Published in final edited form as:

J Pers Soc Psychol. 2010 November ; 99(5): 802–823. doi:10.1037/a0020013.

Paying To Belong: When Does Rejection Trigger Ingratiation?

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Abstract

Societies and social scientists have long held the belief that exclusion induces ingratiation and conformity, an idea in contradiction with robust empirical evidence linking rejection with hostility and aggression. The classic literatures on ingratiation and conformity help resolve this contradiction by identifying circumstances under which rejection may trigger efforts to ingratiate. Jointly, findings from these literatures suggest that when people are given an opportunity to impress their rejecters, ingratiation is likely after rejection experiences that are harsh and that occur in important situations that threaten the individual's self-definition. Four studies tested the hypothesis that people high in rejection sensitivity, and therefore dispositionally concerned about rejection, will utilize opportunities to ingratiate after harsh rejection in situations that are self-defining. In three studies of situations that are particularly self-defining for men, rejection predicted ingratiation among men (but not women) who were high in rejection sensitivity. In a fourth study, harsh rejection in a situation particularly self-defining for women predicted ingratiation among highly rejection-sensitive women (but not men). These findings help identify the specific circumstances under which people are willing to act in socially desirable ways toward those who have rejected them harshly.

The recent wave of research on rejection has provided robust evidence that rejection triggers aggression and other forms of mean-spirited behavior (e.g., Leary, Twenge, & Quinlivan, 2006; Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010; Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007; Williams, 2001). These findings appear to contradict the conventional wisdom that rejection is a particularly effective means of eliciting socially desirable behavior in others. Examples abound of how effective societies, cliques, parents, or romantic partners use rejection to elicit ingratiation, that is, benign, accommodating, or even obsequious behavior intended to gain or regain acceptance. Empirical verification of the link between rejection and ingratiation had been the goal of an earlier wave of research on rejection begun in the 1950s (Geller, Goodstein, Silver, & Sternberg, 1974; Mettee, Taylor, & Fisher, 1971; Pepitone & Wilpizeski, 1960; Saltzstein, 1975; Schachter, 1951). The mixed results of that research suggested the need to focus on identifying the conditions under which rejection motivates ingratiation. However, research on rejection waned before its relation to ingratiation was captured empirically. In this paper, we return to this question.

By integrating insights from classic work on the rejection-ingratiation link and from the recent work on the antisocial consequences of rejection, we propose that two conditions are necessary for rejection to elicit ingratiation. First, the possibility of influencing the rejecter must exist. Second, the rejection must be highly threatening. Taken together this means that

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rejection will be most likely to trigger ingratiation when the rejectee has nothing left to lose and potentially something of value to gain. We test this prediction in four experiments.

The Opportunity to Regain Acceptance

Classic research on ingratiation provided compelling evidence that a necessary condition for an ingratiating response among those facing the possibility of negative evaluation is the perception that *the evaluators may be open to influence* (Jones & Jones, 1964; Jones, Gergen, Gumpert, & Thibaut, 1965). This condition was generally not met in the recent experimental studies showing that rejection triggers aggression toward its source and toward strangers (Bourgeois & Leary, 2001; Pepitone & Wilpizeski, 1960; Twenge, Baumeister, Tice, & Stucke, 2001; Twenge & Campbell, 2003; Warburton, Williams, & Cairns, 2006). Typically, in these paradigms, rejection consisted of blunt exclusions from social circles (Bourgeois & Leary, 2001; Twenge et al., 2001), learning that a prospective interaction partner did not want to meet the participant and had already left the experiment (Downey & Feldman, 1996; Downey, Lebolt, Rincon, & Freitas, 1998), or an induction to expect life-long social exclusion (Twenge et al., 2001). These types of rejection do not leave any possibility for participants to perceive their rejecters to be open to influence. Moreover, given the focus on establishing the effects of rejection on antisocial behavior, opportunities to engage in positive outcomes, including ingratiation, were typically not provided in these studies. In fact, a recent investigation that did provide such opportunities found evidence that the antisocial consequences of an irrevocable social exclusion generalized to a reduction in helpful and cooperative behavior toward others who had not rejected them (Twenge et al., 2007). However, in this research there was no room for the rejectee to ingratiate toward the rejecter.

Other research found evidence that was more in line with Schachter's (1959) untested hypothesis that rejection leads people to intensify behavior likely to gain social approval but from sources other than the rejecter. In a now classic study, Williams, Cheung and Choi (2000) found that participants rejected in an online game conformed with the views of a novel group to a greater extent than did participants who had not been rejected. Replicating and extending Williams et al. (2000), Maner, DeWall, Baumeister, and Schaller (2007) found that after a rejection by an interaction partner, individuals were willing to behave in positive and ingratiating ways toward a new interaction partner, but not toward the partner who had rejected them. These findings led Maner et al. (2007) to conclude that individuals will make efforts to connect with others after rejection only if the targets are "a realistic source of acceptance," a criterion they did not view rejecters as easily meeting. The critical factor, then, may be people's perceptions that their efforts have the potential to positively influence or reverse their rejecters' evaluation of them.

A study by Williams and Sommer (1997) provides some evidence of the effect of rejection on ingratiation in this circumstance. Ostracism by one's group during a ball-tossing game predicted female participants putting more effort into a subsequent group task, but only when their individual effort on behalf of the group was visible to the group. Sleebos, Ellemers, and de Gilder (2006a, 2006b) also showed that harsh disrespect from a group could trigger behaviors beneficial to the group. Importantly, in the paradigms used by Williams and Sommer and Sleebos et al., the participants were given a specific opportunity to benefit the rejecter.

Magnitude of the Threat Posed by the Rejection

Whether ingratiation will occur should depend on the magnitude of threat posed by the rejection, according to claims in the classic literature (Festinger, Schachter, & Back, 1950; Schachter, 1959). Two factors were explicitly identified as increasing the pain of rejection

(cf. Dittes & Kelley, 1956; Schachter, 1959): (a) the *harshness of the rejection*, that is the intensity and clarity with which the rejection is conveyed, and (b) the *value of the rejection source* to the individual. A third factor known, from contemporary research, to moderate the pain of rejection is the extent to which the individual generally finds the threat of rejection aversive (e.g., Murray, Rose, Bellavia, Holmes, & Kusche, 2002; Romero-Canyas et al., 2010; Smart Richman & Leary, 2009).

Harshness of the rejection

Classic work tested the harshness hypothesis in the context of a novel group. Dittes and Kelley (1956) found that those most harshly rejected during a group discussion showed the most public displays of conformity. Interestingly, the public expression of conformity did not extend to participants' private attitudes, suggesting that the expressed conformity served as a strategy to gain acceptance rather than to convey beliefs shared with the rejecters. Although other early studies yielded mixed results (Dittes, 1959; Snoek, 1962), recent support for the harshness hypothesis was provided by Sleebos et al.'s (2006b) finding that interactions marked by harsh disrespect elicited more group-beneficial behavior than mildly disrespectful or neutral interactions.

Value of rejection source

A hallmark of the classic research was the careful selection of situations of singular importance to the populations being studied, reflecting the assumption that the rejection-ingratiation link should emerge in situations where acceptance matters, making rejection deeply threatening (Schachter, 1959; Dittes & Kelly, 1956). Although the value hypothesis was not directly tested in the early work, research in the interim has generated unequivocal evidence that people's behavior is likely to be contingent on the response of peers only in domains with which they are identified and, thus, where feedback about acceptance and rejection is self-defining (Andersen, Downey, & Tyler, 2005; Crocker, Voelkl, Testa, & Major, 1991; Mendoza-Denton, Goldman-Flythe, Pietrzak, Downey, & Aceves, 2010; Purdie-Vaughns, Steele, Davies, Dittmann, & Crosby, 2008; Tyler & Lind, 1992; Tyler & Lind, 2002). This research has also made clear that situations that are particularly self-defining vary as a function of socio-cultural factors. The importance of this consideration was obscured in the early research given that the college population from which participants were drawn was comprised almost exclusively of Caucasian American males. The gender and cultural diversity of the populations sampled in contemporary research requires careful attention to socio-cultural variability in self-defining situations. For example, there is evidence that some social situations, including those that were used in the early research on the rejection-conformity link, are relatively more self-defining for men than for women (Cross & Madson, 1997). It has been argued that as a result of sex differences in socialization, men learn to value group memberships more than do women (Baumeister & Sommer, 1997; Gabriel & Gardner, 1999) and women learn to value close relationships in which they are invested more than do men (Gabriel & Gardner, 1999). Thus, rejection that provides information about status in social groups may be more likely to trigger ingratiation from men than from women, for whom ingratiation may be more likely to occur following a rejection that conveys devaluation of a close relationship in which they are invested.

Dispositional moderators of the threat posed by rejection

The third factor that raises the level of threat is the person's concern with rejection. The view that an individual's response to rejection in any given situation may depend on the underlying level of confidence about being accepted by others was evident in Dittes' (1956) prescient observation: "Assuming valuation constant, information communicated from fellow members that a person is little accepted by them increases his sense of insecurity, activating various acquired motives (to avoid social criticism, etc.), to which conformity

behavior has been learned.” (p. 100, italics added). Although the relevance of various personality dispositions in the dysregulating effects of rejection have been the focus of considerable recent research (Ayduk, Gyurak, & Luerksen, 2009; Nezlek, Kowalksi, Leary, Blevins, & Holgate, 1997; Murray, Rose, Bellavia, Holmes, & Kusche, 2002; Twenge & Campbell, 2003), their potential moderating role was not investigated in the earlier research on the rejection-ingratiation link.

