they had a job while going to school, and how often they engaged in several expensive activities (“go to the movies”, “go out to eat”, “go skiing/snowboarding”, “go to amusement parks”, “go shopping (other than for groceries)”, “travel for pleasure”).

### **Additional Measures**

Given that the following measures were not of focal interest, and either exhibited no change as a result of the manipulation or exhibited inconsistent patterns across samples, we omit further mention of them here. Please contact one of the first authors for more details.

**Attributions for the giver’s behavior.** In addition to the three items assessing attributions to pity and fairness, there were items (on the same 7-point scale) assessing the extent to which: the giver did not need the money, the gift was due to the giver’s good mood, the giver was biased against the receiver, the giver was greedy, the giver was nice, the giver liked the receiver.

**Affective responses.** In addition to measuring *self-conscious* negative emotions after receiving money, we measured *sad* (depressed, sad, hurt, upset, disappointed), *angry* (angry, offended), and *anxious* negative affect (nervous, anxious) after receiving the money. We also measured trait affect before the task, on a baseline information sheet (Diener et al., 2010).

**Partner perceptions.** We measured participants’ ratings of their partner on a set of positive (friendly in Samples 1a and 1b, trustworthy and thoughtful in Sample 1a, fair-minded in Sample 1b) and negative (arrogant and phony in Samples 1a and 1b,



patronizing in Sample 1b) traits. We measured participants' ratings of the extent to which they liked, felt connected to, similar to, close to (Aron, Aron & Smollan, 1992), and warm towards their partner.

**Self-esteem, self-evaluation and reciprocation motives.** We measured trait self-esteem before the task, on a baseline information sheet (Rosenberg, 1979), and state social *self-esteem* after the task (Heatherton & Polivy, 1991). We asked participants how they compared to others (in general) with respect to intelligence, success, and in general (*self-evaluation*; Nadler, Fisher, & Ben-Itzhak, 1983). Finally, we measured willingness to donate to charity in the future.

## Results

### Self-Esteem and Self-Evaluation

Given that prior research on assumptive help has often analyzed effects on self-esteem, we present the results of analyses on state self-esteem here. A 2 (SES: low-SES vs. high-SES) x 2 (money: \$5 vs. \$8) ANOVA on state self-esteem in the combined sample for Study 1 yielded a significant main effect of SES condition; people in the low-SES condition reported lower state self-esteem ( $M = 5.01$ ,  $SD = 1.29$ ) than people in the high-SES condition ( $M = 5.46$ ,  $SD = 1.30$ ),  $F(1, 214) = 5.25$ ,  $p = .02$ , partial  $\eta^2 = .02$ . However, there were no significant effects on state self-esteem,  $ps > .05$ , when the analysis was repeated controlling for trait self-esteem, which was measured at the start of the study.

The same 2 x 2 ANOVA on self-evaluation yielded a significant main effect of SES condition that was qualified by a significant interaction,  $F(1, 214) = 8.10$ ,  $p = .01$ , partial  $\eta^2 = .04$ . Simple main effect analyses revealed that when people received the more

generous \$8 gift, there was no difference in self-evaluations between participants in the low-SES condition ( $M = 4.99$ ,  $SD = 0.77$ ) and participants in the high-SES condition ( $M = 5.05$ ,  $SD = 0.73$ ),  $p = .69$ , partial  $\eta^2 = .001$ . However, when participants received the even split of \$5, participants in the low-SES condition reported lower self-evaluations ( $M = 4.66$ ,  $SD = 0.87$ ) than did participants in the high-SES condition ( $M = 5.34$ ,  $SD = 0.83$ ),  $p < .001$ , partial  $\eta^2 = .08$ . This pattern does not align with what might be predicted from past work on assumptive help.

### **Testing Reverse Mediation: Predictor → Affect → Mediator**

In the main text, we report tests of an indirect effect of SES condition on affect via various proposed/possible mediators (attributions to pity, generosity, and fairness in all studies; status awareness and self-evaluations in Studies 3 and 4). However, the affect-as-information approach might suggest that the indirect effect could go the other direction. When we ran these reverse mediation analyses for this and the other three studies, the indirect effect was sometimes significant, but there was less consistency than in the analyses that tested our proposed causal model (see Table S1 for results from all four studies).