Whereas concern about rejection is a feature of several dispositions (e.g., self-esteem, insecure attachment style, neuroticism), such concern is central to rejection sensitivity, the personality dynamic described by Karen Horney (1937) to capture the way in which some individuals characteristically respond to the threat of rejection with efforts to affiliate interspersed with hostility toward the rejection source. Drawing on contemporary developments in social and cognitive psychology, Downey and colleagues sought to explain how rejection could be a trigger of both prosocial and antisocial behavior in the same person (Downey & Feldman, 1996; Downey, Mougios, Ayduk, London, & Shoda, 2004). Their rejection sensitivity (RS) model proposes that, to the extent the individual has experienced the pain of rejection, protecting the self from being in a state of rejection will become a central organizing goal, and a defensively motivated system develops to serve this goal (Downey et al., 2004). When people high in RS encounter cues they have learned to associate with rejection, their attention is captured by the threat and it becomes the focus of their cognitive and behavioral efforts (Romero-Canyas et al., 2010). Because the desired outcome often requires maintaining or regaining connection with the threat source—a significant other or social group—hostile responses or avoidance of opportunities to further interact with the rejecters (and risk rejection) can be counterproductive. Thus, the repertoire of responses to rejection associated with RS should include the inhibition of actions that might elicit further exclusion (e.g., keeping silent about opinions that might antagonize significant others) and efforts to please the threat source (e.g., performing effortful tasks for others; devoting one’s resources to others) when there is a viable possibility of acceptance (Romero-Canyas et al., 2010).

Correlational evidence from two studies provides support for the prediction that rejection cues will prompt people high in RS to engage in ingratiating efforts to attain acceptance. First, RS is associated with a history of parental acceptance that is conditional on the child behaving in ways that meet the needs of the parents (Downey, Feldman, Khuri, & Friedman, 1994). Thus, ingratiation is likely to become an ingrained response to rejection threats. Second, in the context of women’s romantic relationships, RS predicts engaging in ingratiating behaviors to prevent rejection (Purdie & Downey, 2000).

A series of findings showing that the association between RS and hostility and other intense reactions to rejection from romantic partners was stronger in women than in men (Ayduk, Downey, Testa, Yen, & Shoda, 1999; Downey, Freitas, Michaelis, & Khouri, 1998) led Downey and Ayduk (2005) to assess whether the effect might be reversed when the rejection took the form of a status threat (e.g., Your romantic partner frequently makes fun of your shortcomings in public) rather than a private devaluation of the relationship by a romantic partner (e.g., It’s a special anniversary of your relationship and your partner has forgotten all about it). Consistent with the view that the cues that individuals associate with rejection should reflect their sociocultural characteristics, Downey and Ayduk (2005) found a heightened association between RS and perceived rejection among men in response to status threats and among women in response to private devaluations of a close relationship. These findings suggest that ingratiation by high RS men should be particularly likely when a harsh rejection signals low standing among peers, whereas ingratiation by high RS women should be more likely following rejection in a close dyadic relationship.

Goals of the Research

Drawing on the research and theory discussed above, we conducted four experiments to test the prediction that when given the opportunity to ingratiate following a rejection, people would seize the opportunity to the extent that the rejection was harsh, occurred in a self-defining situation, and the rejectees were dispositionally high in RS. The first two studies were of situations selected to be more self-defining for men: rejection by a novel peer group (Studies 1 and 2). The second two studies examined rejection in the domain of initiating dyadic relationships. However, in Study 3 the rejection took the form of sociometric feedback about one's value as potential romantic partner, making it more self-defining for men. The fourth study placed participants in a situation selected to be more self-defining for women: rejection by a potential dating partner toward whom participants were led to feel close and invested.

The studies used online interaction paradigms in which participants bid for acceptance from people highly compatible with them and whom they expected to meet. We created controlled conditions of accepting, mildly rejecting, or harshly rejecting responses to the acceptance bid to test the harshness hypothesis. Following assessment of their initial reactions to rejection, participants were given the impression they might have an opportunity to behave in ways that could positively influence the rejecters and we examined their willingness to avail themselves of the opportunity.

Study 1: Rejection by Peer Groups

Method

Participants—Participants were 138 students at a northeastern university, recruited through fliers. They received \$15 as compensation. Nine participants were excluded from the data analysis because they had voiced suspicion about the cover story and three were excluded because their background measures were completed incorrectly. Thus, we analyzed data for 126 participants (50% male, 38.1% Caucasian American, age $M = 21.18$ years, $SD = 4.07$).

Procedures—Participants were scheduled for two sessions on consecutive days and were run individually by a Mexican American, female experimenter.

Session 1: The experimenter welcomed participants and told them that the study was part of research on the formation of online communities. The supposed purpose of the project was to study how new and established members of a group responded to each other. Participants were told they would be assigned to a group based on their responses to a questionnaire and that the possibility existed of meeting their fellow group members in person at some point. After the participant completed a bogus questionnaire, the experimenter explained that she would enter the responses into a program that would assign the participant to a group that was “compatible with you.” The intention was to increase participants' identification with the group. In actuality, participants had been assigned randomly to one of three experimental conditions, detailed below. Participants completed background measures while the experimenter entered the “compatibility” questionnaire into a spreadsheet. Participants then sent an email from a new account that they could only access in the lab and introduced themselves to their new group. They were asked not to reveal what university they attended, where they lived, or their sex. The experimenter then confirmed the next-day appointment for the second session.

Session 2: The day after the first session, participants completed a two-page questionnaire that included the pre-manipulation measures of the variables described below. They then

read 4 email responses from their group, in the same order across all experimental conditions. Next, they were instructed to send a reply to the entire group. After they had written their response, they completed a short questionnaire packet that included the manipulation checks. At this point, participants learned that some of the groups from the study met in person and that their group might be meeting. This information was conveyed in an additional questionnaire that included the question about willingness to ingratiate, detailed below. The question suggested that, if the meeting happened, the participant would have the opportunity to do something beneficial to the group. In all studies in this paper, the ingratiation question was among the last measures completed by the participant. After participants finished with the questionnaire, the experimenter debriefed them and probed for suspicion.

Experimental conditions: Participants were randomly assigned to one of three experimental conditions that varied by whether the group responded to the participants' introductory message with acceptance, mild rejection or harsh rejection. Across all three conditions, participants received four messages. The first message was the same for all participants in all conditions, purportedly written by another student who was also just joining the group. This message was intended to create a distinction between how the group responded to the participant and to another new member. Thus, in the harsh rejection condition the group could welcome the fake new member and reject the participant, thus preventing the participant from attributing the group's hostility to a generalized resistance to new members. The other three messages were from fictitious established group members. The messages differed across conditions only in the first and last paragraphs (see Appendix A for an example) with the differences pretested to convey clear acceptance, mild rejection, or harsh rejection towards the participant. Pretesting of the messages showed that respondents perceived them to be accepting, mildly or harshly rejecting. Sixty-three (63) students (50.8% female, mean age = 21.44 years, $SD = 4.54$) used an eight-point scale (1 = "Not at all," 8 = "A lot") to rate how accepting the author of the message came across (acceptance: $M = 6.50$, $SD = 1.32$; mild rejection: $M = 4.70$, $SD = 1.70$; harsh rejection: $M = 2.85$, $SD = 1.50$). There were no significant sex or RS differences in how the messages were perceived.

In the acceptance and harsh rejection conditions, the participant was singled out as the person being liked or disliked. In the harsh rejection condition, the other (fictitious) new member was used as a comparison to the participant; the group members wrote accepting comments about the other new member, but then wrote rejecting comments about the participant. The other new member was accepted, though less effusively than the participant, in the acceptance condition. The participant was not singled out in any way in the mild rejection condition.

Materials and Measures—All measures of dispositions, including RS, were completed during session 1. All dependent variables were collected in session 2.

Rejection Sensitivity Questionnaire—short version (RSQ): The RSQ assesses individuals' anxious expectations of rejection. The psychometric properties of the measure are described in Downey and Feldman (1996). The measure consists of a series of situations in which rejection by a significant other is possible (e.g., "You ask your friend to do you a big favor"). For each situation, respondents rate the level of anxiety or concern that they would experience about the outcome of the situation (1 = "very unconcerned," 6 = "very concerned"). Respondents then indicate the likelihood that the person with whom they are interacting in the situation would respond in an accepting manner (1 = "very unlikely," 6 = "very likely"). Because the measure seeks to capture anxious expectations of rejection, a score for each situation is computed by weighing the likelihood of rejection by the level of

anxiety about the situation. To this end, the rating of expected acceptance is reverse-coded to indicate expectations of rejection and then multiplied by the degree of anxiety experienced in the situation. A cross-situational, total RSQ score is computed by obtaining the mean score across the situations in the questionnaire. In this study, we used the short version of the RSQ, consisting of the 8 items with the highest factor loading from the full 18-item version ($\alpha = .77$; $M = 7.68$; $SD = 3.61$). In all studies, participants completed this version of the RSQ in the background packet in session 1 (before writing to the group). The measure is available at <http://socialrelations.psych.columbia.edu/>.

Rejected mood: Feelings of acceptance by the group were measured by averaging responses (ranging from 1 = “not at all” to 6 = “extremely”) to the following items: “How well do you think you got along with the other members of your group?” and “How accepted by your Internet group do you feel?”. We posed these questions at the start of the second session and again immediately after participants had read the emails from their group members. Scores were reverse-coded to index rejection (Time 1 $\alpha = .68$, $M = 3.07$, $SD = .77$; Time 2 $\alpha = .91$, $M = 4.09$, $SD = 1.39$).