Table S1. Summary of results of mediation (indirect effects on negative and positive affect (NA and PA) via attributions, status awareness and self-evaluations), and reverse mediation (indirect effects on proposed mediators via affect)

Study	Affect	Reported indirect effect: b (SE) Predictor → mediator → affect						Reverse mediation: b (SE) Predictor → affect → mediator					
		Pity	Generosity	Fair	Status aware	Competence	Belonging	Pity	Generosity	Fair	Status aware	Competence	Belonging
1	NA	<b>.08 (.03)*</b>	-.001 (.01)	.03 (.03)	-	-	-	<b>.06 (.02)*</b>	-.01 (.02)	-.02 (.02)	-	-	-
	PA	<b>-.08 (.03)*</b>	<b>.13 (.03)*</b>	<b>-.07 (.03)*</b>	-	-	-	<b>.02 (.01)*</b>	<b>-.05 (.02)*</b>	<b>-.02 (.01)*</b>	-	-	-
2	NA	<b>-.06 (.03)*</b>	n/a	n/a	-	-	-	<b>-.05 (.02)*</b>	n/a	n/a	-	-	-
	PA	<b>.03 (.02)*</b>	n/a	n/a	-	-	-	-.02 (.01)	n/a	n/a	-	-	-
3	NA	<b>-.06 (.02)*</b>	n/a	n/a	<b>-.05 (.02)*</b>	<b>-.04 (.02)*</b>	-.01 (.01)	-.02 (.02)	n/a	n/a	-.02 (.02)	.02 (.02)	.02 (.02)
	PA	<b>.03 (.01)*</b>	n/a	n/a	-.01 (.01)	<b>.07 (.02)*</b>	<b>.04 (.02)*</b>	<b>-.03 (.01)*</b>	n/a	n/a	<b>-.03 (.01)*</b>	<b>.87 (.03)*</b>	<b>.08 (.03)*</b>
4	NA	<b>.25 (.10)*</b>	n/a	.001 (.03)	.11 (.08)	n/a	n/a	-.01 (.04)	n/a	-.001 (.01)	-.004 (.03)	n/a	n/a
	PA	.10 (.08)	n/a	<b>.06 (.04)*</b>	<b>-.13 (.07)*</b>	n/a	n/a	-.003 (.02)	n/a	-.01 (.04)	.01 (.03)	n/a	n/a

*Note.* Effects that are significant at .05 are indicated with an asterisk and marked in bold. n/a = not significant on its own, so not tested in mediation; missing = measure not included in the study. For Study 1, we describe the results of simultaneous mediation on the left – not the moderated simultaneous mediation reported in the text; money was used as the sole predictor. For Studies 3 and 4, we describe the results of simultaneous mediation on the left – not the serial mediation reported in the text.

## Study 2

### Method

#### Participants: Representativeness

The participants in this study were fairly representative of national averages in terms of age, gender, ethnicity, and income, as determined from the U.S. census (U.S. Department of Commerce, 2013; see Table S2). The study participants were, however, more educated than national averages.

Table S2. Comparison of means of demographic information for participants in Studies 2 and 3 vs. estimated 2013 U.S. national averages (U.S. Department of Commerce, 2013)

Demographic variable	Study 2 Final Sample	Study 3 Final Sample	2013 Census Estimate
Age	34.1	34.8	37.5
Gender - % female	55	59	50.8
Ethnicity - % White	79	72	73.7
Education - % with at least some post-secondary	92	91	58.8
Income	\$49,213	\$31,000 - \$40,999	\$52,250

#### Procedure: Instructions

Participants read the following instructions:

*In this study, we are interested in situations where someone gives money or some other generous gift or donation to someone else with no expectation that the recipient will reciprocate. Some examples might include:*

*- A friend offers to pay for a movie ticket for another friend who worries that they couldn't really afford the expense.*

- *A family receives a gift basket or food donation during the holidays from a local charitable organization.*

- *A person asks a stranger for \$2 for bus fare, and is given \$20 and told to keep the change.*

*Can you think of an occasion when you personally received a generous gift or charitable donation?*

### **Measures: Changes from Study 1**

**Attributions for the giver's behavior.** We dropped the items assessing the extent to which the giver was biased against the receiver, and the giver was greedy. We added an item assessing the extent to which the giver was just doing what the receiver had asked. This item was considered filler and was not analyzed.

**Affective responses.** We added one adjective to the list from Study 1: grateful.

**Moderators.** Participants indicated whether the gift was given to them *in person* (“directly and in person”,  $n = 226$ ), or *indirectly from either a person or group* (sum of: “indirectly through the mail or another third party, but from an individual”,  $n = 62$ ; “from a charitable organization or group (i.e., not from an individual)”,  $n = 20$ ; “Other”,  $n = 23$ ).

Participants indicated whether their relationship to the giver was *friend/family* (sum of: friend(s),  $n = 99$ ; family member(s),  $n = 106$ ), or *acquaintance/stranger/group/organization* (sum of: acquaintance(s),  $n = 27$ ; stranger(s),  $n = 46$ ; group I am a member of,  $n = 18$ ; group or organization I have no affiliation with,  $n = 15$ ; Other,  $n = 20$ ).

We also asked participants how much they liked the giver and how similar their personality was to that of the giver.

**Demographic variables.** We asked participants to rate their political orientation.

## Results

### Detailed Results for Attributions

Attributions to *generosity* were not predicted by relative SES,  $b = -.11$  ( $SE = .07$ ),  $t(315) = 1.72$ ,  $p = .09$ ,  $CI_{95} = [-.25, .02]$ . Monetary value was a significant covariate,  $b = .15$  ( $SE = .07$ ),  $t(316) = 2.25$ ,  $p = .03$ ,  $CI_{95} = [.02, .27]$ .

Attributions to *fairness* were not predicted by relative SES,  $b = .16$  ( $SE = .12$ ),  $t(315) = 1.34$ ,  $p = .18$ ,  $CI_{95} = [-.07, .38]$ . Monetary value was not a significant covariate,  $b = -.21$  ( $SE = .11$ ),  $t(316) = -1.85$ ,  $p = .07$ ,  $CI_{95} = [-.43, .01]$ .

See Table S3 for results of analyses that do not use monetary value as a covariate.

Table S3. Main effects without using monetary value as a covariate, in Studies 2 and 3.

Variable	Regression results (b's)	
	Study 2	Study 3
Giver attributions		
Pity	-.28**	-.47***
Generosity	-.13*	-.06
Fairness	.19	.13
Affective response to receiving money		
Negative self-conscious affect	-.12	-.08
Positive affect	.04	.16**
Possible mediators		
Status awareness	n/a	-.23***
Competence	n/a	.23***
Belonging	n/a	.15**

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

### **Detailed Results for Tests of Moderation**

In the main paper we summarize the results of exploratory analyses testing whether the effect of relative SES on affective responses is moderated by different aspects of the giving situation. Analyses showed no evidence that effects of relative SES on either affect measure were moderated by any of the variables tested. There were, however, main effects of some of these variables: people reported more self-conscious NA when they were male (vs. female), when they requested the money vs. not, and when they had greater need (see Table S4). People reported more PA when they were more similar to the giver.

Table S4. Standardized regression coefficients from analyses testing possible moderators of affective responses in Study 2.

	Regression results (b's)			Conditional main effect of relative SES on affect	
	Moderator	Relative SES x Moderator	Money (Covariate)	Level of moderator	
				0/Low	1/High
Self-Conscious Negative Affect					
Participant Gender (0 = male; 1 = female)	-.30**	-.001	-.06	-.13	-.14
Gift type (0=non-monetary; 1=monetary, non-specific)	-.06	-.16	-.07	-.02	-.18
In-person (1 = yes, 0 = no)	.07	.14	-.08	-.21*	-.07
Relationship (1 = friend/family, 0 = other)	.18	-.14	-.10	-.04	-.18*
Requested (1 = yes, 0 = no)	.50*	.09	-.10	-.12*	-.03
Expected (1 = yes; 0 = no)	.13	-.09	-.09	-.09	-.18*
For expected gifts, degree to which met expectations	.16	-.16	-.05	.01	-.28*
Similarity	-.02	-.01	-.08	-.11	-.13
Need	.17**	-.05	-.12*	-.05	-.16
Positive Affect					
Participant Gender (0 = male; 1 = female)	.20	.10	.11	.02	.12
Gift type (0=non-monetary; 1=monetary, non-specific)	-.08	.26	.15*	-.12	.14
In-person (1 = yes, 0 = no)	.13	-.20	.15*	.21*	.002
Relationship (1 = friend/family, 0 = other)	-.17	.16	.15*	-.02	.14
Requested (1 = yes, 0 = no)	-.03	.08	.13*	.07	.15
Expected (1 = yes; 0 = no)	.13	-.03	.13*	.09	.06
For expected gifts, degree to which met expectations	-.14	.11	.11	-.08	.12
Similarity	.14*	.06	.12*	-.001	.11
Need	-.06	.06	.15*	.02	.13