Hostile mood: Mood was measured with items from the PANAS scale (Watson, Clark, & Tellegen, 1988). Given the clear link between rejection and hostility, we computed a measure of mood that focused on angry and hostile feelings with four items from the PANAS (“hostile,” “irritable,” “distressed” and “upset”) to use as a manipulation check. These items are part of the hostility and distress subscales of the PANAS. Because scores on these subscales were affected in the same way by the experimental manipulation and were highly correlated, we combined them into one index. The patterns reported in this paper are the same if we use only the hostile or the distressed subscales. This index of hostile mood was computed by obtaining the mean of the ratings (1 = “Very slightly or not at all,” 5 = “Extremely”). The PANAS was administered immediately before and immediately after the experimental manipulation (Time 1 $\alpha = .83$, $M = 1.29$, $SD = .60$; Time 2 $\alpha = .80$, $M = 1.54$, $SD = .72$).

Task investment: At the start of the second session participants answered the following questions: “How interested are you about checking your email now?” and “How excited are you about checking your email now?” Responses (1 = “Not at all,” 6 = “Completely”) were averaged to index task investment ($\alpha = .87$, $M = 3.85$, $SD = 1.10$).

Hostility and ingratiation in responses to messages from group members: Four independent coders, blind to the hypotheses, rated the extent to which they detected each of 9 emotions in the second (post-manipulation) message that participants sent to the group (1 = “Not at all” to 8 = “Very much”). Hostility was embedded in this list¹. We computed a hostility index by averaging the coders’ ratings (Average measure ICC = .89, $F(122, 366) = 9.69$, $p < .001$; $M = 1.83$; $SD = 1.45$).

Using the same 8-point scale, the raters also coded how much they thought the message conveyed positive, affiliative gestures toward the group. Three items were used to form one index (“Comment positively on the group,” “Be ingratiating,” and “Inquire about other members of the group”). This was the index of positivity ($\alpha = .69$; $M = 2.32$; $SD = .99$).

Willingness to ingratiate: Once participants had sent their second emails to the group, the experimenter handed them a packet with measures for them to complete, including the

¹The list of emotions was: anger, sadness, disappointment, hostility, joy, frustration, happiness, elation, suspicion. RS did not predict these ratings in any of the conditions, in either Study 1 or in Study 2.

PANAS and our measure of willingness to ingratiate. We asked participants how much money they would be willing to donate to the group to cover expenses for a live meeting: “Some of the Internet groups formed in this study have met in person. The members of the group organized and paid for these meetings. Groups generally meet for dinner and some other activities, like going to a movie or museum. If your group were meeting in person, how much would you be willing to contribute to cover expenses? The average amount contributed by members is \$25. How much would you contribute?” The mean contribution was \$12.91 ($SD = 10.29$).

Additional dispositions measured: As part of the session 1 background questionnaire, participants completed measures of constructs conceptually related to RS or that moderate the effects of rejection. Measures of social avoidance and distress (SADS; Watson & Friend, 1969), self-esteem (Rosenberg, 1965) and neuroticism (Costa & McCrae, 1992) were included in all studies.

Results

Manipulation Checks—Attesting to the effectiveness of the experimental manipulations, ANOVA revealed that post-manipulation feelings of rejection and hostility increased significantly as level of rejection increased across the three conditions. These findings held when statistically controlling for RS, sex, their two and three-way interactions with each other and with conditions, Time 1 task investment, and Time 1 measure of the relevant dependent variable. No significant two or three-way interactions between these variables were found. The means of rejected and hostile mood are reported in Table 1 (A), along with the corresponding statistical tests.

Hostility and Positivity Expressed in Post-Manipulation Emails to Group—

Next, we tested the effects of the manipulations on hostility and positivity expressed in post-manipulation emails to the groups. We shift to reporting the results of regression analyses because testing key hypotheses involved assessing whether the manipulation effects depended on level of RS, a continuous variable.

In all of the regression analyses described hereafter (for all studies), we created a dummy for the mild rejection condition (mild rejection = 1, other conditions = 0), harsh rejection condition (harsh rejection = 1, other conditions = 0), and sex (female = 0, male = 1). All variables were centered around the sample mean. The analyses allowed us to test for the main effects of each variable, the effects of RS within each condition and whether any effects differed by sex. Because there was a trend for RS to predict more task investment before the manipulation and because the manipulation affected hostility, we controlled for pre-manipulation levels of both variables in all regression analyses hereafter (for all studies). In models testing interactions, the comparison condition is the acceptance condition and women are the comparison sex.

Analyses of post-manipulation emails showed the expected increase in hostility and decrease in positivity as rejection level across the three conditions increased, as shown in Table 2 (A). The hostility of those harshly rejected was significantly greater than that of those accepted or mildly rejected, who did not differ significantly from each other (mild rejection vs. acceptance: $b = .27$, $t(110) = .95$, $p = .30$, $d = .21^2$; harsh rejection to acceptance $b = 1.77$, $t(110) = 6.03$, $p < .001$, $d = 1.43$; harsh to mild rejection: $b = 1.50$, $t(110) = 5.44$, $p < .001$, d

²To report effect sizes we used Cohen's d , computed by dividing the difference between the means (adjusted or raw) by the pooled standard deviation of the three conditions. Similarly, in regression analyses, slopes were standardized by multiplying the slope by the pooled SD of the predictor and dividing by the pooled SD of the dependent variable.

= 1.21). There were no significant sex effects, RS effects, or significant two or three-way interactions.

Harshly rejected participants were significantly less positive than either accepted ($b = -.87$, $t(110) = -4.12$, $p < .001$, $d = .94$) or mildly rejected participants ($b = -.47$, $t(110) = -2.37$, $p < .05$, $d = .51$). Mildly rejected participants were significantly less positive than accepted participants ($b = -.39$, $t(110) = -1.99$, $p < .05$, $d = .42$). RS did not predict greater positivity in the emails, confirming that high RS participants do not spontaneously behave positively toward their rejecters.

Willingness to Ingratiate: Financial Contributions to Meeting with Group

Analysis: We tested the effects of condition, sex, RS and their interactions on our measure of willingness to ingratiate using regression analysis, treating RS as a continuous variable and dummy coding sex and the two rejection conditions. We predicted that ingratiation would be most pronounced among men high in RS in the harsh rejection condition and therefore expected a significant three-way interaction of harsh rejection, sex, and RS, but not of mild rejection, sex, and RS. We conducted simple slopes analyses to test whether RS was a significant predictor of ingratiation in each condition separately for men and women. For details on this approach, see Aiken and West (1991). Willingness to contribute financially to the group was assessed after participants had sent their second email to the group.

Results: Accepted participants were willing to spend more money than either mildly or harshly rejected participants (mild rejection: $b = -3.69$, $t(112) = -1.74$, $p = .08$, $d = .37$; harsh rejection: $b = -5.63$, $t(112) = -2.50$, $p < .05$, $d = .56$), who did not differ significantly from each other ($b = -1.94$, $t(112) = -.92$, $p = .30$, $d = .19$). There was no significant main effect of RS. Although the harsh rejection $\times$ RS $\times$ sex interaction did not reach statistical significance ($b = 1.75$, $t(112) = 1.36$, $p = .11$), the pattern was in the predicted direction. Hence, we conducted simple slope analyses to assess the effect of RS on financial contribution for each sex within each condition.

As expected, RS was a significant predictor of financial contribution among harshly rejected men ($b = 2.10$, $t(112) = 3.00$, $p < .01$, $\beta = .76$), but no such pattern emerged for accepted or mildly rejected men. RS was not significantly related to women's financial contribution in any condition.

Figure 1 (A) depicts predicted financial contributions by condition, RS and sex. The figure depicts predicted values for participants at 1 standard deviation below (low RS) or above (high RS) the mean RS score, controlling for the pre-manipulation levels of hostile mood and investment index. All of the subsequent figures follow this format.

Does hostility in emails predict willingness to ingratiate?: To assess whether willingness to ingratiate was affected by the hostility of participants' emails to the group, we re-estimated the regression models for the financial contribution measure and included email hostility and its interaction with RS in each condition. Hostility and RS did not interact significantly in any condition or for either sex. However, the more hostility that harshly rejected men expressed in their emails, the less financially generous they were willing to be ($b = -2.76$, $t(48) = 2.73$, $p < .01$, $\beta = -.34$). There were no other significant effects of hostility for men or women.

Similar analyses were conducted with positivity in the email instead of hostility. There was no main effect of positivity and it did not interact significantly with condition or RS.

All of the findings hold if we control for each of the other constructs measured in this study: SADS, self-esteem and neuroticism. If all of these are added to the model, the pattern holds.

Discussion

Study 1 supports our general hypothesis that after a harsh rejection in a self-defining situation, those most concerned with acceptance, people high in RS, would seize opportunities to impress or ingratiate toward their rejecters. The paradigm made participants experience an email interaction with a novel group of peers. Following harsh rejection in this setting, there was no evidence of spontaneous ingratiation, but when participants were given an opportunity to ingratiate by contributing financially to a meeting of the group, ingratiation emerged. As expected, high RS men were more willing to ingratiate than low RS men and than women in the same situation. RS was not a significant predictor of spending more money among men or women in the acceptance or mild rejection conditions. Thus, the data support the proposal from the rejection-conformity literature that people are willing to ingratiate following harsh rejection in proportion to the strength of the threat they experience.

The sex difference that emerged in Study 1 needs to be reconciled with Williams and Sommer's (1997) findings of women, but not men, making greater effort in group-beneficial tasks after rejection. In that study, ingratiation was indexed by the effort put into a task being performed with the rejecting group when the participants knew that their individual effort would be evident to the group, but not when individual effort was not discernible from the group effort. This finding raises the possibility that women may prefer forms of post-rejection ingratiation other than money, a possibility we explore in Study 4.

Study 1 also provides an extension of established findings linking rejection to increased hostility. Before the opportunity to ingratiate was presented, everyone—regardless of gender and level of RS—reacted to harsh rejection with hostility. In their emails to the group, rejected participants showed the expected increase in hostility relative to their accepted peers, with no spontaneous display of intent to ingratiate or of positivity more generally. Participants expressed their post-rejection hostility directly to the rejecters, which is, to our knowledge, one of the few documented displays of post-rejection hostility communicated directly to a rejecter rather than indirectly. This direct expression of hostility is predicted by the recent literature on rejection (Leary et al., 2006).

Though in past work, RS has been linked to feeling more hostile and rejected when rejection occurs, this association did not emerge in Study 1. The characteristics of the study may explain the absence of a link between RS and hostility. First, in this study the rejection was from a group, a situation not previously explored in the RS literature using adult participants. Previous studies had focused on dyadic rejections, and hostility was displayed indirectly, as a form of relational aggression (cf. Ayduk et al., 1999). Most importantly, we developed the email messages used in the study to be perceived as similarly accepting or rejecting across gender and levels of RS, which may account for why low and high RS people did not differ in how rejected and hostile they felt post-rejection.

Given that participants felt equally rejected and hostile after the harsh rejection, regardless of their level of RS, the ingratiation intentions of high RS men cannot be explained by an absence of hostility among them. This apparent about-face by high RS men is predicted by the RS model, which proposes that rejection sensitivity will lead to exaggerated efforts to prevent being in a state of rejection when the possibility of preventing such a state arises.

Study 2: Ingratiation Toward Others

We undertook Study 2 to replicate Study 1 and to assess whether the post-rejection ingratiation displayed by high RS men would extend to people other than the rejecters. We reasoned that high RS men would ingratiate to compensate for the rejection by gaining acceptance regardless of the source; hence, they should seek this acceptance from other readily available sources, consistent with theories of belongingness regulation (cf. Baumeister & Leary, 1995; Gardner, Pickett, Jefferis, & Knowles, 2005). Thus, in Study 2 we tested whether high RS men would be more helpful to the experimenter after rejection in contrast to the normative response of reduced helpfulness toward the experimenter following a rejection found by Twenge et al. (Study 3, 2007).

We also wanted to rule out the possibility that participants who show more willingness to ingratiate following harsh rejection—high RS men—were trying to portray themselves in a positive light to the experimenter. Thus, we asked participants to describe to the experimenters their responses to the group interaction after the rejection, but *before* the opportunity to ingratiate was presented. We were particularly interested in establishing whether among harshly rejected men, RS was associated with a more positive portrayal of the group in these descriptions. This would suggest that high RS men might not be ingratiating, but rather trying to save face and create the illusion that the group had treated them well.

All of the second experimental sessions were conducted by one of three Caucasian American male experimenters, to rule out the possibility that efforts to ingratiate toward the group may have been in the service of gaining the approval of the female experimenter. This is a valid concern given that men are more generous in the presence of women, perhaps to signal greater mate value (Buss, 1988; Iredale, Van Vugt, & Dunbar, 2008).

Method

Participants—The experimenters in Study 1 noticed that after the harsh rejection, non-Caucasian American men (i.e., ethnic minority males and international students) appeared to disengage from the task. A post-hoc analysis of Study 1 data supported this observation. This effect has been documented in studies that revealed that when it is possible to attribute negative feedback to outgroup prejudice, people will do so, and as a result the negative feedback will not be experienced as self-defining (Crocker, Voelkl, Testa, & Major, 1991). Similarly, Tyler and colleagues (e.g., Andersen, Downey, & Tyler, 2005; Tyler & Lind, 1992; Tyler & Lind, 2002) have shown that rejection by outgroup members prompts disengagement, whereas rejection from ingroup members is viewed as self-relevant and thus should be more likely to promote efforts to restore acceptance. Pilot testing suggests that our college-age participants assume their peer group will reflect the demographics of their predominantly Caucasian university. Therefore, to prevent disengagement from non-Caucasian Americans, Study 2 was restricted to Caucasian American participants ($N = 90$, 43.3% female). Some of the analyses below were based on 88 participants because of missing values in the dependent measures. The mean age was 20.08 years ($SD = 1.67$). The mean score on the short-form of the RSQ (short version) was 7.12 ($SD = 3.19$); the mean pre-manipulation hostile mood was 1.30 ($SD = .30$); the mean for task investment was 3.72 ($SD = 1.17$); the mean for the pre-manipulation rejection index was 2.92 ($SD = .74$).

Procedures—This study was conducted using the same procedures as in Study 1. The second experimental session was modified as outlined below to give participants an opportunity to express their thoughts about the group to the experimenter and to include the behavioral measure of ingratiation.

Materials

Description of group: After participants sent out the second message to the group, but *before* they completed any measures of ingratiation intentions and *before* they were led to believe they might meet the group in person, participants received a lined sheet of paper, at the top of which was the following statement: “Tell us what you think about your group. Write as much as you like.” The research assistants who coded the email messages also coded these descriptions.

Behavioral measure of ingratiation: After the participant completed the final questionnaire in the second session, the experimenter came into the room and knocked over a plastic cup full of thumbtacks, ostensibly by accident. Feigning anxiety, the experimenter exclaimed that the lab manager often scolded him for making a mess of the laboratory space and he then hurriedly left the room to get the participant’s payment. The experimenter returned to the room after 60 seconds, stopped the participant and proceeded with the debriefing. We used a video made with a hidden camera to compute the amount of time (in seconds) that passed between the moment the experimenter left the room and the moment the participant began to pick up the fallen thumbtacks. When participants did not pick up any thumbtacks, we recorded the time elapsed as 60 seconds, the length of time that the experimenter was out of the room.

Results

Manipulation Checks—Using the same data analysis strategy as in Study 1, we replicated Study 1 by showing that post-manipulation feelings of rejection and hostility increased as level of rejection intensified across the three conditions (see Table 1 (B)). All the between-condition differences were significant in the expected pattern. These findings held controlling for RS, sex, their two and three-way interactions, Time 1 task investment and Time 1 measure of the relevant variable. Effects did not vary by RS, sex or their interaction, as there were no significant two or three-way interactions with condition.

Hostility and Positivity Expressed in Post-Manipulation Emails to Group—Four coders (2 females, 2 males) coded the content, with high reliability (Positivity ICC for each item ranged between .50 and .88, three-item scale $\alpha = .86$; Hostility ICC = .84, $F(83, 249) = 8.62, p < .001$). As in Study 1, hostility increased and positivity decreased as level of rejection increased across conditions (see Table 2 (B)). Again, only the difference in hostility between accepted and mildly rejected participants did not reach significance (Hostility: harsh rejection vs. acceptance: $b = 1.48, t(74) = 3.60, p < .005, d = 1.05$; mild rejection vs. acceptance: $b = .37, t(74) = .88, p = .38, d = .26$; harsh vs. mild rejection: $b = 1.12, t(74) = 3.51, p < .005, d = .79$. Positivity: mild rejection vs. acceptance: $b = -1.24, t(74) = -4.17, p < .001, d = 1.32$; harsh rejection vs. acceptance: $b = -1.96, t(74) = -6.71, p < .005, d = 2.09$; harsh vs. mild rejection: $b = -.72, t(74) = -3.2, p < .005, d = .77$). There were no significant effects of RS or sex, or significant interactions.

Hostility Expressed in Descriptions of the Group to Experimenter—Four coders rated hostility in the descriptions on a scale of 1 to 8 (ICC = .78, $F(86, 172) = 4.60, p < .001$; $M = 3.10, SD = 1.73$). As expected, harshly and mildly rejected participants expressed significantly more hostility than accepted participants (harsh rejection vs. acceptance: $b = 2.85, t(74) = 6.05, p < .001, d = 1.98$; mild rejection vs. acceptance: $b = 2.13, t(74) = 4.45, p < .001, d = 1.48$), and harshly rejected participants expressed marginally significantly more hostility than mildly rejected participants ($b = .73, t(74) = 1.99, p = .05, d = .51$). There were no effects of sex or RS, or significant interactions. Regardless of sex or RS, participants clearly communicated the experience of rude treatment by the group in the harsh rejection condition. For instance, a rejected participant wrote: “This group seems to be made up of

relatively unintelligent people that for some reason over value themselves. Their hesitancy to welcome others and outright hostility is stupid.” Another wrote: “Boring geeks and dorks. Only wrapped up in their own interests. Neo-hippie [college name] posers.”

Ingratiation: Willingness and Behavior

Willingness to make financial contributions to meeting with group: As in Study 1, harshly rejected participants were less willing to be generous than those accepted ($b = -4.20, t(76) = -1.80, p = .07, d = .52$). Mildly rejected participants did not differ significantly from either those rejected or accepted (harsh rejection vs. mild rejection: $b = -1.24, t(76) = -.70, p = .40, d = .15$; mild rejection vs. acceptance: $b = -2.96, t(76) = -1.25, p = .21, d = .37$). There were no significant main effects of RS or sex. However, as predicted, the three-way interaction of harsh rejection $\times$ RS $\times$ sex was significant ($b = 5.29, t(76) = 3.60, p < .005$).