\*\*  $p < .01$ , \*  $p < .05$



## Study 3

### Method

#### Participants: Representativeness

The demographics of the participants were very similar to those of Study 2. Participants (59% female) were predominantly White (72%) adults ( $M_{\text{age}} = 34.77$ ,  $SD = 12.18$ ) with at least some post-secondary education (91%). They considered themselves somewhat below average with respect to socioeconomic advantages ( $M = 4.76$ ,  $SD = 1.71$ ) and more than 50% of the sample reported an average household income less than \$41,000. Consistent with this, 66% of the sample identified with being “Lower middle class” or lower, though the mode (28%) was “Middle class”. As in Study 2, this sample is fairly representative of national averages in all respects except education (see Table S2).

#### Procedure: Instructions

Participants read the following instructions, which differed slightly from those used in Study 2:

*In this study, we are interested in situations where someone gives money or some other generous gift to someone else with no expectation that the recipient will reciprocate. Some examples might include:*

- A friend offers to pay for a movie ticket for another friend who worries that they couldn't really afford the expense.*
  
- A family receives a gift basket during the holidays from a neighbor.*

- *A person asks a stranger for \$2 for bus fare, and is given \$20 and told to keep the change.*

*Can you think of an occasion when you personally **received** a generous gift from someone who was NOT a member of your immediate family (e.g., your parent or grandparent)?*

### **Measures: Changes from Study 2**

**Attributions for the giver's behavior.** We removed any attributions that had been included in Studies 1 and 2 but were not of focal interest, except for "He/she expected that I would pay them back or reciprocate". This acted as a check on our instructions to think about a gift that did not involve expectations of reciprocation. As in Study 2, the very low ratings on this item suggest that participants were recalling appropriate gifts with no expectation of reciprocation ( $M = 1.69$ ,  $SD = 1.29$ ).

**Affective responses.** We removed the sad and anxious negative emotions to shorten the list.

**Mediators.** An additional semantic differential was not examined: "different than this person: similar to this person".

**Moderators.** We removed the items measuring whether the gift was given directly or indirectly, and the extent to which the value of the gift compared to expectations.

We included four new variables to explore as possible moderators: stigma consciousness, threat of misclassification, belief in meritocracy, and status legitimacy. Exploratory analyses examined whether people would feel more self-conscious in response to receiving a gift when they were more conscious of being stigmatized, more

worried about being judged as having lower SES, or had stronger beliefs in meritocracy and status legitimacy. The results of these exploratory analyses were not consistent and/or not theoretically sensible, thus we do not include them here.

**Other measures.** Participants reported how certain they were about the value of the gift, and reported their political orientation.

## Results

### Detailed Results for Attributions

Attributions to *generosity* were not predicted by relative SES,  $b = -.07$  ( $SE = .05$ ),  $t(421) = -1.32$ ,  $p = .19$ ,  $CI_{95} = [-.17, .03]$ . Monetary value was not a significant covariate,  $b = -.01$  ( $SE = .05$ ),  $t(422) = -0.12$ ,  $p = .90$ ,  $CI_{95} = [-.11, .09]$ .

Attributions to *fairness* were not predicted by relative SES,  $b = .15$  ( $SE = .10$ ),  $t(421) = 1.55$ ,  $p = .12$ ,  $CI_{95} = [-.04, .35]$ . Monetary value was not a significant covariate,  $b = .12$  ( $SE = .10$ ),  $t(423) = 1.24$ ,  $p = .22$ ,  $CI_{95} = [-.07, .31]$ .

See Table S3 for results of analyses that do not use monetary value as a covariate.

### Detailed Results for Tests of Moderation

As in Study 2, we carried out exploratory analyses testing whether the effects of relative SES on affective outcomes were moderated by characteristics of the giving situation. Detailed results of these analyses are provided in Table S5. As in Study 2, there were some main effects of the potential moderator variables: people reported more self-conscious NA when they were male (vs. female), and when they had greater need.

Women reported more positive affect than men. People reported more positive affect when they reported feeling closer to or more similar to the gift-giver.