Simple slopes analysis showed that RS predicted willingness to contribute a larger amount of money ($b = 1.65, t(76) = 2.91, p < .01, \beta = .65$) among harshly rejected men. RS was not significantly associated with the contribution made by accepted or mildly rejected men. RS was not associated with the contribution of either accepted or mildly rejected women. However, among harshly rejected women, RS predicted a smaller contribution ($b = -1.75, t(76) = -2.14, p < .05, \beta = -.69$). Figure 1 (B) depicts predicted financial contributions by condition, RS and sex.

Ingratiating behavior toward experimenter: Using the same set of predictors as for the other dependent variables, we regressed the amount of time (in seconds) that it took participants to begin to collect the thumbtacks. To control for systematic differences in helping the individual experimenters due to how much participants liked or felt comfortable around them, we added two dummy variables representing two of the three experimenters.

Harshly rejected participants were slower to collect the thumbtacks than were participants who were either mildly rejected ($b = 16.72, t(73) = 2.77, p < .01, d = .62$) or accepted ($b = 16.71, t(73) = 2.12, p < .05, d = .62$), who did not differ significantly from each other (acceptance vs. mild rejection: $b = -.01, t(73) = -.002, p = .90, d = .000$). There were no significant main effects of RS or sex. The three-way interaction of harsh rejection $\times$ RS $\times$ sex did not reach statistical significance, although it was in the expected negative direction ($b = -4.99, t(73) = -.95, p = .30$).

Simple slope analyses showed that among harshly rejected men, RS was associated with taking less time to begin collecting the thumbtacks ($b = -5.43, t(73) = -2.60, p < .05, \beta = -.65$). RS was not significantly associated with seconds elapsed among either accepted ($b = -3.10, t(73) = -1.22, p = .20, \beta = -.37$) or mildly rejected men ($b = 1.61, t(73) = .77, p = .40, \beta = .19$) or among women in any condition (for all, $p \geq .40$). Figure 2 depicts predicted values for time elapsed before participants began collecting the thumbtacks by condition, RS and sex.

Results for both ingratiation measures hold when we control for hostility expressed to the groups via email. The patterns hold if we control individually or simultaneously for the other individual differences measured in this study: SADS, neuroticism, and self-esteem.

Discussion

Study 2 replicated Study 1 by showing the distinctive willingness of high RS men to ingratiate following rejection from a group. The study also showed that this willingness extended to people other than the rejecter. Replicating Twenge et al., (Study 3, 2007), the normative response of participants following a rejection was to be less helpful to the

experimenter than following an acceptance. Only men high in RS showed the opposite pattern. After the harsh rejection, high RS men were quicker than low RS men and than women to begin helping the experimenter clean up a mess in the laboratory. RS did not predict helping the experimenter in the acceptance or mild rejection condition for men or for women. It seems that high RS men's need to regain acceptance after harsh rejection overrides the mean-spirited actions (i.e., hostility, unwillingness to help people in need) induced by rejection. However, the behavior of high RS men is likely to be intended to benefit themselves (by eliciting acceptance and approval). High RS men may be seeking to fulfill a personal need to connect with others after harsh rejection and thus replenish their sense of belonging, consistent with models of the need for approval and a sense of belonging (e.g., Baumeister & Leary, 1995; Gardner et al., 2005; Schachter, 1959).

Study 3: Rejection by Online Dating Community

Studies 1 and 2 replicated the focus of those researchers in the 1950s that studied the rejection-ingratiation link in groups. In Studies 3 and 4, we move into a dyadic relational domain with a view toward testing whether the rejection-ingratiation link extends to this domain for high RS men and emerges in this domain for high RS women. In combination, Studies 3 and 4 were designed to test claims that a critical distinction in the motivational salience of rejection for men and women is whether it conveys information about one's standing in the social group or about how one is valued by a single partner in whom one is invested. Both studies involved an online dating paradigm where acceptance or rejection would come from potential, compatible dating partners. In Study 3 the rejection took the form of a sociometric rating of the participants' standing in the online dating pool. As such, the expectation was that it would be more self-threatening for men than women. In Study 4, the rejection intended to elicit ingratiation came from a single individual toward whom the participant had been induced to feel a sense of connection and investment, a situation deemed to be relatively more self-threatening for women than men (Gabriel & Gardner, 1999).

Our prediction that sociometric standing in a dating pool would be relatively more self-defining for men than women is rooted in the fact that in North American culture, men are socialized to be the relatively more proactive partner in the initiation of romantic relationships (Berger & Bell, 1988). Evolutionary perspectives would attribute these distinct patterns of behavior to biologically-based sex differences in mammalian investment in offspring, premised on the assumption that the sex required to make the least investment in the offspring must compete for access to the sex that makes relatively more investment (e.g., gestation, feeding) in the offspring. Thus, because men must generally compete with each other for access to women, information about their general standing within the dating pool is likely to be a highly important indicator of general acceptance or rejection. Moreover, given that indicators of status and power such as money predict success in dating forums (Olivola, Eastwick, Finkel, Hortaçu, Ariely, & Todorov, 2009), high RS men should be willing to use money when given the opportunity to enhance their value as a dating partner after a harsh rejection that signals low status.

Participants in Study 3 were either accepted, mildly rejected or harshly rejected, ostensibly by multiple potential dating partners who had read and evaluated the participant's profile in an online dating website. We provided participants with feedback on how other users of the dating service perceived them, hence giving them a measure of their social standing within the online dating community. Ingratiation intentions were assessed as willingness to spend money on the first date. We also measured their willingness to spend money on a date with someone who had not evaluated their profile to test whether the ingratiating behavior of high RS men would generalize to dating partners who had not rejected them. This also allowed us

to test whether the normative tendency to be mean-spirited toward others following rejection extended to novel prospective dating partners, as Twenge et al.'s (2007) finding would suggest, or whether, in these circumstances, the normative tendency would be to avail of this new opportunity to replenish belongingness, as Maner et al. (2007) would suggest.

Study 3 also allowed us to address a concern about the mild rejection condition in Studies 1 and 2. In these two studies, the mild rejection was an ambiguous condition in which the peer group seemed ambivalent about the participant. In Study 3, the condition effects resulted from feedback ratings on a continuous scale, which allowed us to set the mild rejection at an intermediate level of acceptance relative to the acceptance and harsh rejection conditions.

Method

Participants—Participants were 126 students at a northeastern university in the United States (age: $M = 20.55$, $SD = 3.12$). Of the sample, 42.9 % were men and 57.1 % were Caucasian Americans, none of whom were in committed romantic relationships. Comparison of Caucasian Americans and Minority/International students showed that both groups reacted to the experiment in the same way. Thus, we present the findings for the full sample. Participants received \$15 as compensation.

Procedures—Participants were recruited to participate in a two-session study of online dating where they would meet a potential dating partner. Over email, they learned that the study involved joining an online dating service and meeting potential dating partners. After answering questions about their age and dating status, they were scheduled for their first session.

Session 1: Participants were run in the study individually. An experimenter met them in the lab and presented the cover story, informing participants that the study was about the attraction that people experience online as a result of “non-physical characteristics.” We made this claim to justify our request that participants not describe themselves in terms of their appearance or include any information about their race/ethnicity/nationality. We told participants that their ethnicity would not be revealed and any indicators of it in their profile would be removed. This was intended to minimize the likelihood of any ingroup/outgroup effects as potential causes of disengagement following rejection.

After completing a battery of questionnaires, participants logged into a site created for the study and answered a series of questions about their academic and leisure activities, dietary preferences, religion and political attitudes. They then spent between 20 to 60 minutes writing a biographical sketch of themselves. To increase investment in the task, the experimenter asked participants to read a two-page biographical sketch that the experimenter claimed was representative of what most people wrote.

Session 2: Two weeks after the first session, participants returned to the lab to read and evaluate the profiles of users of the dating service whom the researchers considered good matches for them, people the participants were led to believe they could meet in the future if they chose to do so. Participants also expected to read a general summary of the evaluation that other people had made of his or her profile. After completing a brief packet that assessed their mood and their investment in the task ahead, participants evaluated profiles we created for the site, but which they thought were real, in what was introduced as a “practice round.” This was intended to give participants a sense of the process through which they had, purportedly, been evaluated. The profile evaluation form included 16 questions (e.g., “How interested would you be in a friendship with this person?”; “How much would you like to meet this person?”; “How eager are you to know more about this

person?”) that participants answered about each profile by making a rating on a scale (1 = “Not at all”, 9 = “A lot!”). All the questions are available from the corresponding authors of this paper. Following the practice round, participants evaluated three profiles we had generated. Everyone read the same three profiles, but these were matched to each participant along certain dimensions (age, religion, food preferences, sexual orientation and political orientation). The biographical sketches in each profile were otherwise unchanged; pilot testing had established that they were equally attractive to men and women.

After evaluating their matches, participants received a form that included 12 of the questions from the form that participants had used to evaluate other profiles. Next to each question, we presented the mean rating that the participant had purportedly received from the readers of his or her profile—in actuality, participants received bogus ratings. In the acceptance condition, the ratings were high (range = 6.50 to 8.75). In the mild rejection condition, the ratings were in the mid-range of the scale (range = 3.75 to 6) and in the harsh rejection condition, they were low (range = 1.25 to 3.50). Four questions from the evaluation form were not included in the feedback because they asked participants to rate how much of a match they thought the profiles were in social category memberships. Rejecting feedback about this might give participants reasons to make external attributions about why they were not accepted, thus dampening the effect of the rejection.

The experimenter waited about a minute for the participant to read the feedback form and then handed them a final questionnaire, which included the measures of hostile mood and manipulation check. The final section of the questionnaire assessed participants’ willingness to ingratiate using the measures described below. Upon completing the final questionnaire, participants were debriefed and compensated. The experimenters clarified that no one had actually read the participant’s profile and that all feedback had been fabricated and randomly assigned to them. Participants were run in session 2 by an experimenter of their same sex, who was either Caucasian American or Asian American.

Materials—All the individual differences measures were completed in session 1. Measures of willingness to ingratiate toward the rejecter and toward other online daters were completed in session 2, after participants had received the accepting or rejecting feedback.

Rejection Sensitivity Questionnaire—short version (RSQ): We used the short version of the RSQ ($\alpha = .70$; $M = 9.33$, $SD = 3.30$).

Rejected mood: Feelings of acceptance at the start of the experimental session were measured by averaging responses (ranging from 1 = “Not at all” to 6 = “Extremely”) to the following two items: “How likely do you think it is that you will meet someone with whom you can get along?” and “How much do you think other people will like you?” The items were reverse-coded to index rejection (Time 1 $\alpha = .60$; $M = 3.51$, $SD = .81$). Immediately after participants had read the summary of others’ perceptions of them, they answered the question: “How much do you think the people who read your profile liked you?” ($M = 3.76$, $SD = 1.16$).

Hostile mood: The Time 1 mean was 1.30 ($SD = .63$) and Time 2 mean was 1.54 ($SD = .83$). The generally low levels of hostility pre-manipulation precluded estimating a reliable alpha. For Time 2, post-manipulation, the reliability is high ($\alpha = .83$).

Task investment: At the start of session 2, participants answered two questions about their investment in the experiment: “How interested are you in reading other people’s profiles?” and “How interested are you in learning what other people thought of your profile?”

Responses (1 = “Not at all,” 6 = “Completely”) were averaged to index task investment ($\alpha = .80$; $M = 4.32$, $SD = .99$).

Willingness to spend money on date: In a questionnaire completed after the rejection/acceptance, participants were asked: “Some of the participants in this study have actually met up with the people with whom we matched them. They generally go out for coffee or brunch, on an informal date. If you were meeting one of the people who read your profile, how much would you be willing to spend on the date? Most people spend between \$15 to \$35. How much would you spend?” ($M = \$18.46$, $SD = 7.55$).

Finally, to assess whether RS would be associated with willingness to ingratiate toward people other than those who had evaluated their profile, participants were also asked how much money they would spend on a date with the people they had evaluated, but who had not evaluated them yet: “If you were meeting one of the people whose profile you read, how much would you be willing to spend on the date? Most people spend between \$15 and \$35. How much would you spend?” ($M = \$20.18$, $SD = 7.70$).

Additional measures: Besides self-esteem, neuroticism and SADS, we also measured adult attachment (using the ECR-R; Fraley, Waller, & Brennan, 2000) and narcissism (using the Narcissistic Personality Inventory; Raskin & Hall, 1981; Raskin & Terry, 1988). Insecure attachment styles are positively associated with RS (Downey & Feldman, 1996; Feldman & Downey, 1994), and narcissism, though negatively related to RS, intensifies hostile responses to rejection (Twenge & Campbell, 2003).

Results

Manipulation Checks—As expected, ANOVA showed post-manipulation rejected mood and hostile mood increased significantly as level of rejection increased across the three conditions (see Table 1 (C)). These findings held controlling for RS, sex, their two and three-way interactions with condition, Time 1 task investment and Time 1 measure of the relevant variable. There was no main effect of sex and no interaction of sex and either condition or RS. However, RS interacted significantly or marginally with the rejection condition variables (mild rejection and RS: $b = .07$, $t(108) = 1.68$, $p = .09$; harsh rejection and RS: $b = .11$, $t(108) = 2.42$, $p < .05$). Simple slopes revealed that RS predicted more hostile mood in the mild rejection condition ($b = .09$, $t(108) = 3.19$, $p < .005$, $\beta = .45$) and in the harsh rejection condition ($b = .13$, $t(108) = 3.88$, $p < .001$, $\beta = .65$), but not in the acceptance condition ($b = .02$, $t(108) = .58$, $p = .57$, $\beta = .10$).

Willingness to Ingratiate

Financial expenses on date with an evaluator: The same linear regression strategy used in Studies 1 and 2 revealed that harshly rejected participants did not differ significantly from participants who were either accepted ($b = -2.23$, $t(108) = 1.58$, $p = .11$, $d = .30$) or mildly rejected ($b = 1.66$, $t(108) = 1.21$, $p = .20$, $d = .22$). Mildly rejected participants were willing to spend significantly less than accepted participants ($b = -3.90$, $t(108) = 2.86$, $p < .01$, $d = -.52$). There was no main effect of RS, but across conditions, men were willing to spend significantly more money on dates than were women (b for men compared to women = 5.87, $t(108) = 5.03$, $p < .001$, $d = .84$). Although the harsh rejection $\times$ sex $\times$ RS interaction ($b = 1.53$, $t(108) = 1.60$, $p = .11$) did not reach significance, the sex $\times$ RS interaction was significant within the harsh rejection condition ($b = 2.26$, $t(108) = 3.20$, $p < .005$). The mild rejection $\times$ sex $\times$ RS interaction ($b = .14$, $t(108) = .16$, $p = .80$) was not significant³.

Simple slope analysis showed that high RS men were willing to spend more money than low RS men on a date with someone who had harshly rejected them ($b = 2.30$, $t(108) = 3.80$, p

$< .001$, $\beta = 1.09$; for women $b = .04$, $t(108) = .10$, $p = .90$, $\beta = .02$). Again, RS was not significantly associated with the responses of women in any of the conditions or of men in the mild rejection and acceptance conditions. All of these results held when post-manipulation level of hostility was controlled. Figure 1 (C) depicts the predicted amounts that participants were willing to spend on a date by condition, sex and RS.

Financial expenses on date with online daters other than evaluators: Mildly rejected participants were less willing to spend money on a date than those accepted ($b = -2.73$, $t(108) = -1.93$, $p = .06$, $d = .38$) or harshly rejected ($b = -3.34$, $t(108) = 2.34$, $p < .05$, $d = .46$). Accepted and harshly rejected participants did not differ significantly from each other ($b = .61$, $t(108) = .41$, $p = .60$, $d = .08$). There was no main effect of RS, but men were more willing to spend money on the date than were women (b for men compared to women = 5.52 , $t(108) = 4.55$, $p < .001$, $d = .77$). Neither the harsh rejection $\times$ RS $\times$ sex interaction ($b = 1.36$, $t(108) = 1.36$, $p = .18$) nor the mild rejection $\times$ RS $\times$ sex interaction ($b = .60$, $t(108) = -.80$, $p = .40$) was significant. However, the interactions of RS $\times$ sex ($b = .89$, $t(108) = 2.31$, $p < .05$) and harsh rejection $\times$ RS ($b = 1.42$, $t(108) = 2.92$, $p < .005$) were significant.

Simple slope analyses showed that RS was a significant predictor of financial contribution only for harshly rejected men ($b = 1.94$, $t(108) = 3.06$, $p < .005$, $\beta = .89$) although there was a marginally significant trend for RS to predict spending more money among mildly rejected men ($b = .87$, $t(108) = 1.75$, $p = .08$, $\beta = .40$). However, RS did not show this pattern for women in any of the conditions. These results held when post-manipulation level of hostility was controlled. Figure 3 depicts the predicted values by condition, RS, and sex.

All of the patterns hold if we control individually or simultaneously for the other constructs measured in this study: SADS, self-esteem, neuroticism, attachment style and neuroticism.

Discussion

The more harshly participants were evaluated by prospective dating partners, the more rejected and hostile they felt, irrespective of gender. Consistent with past work on romantic relationships, RS predicted increased hostile mood in the rejection conditions (cf. Ayduk et al., 1999; Downey & Feldman, 1996). But, replicating Studies 1 and 2, harshly rejected high RS men reported more willingness to spend money on a date with one of the matches who had rejected them, relative to low RS men in the same situation. Harshly rejected high RS men were also willing to spend significantly more money than low RS men on a date with another person who was using the dating service. However, RS was not a significant predictor of willingness to spend for men in the accepting or mild rejection conditions or for women in any of the experimental conditions. The specificity of the finding to high RS men is consistent with the view that rejection in the form of devalued social status would be more self-defining for men than for women.

The normative tendency to be mean-spirited toward others following rejection, proposed by Twenge et al. (2007) and supported in relation to behavior toward the experimenter following a harsh rejection in Study 2, did not extend to novel prospective dating partners.

³Given that the harsh rejection $\times$ sex $\times$ RS interaction showed the same pattern in Studies 1 through 3, but was not significant at $p = .05$ in all, we decided to combine the data of the three studies. We carried out the same analysis we had used for each study, but we also entered dummy variables for Studies 2 and 3 and had those interact with the dummies for the conditions, sex and the RS scores. Any difference due to the domain in studies would be captured in the slope of the dummy variables for each study. However, there was no significant four-way interaction of Study $\times$ condition (any) $\times$ sex $\times$ RS. The three-way interaction of harsh rejection $\times$ sex $\times$ RS was significant ($b = 2.41$, $t(304) = 3.33$, $p < .005$), but not the three-way of mild rejection $\times$ sex $\times$ RS ($p = .90$). When looking at male participants only, the slope of RS as a predictor of money spent on the rejecters was significantly greater for the harsh rejection condition compared to the mild rejection (harsh rejection $\times$ RS: $b = 2.14$, $t(147) = 3.84$, $p < .001$). For women, this interaction of harsh rejection and RS was not significant ($b = -.28$, $t(151) = -.67$, $p = .50$).