Table S5. Standardized regression coefficients from analyses testing possible moderators of affective responses in Study 3.

	Regression results (b's)			Conditional main effect of relative SES on affect	
	Moderator	Relative SES x Moderator	Money (Covariate)	Level of moderator 0/Low	1/High
Self-Conscious Negative Affect					
Participant Gender (0 = male; 1 = female)	-.27**	-.07	.01	-.04	-.11
Gift type (0=non-monetary; 1=monetary, non-specific)	.04	.06	.004	-.10*	.002
Relationship (0 = other, 1 = friends/family)	.01	-.04	.003	-.05	-.09
Closeness	.02	.01	.002	-.09	-.07
Similarity	-.01	-.09	.002	.02	-.17*
Requested (0 = no, 1 = yes)	.38	-.21	-.01	-.06	-.28
Need	.20***	.03	-.05	-.08	-.02
Positive Affect					
Participant Gender (0 = male; 1 = female)	.30**	.10	.14**	.11	.21***
Gift type (0=non-monetary; 1=monetary, non-specific)	-.07	-.07	.15**	.19**	.07
Relationship (0 = other, 1 = friends/family)	.02	.07	.15**	.12	.19**
Closeness	.11*	.09	.13*	.05	.24***
Similarity	.17**	.12*	.15**	-.002	.23***
Requested (0 = no, 1 = yes)	-.16	.23	.15**	.14**	.38
Need	-.01	.02	.15**	.13	.17*

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$

## Study 4

### Method

#### Procedure: Differences Compared to Study 1

Unlike in Study 1, there was no baseline information sheet, therefore no measures of trait self-esteem or baseline affect.

#### Measures: Changes from Study 1

**Affective responses.** We added one adjective that was not included in Study 1: grateful.

**Moderators.** As in Study 3, we included the same measures of stigma consciousness, threat of misclassification, belief in meritocracy, and status legitimacy. We also included a new four-item, face-valid measure of *financial need* (“I have to watch what I spend money on so that I can make ends meet”, “I worry about having enough money to pay for basic expenses”, “I avoid going out with friends because I think it will cost too much”, “I have the money I need to cover my living expenses and tuition fees”), assessed on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

**Partner perceptions.** We measured participants’ ratings of their partner on a set of positive (friendly, trustworthy, thoughtful, fair-minded) and negative (arrogant, phony, patronizing) traits. However, we dropped the measures of feeling connected to, similar to, close to, and warm towards their partner that were included in Study 1.

**Working memory.** We added an exploratory memory updating task. This task measures working memory similar to more traditional working memory tasks (Riediger, Wrzus, Schmiedek, Wagner, & Lindenberger, 2011). During this task, participants were

given 6.5 seconds to memorize four base numbers, presented in four adjacent boxes on the computer screen. Then they were required to perform five sequential arithmetic operations (adding/subtracting new numbers to/from the base numbers), and finally report the results (four separate final answers). The working memory task contained an initial practice trial, followed by ten test trials, half of which were moderately difficult (single digit arithmetic), and the other half of which were hard (double-digit arithmetic). No effects were found on this measure.

**Other measures.** The following measures that were included in Study 1 were dropped from Study 4: state social self-esteem; social comparison; willingness to donate to charity in the future.

## Results

### Tests of Moderation

There was no evidence that affective reactions to the money were moderated by financial need. Regression analyses predicting affective responses from status salience, need (z-scored), and their interaction found no interaction effects on either self-conscious negative emotions,  $b = -.08$  ( $SE = .16$ ),  $t(138) = -.54$ ,  $p = .59$ , or positive emotions,  $b = -.13$  ( $SE = .17$ ),  $t(138) = -.74$ ,  $p = .46$ .

### References

- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*(4), 596.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research, 97*(2), 143-156.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social psychology, 60*(6), 895.
- Riediger, M., Wrzus, C., Schmiedek, F., Wagner, G. G., & Lindenberger, U. (2011). Is seeking bad mood cognitively demanding? Contra-hedonic orientation and working-memory capacity in everyday life. *Emotion, 11*(3), 656.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- U.S. Department of Commerce, United States Census Bureau. *2013 American Community Survey 1-Year Estimates*. (2013). Retrieved from [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_13\\_1YR\\_S0201&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_13_1YR_S0201&prodType=table) and [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_13\\_1YR\\_CP05&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_13_1YR_CP05&prodType=table)