Instead, participants were willing to pay significantly more on a date with a novel partner following a harsh rejection than following a mild rejection, offering support for Maner et al.'s (2007) claim that, in circumstances where people thought they would have a realistic opportunity to positively influence the evaluators, people would be willing to avail of the opportunity to replenish belongingness.

Study 4: Dyadic Rejection by a Romantic Match

We combined the Study 3 paradigm with a paradigm shown in prior research to activate the RS dynamic in women: rejection in a dyadic interaction from a single potential romantic partner (Ayduk et al., 1999). Given the importance of closeness for making a rejection self-defining for women, we manipulated closeness in Study 4 by having participants in one condition experience a rejection from someone with whom they had shared a lot of personal information and who they believed had shared a lot of information with them. Participants read a biographical sketch from someone supposedly selected to be compatible with them. Some of the participants were led to believe that the profile was that of their match, while others were led to believe that it was just a sample profile. Participants then wrote their own biographical sketch. We expected that when participants thought they had read about their match, they would experience minimal closeness, premised on the idea that shared personal information induces closeness (Aron, Melinat, Aron, Vallone, & Bator, 1997). For participants told that they had only read a sample biographical sketch, the rejection that eventually happens comes from a stranger about whom they knew nothing until the moment of the rejection.

In Study 4, we also included a measure of ingratiation intended to be more culturally appropriate for women following a dyadic rejection. Willingness to spend money was used to index ingratiation in Studies 1-3 because of evidence suggesting that it is a culturally sanctioned way for men to indicate social status (Furnham, 1984; Goldberg & Lewis, 1978; Prince, 1993; Schmitt & Buss, 1996) and thus to counter threats caused by the rejection. Although women also equate money with power, their relatively greater valuation of close relationships than of social standing makes it more likely they will use culturally sanctioned ways of expressing their relational worthiness, such as their ability to "tend and befriend" (Taylor et al., 2000) as evidenced in gift-giving, a "sweet" form of using money (cf. Furnham & Argyle, 1998, p. 31). Choosing gifts that have a greater monetary value may be a way of conveying greater interest and a desire to create a positive impression on the recipient of the gift. Hence, Study 4, in addition to replicating Study 3 in using willingness to spend money on a date to index ingratiation, provided participants with the opportunity to select a gift from a list of items that differed in monetary value.

Method

Participants—Participants were 111 students at a university in the northeastern United States (age: $M = 19.05$, $SD = .99$). Of the sample, 44.1% were males and 36.9% were Caucasian Americans. All participants were single (unmarried and not dating anyone) and received a total of \$20 as compensation (\$10 in each of the two sessions). Due to missing values in some measures, some analyses are based on 109 or 104 participants.

Procedures—Participants were recruited for a two-session study of online dating. The study was described as an investigation of the nonphysical characteristics that make for successful matchmaking. Via email, participants were directed to complete an online questionnaire that assessed their personal preferences (e.g., favorite movies, TV shows, food, music, and religious and political affiliations) and completed some background personality measures. An email informed participants that the data from the online portion would be used to find them a compatible match, but that the match would not see the

information. Once participants completed the online questionnaire, the study coordinator scheduled participants for session 1 of the study, which took place in the lab about 7 to 14 days later, ostensibly enough time for the investigators to find a match for the participant.

Session 1: After the participants completed a questionnaire packet that included the RSQ, the experimenter asked them to write a biographical sketch describing themselves for the person selected to be their match, whom they would meet in session 2. They were encouraged to take their time to write as much as they wanted. To give them a sense of what to write, the experimenter gave them a profile to read. The profiles had been generated using data from the online questionnaires and had been tailored to match participants along certain dimensions, but were otherwise identical. The profiles matched the participants along political orientation, geographical origin and on some of their tastes and preferences. Matched preferences were intended to increase feelings of similarity, and hence of attraction, while mismatches were included to make the profile seem realistic. Participants were led to assume the match was from their own cultural/ethnic group through matching of preferences on signals of ethnic identity (Marshall & Eberhardt, 2009).

A randomly selected third of the sample was told that the profile was an example of the kind of profiles that people write and that they should aim to produce a similar profile. The remaining participants were told that the profile was that of a person the researcher had found to be a match for the participant based on the information provided in the online portion of the study. After writing their biographical sketch, participants received \$10 and were told that they would be contacted for session 2 in a few days.

Session 2: Participants arrived for session 2 about 7 to 14 days after session 1, depending on their availability. A Caucasian American or Asian American experimenter of the same sex as the participant ran the second session, though ten participants had experimenters of the opposite sex due to scheduling conflicts. The experimenter informed participants that they would be meeting their match, who should be in a nearby room. Participants would have a couple of minutes to get to know their match, after which they would answer some questions about their interaction. The experimenter claimed it was time to check whether the match had arrived, gave the participant a short mood questionnaire (the PANAS) and a copy of the match's profile. Five minutes later, the experimenter returned with some news for participants.

Experimental conditions: In the **control condition**, participants were told that the match could not make it due to a last minute scheduling conflict, similar to the method used by Ayduk et al. (1999). All participants in this condition had read their match's profile in session 1 before writing their own profile. We also created two harsh rejection conditions that differed slightly in order to test for the minimal closeness necessary for rejection to elicit ingratiation in women. Participants in both harsh rejection conditions were told that their match had chosen not to meet them. In the **novel rejection condition**, participants had not read about their match during the first session, thus the person who rejected them was a stranger about whom they knew nothing. In the **match rejection condition**, participants had read their match's biographical sketch during session 1 and had written their own biosketch with that person in mind.

Participants in all conditions were then told that despite the fact that they would not be meeting their match, the investigators wanted them to complete the rest of the measures, which were about the effectiveness of the matchmaking. This packet included (in this order) the PANAS, the positive impression scale (described below), open-ended questions about the match and, at the end, the ingratiation measures. Some bogus questions in the packet read as though the participant had met the match, so as to mitigate suspicion. To remind

them of their match, participants were once again shown their match's profile. Participants in the **novel rejection condition**, who read a sample profile in session 1, read the profile of their purported match. A standard attractive profile was used for all participants in that condition.

After completing the final measures, they were fully debriefed and compensated \$10.

Measures

Rejection Sensitivity Questionnaire-short version (RSQ)—Participants completed the RSQ during session 1 ($\alpha = .65$; $M = 9.23$, $SD = 3.31$).

Investment index—Session 2 investment was assessed with the positive mood scales of the PANAS (Watson et al., 1988), which correlates highly with the investment index used in Studies 1 to 3 (average $r = .54$). Participants rated (1 = “very slightly or not at all” to 5 = “extremely”) how much they were experiencing each of the following mood states: attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong and active ($\alpha = .87$; $M = 2.75$, $SD = .74$).

Rejected mood—This was assessed with two items inserted in the PANAS (“rejected” and (reverse coded) “accepted”) before ($M = 2.18$, $SD = .65$) and after ($M = 2.77$, $SD = .94$) the manipulation.

Hostile mood—This was assessed with the same PANAS items used in Studies 1-3 before ($\alpha = .76$; $M = 1.47$, $SD = .61$) and after the manipulation ($\alpha = .83$; $M = 1.69$, $SD = .81$).

Impression of match—In the post-manipulation questionnaire participants rated their agreement (ranging from 1 = “strongly disagree” to 5 = “strongly agree”) with the following six items: “Overall, I liked my match's profile”, “I thought my match's profile contained interesting information”, “Prior to today, I was interested in meeting my match”, “I feel like my match was compatible with me”, “There are parts of my match's profile that I did not like” (reverse-coded), and “There are parts of my match's profile that I did like” ($\alpha = .84$; $M = 3.42$, $SD = .76$).

Willingness to ingratiate: Money spent on date—In the post-manipulation questionnaire participants were asked: “If you were to go on a date with your match outside of this lab, how much would you be willing to spend on the date? Most people spend between \$15 and \$35. How much would you spend?” ($M = \$18.66$, $SD = 10.80$).

Willingness to ingratiate: Gift catalogue—After completing the post-manipulation questionnaire, participants were given a sheet with images of six gift items that ranged in value (the price was listed below each item), from a ballpoint pen (\$0.98), to a sports water bottle (\$14.98). The experimenter asked the participant to select and circle one gift item for the person with whom they were matched and made clear that they would not have to pay for the gift themselves. Purportedly, at the end of the month, one in every five participants in the study would receive the gift chosen by his or her match.

Additional measures—The initial online questionnaire included the NEO neuroticism scale, the SADS and the Rosenberg self-esteem scale. During session 1, participants completed a measure of narcissism. A part of the sample ($N = 59$) also completed the short form of the Fear of Negative Evaluation scale (FNE; Leary, 1983), which Maner et al. (2007) have shown was negatively associated with prosocial behavior.

Results

Manipulation Checks—ANOVA revealed that post-manipulation feelings of rejection and hostility increased with level of rejection (see Table 3). Participants in the novel and match rejection conditions felt more rejected and hostile than participants in the control condition, with no difference between the rejection conditions. Using regression, we tested for sex and RS effects and found that RS predicted feeling more rejected in the novel ($b = .13$, $t(101) = 2.73$, $p < .01$, $\beta = .49$) and match ($b = .08$, $t(101) = 2.14$, $p < .05$, $\beta = .30$) rejection conditions, but not in the control condition ($b = .005$, $t(101) = .14$, $p > .89$, $\beta = .02$). No other main effects emerged of RS or sex and there were no significant interactions between these variables and the experimental conditions.

Overall positive impression: We created two dummy codes for the two harsh rejecting conditions (novel rejection and match rejection conditions). Regression analyses revealed no main effects of condition, sex or RS. However, there was a significant three-way interaction of novel rejection $\times$ sex $\times$ RS ($b = .35$, $t(97) = 2.69$, $p < .01$) for impression of the match. Simple slope analysis revealed that for women only, RS predicted a less positive impression in the novel rejection condition ($b = -.12$, $t(97) = -1.96$, $p = .05$, $\beta = -.53$). This replicates the effect of rejection on indirect hostility found among those high in RS captured in past rejection (Ayduk et al., 1999), work in which the rejection condition was like the novel rejection in this study.

Willingness to Ingratiate

Money spent on date: We found no main effects of condition or RS, but men were willing to spend more money on the date with their match than were women ($b = 7.44$, $t(89) = 3.39$, $p < .005$, $d = .72$). The three-way interactions of condition, RS and sex did not approach significance (all p 's $\geq .50$).

Gift catalogue: We treated the 6 gift choices as a continuous scale from 1 to 6 ($M = 4.29$, $SD = 1.70$) and regressed gift choice on RS, sex, condition, and their interactions controlling for pre-manipulation levels of hostility and investment. Using dollar value of the gifts (ranging from \$0.98 to \$14.98) yielded the same pattern of results.

The main effects of condition and RS were not significant. However, men were significantly more willing to give higher value gifts than were women (gift chosen for rejecter: b for men vs. women = 1.10, $t(94) = 3.36$, $p < .001$, $d = .67$). This supports past findings that men buy high value items for women when courting them (Camerer, 1988; Cronk & Dunham, 2007).

As predicted, there was a significant three-way interaction of match rejection $\times$ RS $\times$ sex ($b = -.47$, $t(94) = -2.02$, $p < .05$). Simple slope analysis revealed that RS was a significant predictor of gift-giving for women in the match rejection condition ($b = .22$, $t(94) = 2.05$, $p < .05$, $\beta = .44$), such that high RS women chose more valuable gifts than low RS women. RS was not a significant predictor of gift-giving among men in the match rejection condition ($b = -.07$, $t(94) = -.64$, $p \geq .53$, $\beta = -.14$). In the control condition, RS was not a significant predictor of gift-giving for either sex (for women $b = .01$, $t(94) = .14$, $p \geq .89$, $\beta = .02$; for men $b = .18$, $t(94) = 1.26$, $p \geq .21$, $\beta = .36$). In the novel rejection condition, RS predicted selecting gifts of lower value among women ($b = -.27$, $t(94) = -2.08$, $p < .05$, $\beta = -.54$). It was not significantly related to the gifts chosen by men ($b = -.05$, $t(94) = .27$, $p = .79$, $\beta = -.10$).

The patterns hold when controlling, individually or simultaneously, for SADS, neuroticism, self-esteem, or narcissism. A subsample of Study 4 ($N = 59$) had completed the Fear of Negative Evaluation (FNE) scale used by Maner et al. (2007, Studies 4 thru 6). Though the

findings reported above are not significant with this smaller sample, the patterns are in the expected direction. When we include both FNE and RS in the model, the pattern holds so that among women in the match harsh rejection condition, higher FNE predicts choosing gifts of lower value ($b = -1.53$, $t(12) = -2.85$, $p < .05$, $\beta = -.79$) while high RS predicts choosing a more valuable gifts ($b = .22$, $t(12) = 1.71$, $p = .11$, $\beta = .51$). This replicates Maner et al.'s (2007) findings for FNE.

Figure 4 depicts the predicted values for the gift-giving scale for low and high RS women and men in all conditions.

Discussion

Study 4 showed that when rejection occurs in a situation that is relatively more self-defining for women and when a culturally appropriate opportunity to ingratiate is presented, RS will predict willingness to ingratiate by women, but not by men. Hence, Study 4 supports the general hypothesis that harsh rejection in a self-defining situations triggers ingratiation from those highly concerned with rejection. The differences between the two harsh rejection conditions highlight the relevance of closeness and emotional investment in the dyad for triggering the motivation to ingratiate. Consistent with classical work, some increased valuation or attraction has to exist for ingratiation to occur. Only when the rejection was from the romantic match in whom they had invested were high RS women more likely to ingratiate. Rejection by someone about whom they did not know anything only elicited the expected indirect hostility among high RS women, replicating prior findings (Ayduk et al., 1999).

In keeping with the anthropological literature, men, regardless of the harshness of the rejection, chose more expensive gifts than did women and reported being willing to spend more money on a date with the rejecter. Men's willingness to spend money or buy gifts was not moderated by RS. It seems that in this dyadic situation, regardless of the rejection circumstances, men tend to express a high willingness to behave ingratiatingly. Perhaps sociocultural norms in these situations prescribe that men should respond to rejection after a bid for attention from a potential date with displays of mate value, even when the rejection is not personal. Culturally prescribed norms (e.g., men must pay for expenses on a date) may override other reactions to the rejection (e.g., anger, hurt), making men's default response to the ingratiation questions seem like an ingratiation response, while they may simply be responding in what they deem to be the normative way. However, it is not possible to interpret this unexpected finding in the absence of acceptance or neutral conditions in which no rejection happened.

While participants in Study 4 were not led to expect that they would have another interaction with their match, high RS women in the self-defining situation still chose to do something ingratiating and picked a gift of higher value for their match. Perhaps they made this choice to show their rejecter that they had made a mistake by missing the chance to meet a kind and caring person or to affirm to themselves that they are such a person. This still would suggest an effort to create a positive impression after rejection.

GENERAL DISCUSSION

The goal of this paper was to reconcile two contradictory accounts of the effects of rejection on social behavior. One account depicts rejection as an effective means of eliciting socially desired behavior in others, presumably because humans are dependent on social relationships for survival and wellbeing (Schachter, 1951; Williams et al., 2000). The other account depicts rejection as violating the social pact that obligates people to behave in socially desirable rather than selfish ways in return for social inclusion. From this latter

perspective, rejection prompts and permits behavior that is vengeful and mean-spirited (e.g., Twenge et al., 2007).

The set of studies reported in this paper yields support for the latter account except when two specific conditions—identified through a review of relevant recent and classic literature—were met: First, the rejected individual must be explicitly given the opportunity to engage in behavior that has the potential to create a positive impression on the rejection source. Second, the rejection must be highly threatening to the individual. We found that a combination of sources of threat was necessary to trigger willingness to ingratiate toward the rejection source. The rejection needed to be unambiguously clear to someone for whom acceptance and rejection are paramount concerns, and it had to clearly convey that acceptance from a valued source was improbable, albeit possible. When these conditions were met, rejection triggered ingratiation across the four studies, provided the rejection occurred in a normatively self-defining domain and the specific form of ingratiation made available was a culturally scripted means of producing a positive impression (e.g., giving money for men, giving a valuable gift for women). These findings can be taken as evidence that despite people's impulse to behave in vengeful and selfish ways following a deeply threatening rejection, when they are given the opportunity to behave in ways that have the potential to restore what they have lost, people will seize this opportunity.

Hostility Is An Automatic Reaction To Rejection But Ingratiation Is Not

The findings from Studies 1 and 2 extend prior evidence that hostility is a normative immediate and apparently automatic reaction to rejection by showing that rejection elicits spontaneous expressions of hostility directly toward the rejection source that were proportionate to the harshness of the rejection. Much of the previous research examined the effect of rejection on indirect expressions of hostility to the rejection source. Studies 1 and 2 also show that, in contrast to hostility, prosocial responses, including ingratiation, toward the source of rejection do not occur spontaneously. In this respect, our findings converge with prior findings showing that after rejection people will not be motivated to ingratiate, behave prosocially, or interact with those who have rejected them (e.g., Maner et al., 2007; Twenge et al., 2007).

However, the story changed when the possibility of behaving in ways that might improve the rejecters' impression of the rejectee was introduced and the situation was one in which the rejection deeply threatened the self. In this circumstance, people showed a willingness to behave in prosocial ways that belied the post-rejection hostility they had expressed to their rejecters. Thus, finding evidence of the rejection–ingratiation effects requires the careful identification of situations that are self-defining to the rejection target. Illustrating the importance of attending to sociocultural differences in which situations are self-defining, we found gender differences in the rejection sources that elicited ingratiation among those highly sensitive to rejection that were consistent with the literature depicting peer status as more self-defining for men and valuation within close dyadic relations as more self-defining for women. In Studies 1 through 3 men high in RS were willing to ingratiate following a harsh rejection in the form of public devaluation of social status. In Study 4 women high in RS were willing to ingratiate following rejection from a dyadic partner to whom they were induced to feel close.

Why Would Anyone Behave Positively Toward a Rejection Source?

Following a harsh rejection, the normative tit-for-tat response is to behave less positively (Kiesler, 1983; Markey, Funder, & Ozer, 2003). The behavior of women and low RS men in Studies 1, 2 and 3 and the behavior of men and low RS women in Study 4 was consistent with both the socially appropriate response and prior findings on typical responses to

rejection (Twenge et al., 2001; Twenge et al., 2007). One interpretation of our ingratiation findings is that high RS people's behavior is simply indicative of a normative willingness to behave in prosocial ways to replenish a diminished sense of belongingness (cf. Baumeister & Leary, 1995; Gardner et al., 2005). However, if this were the only motivation for ingratiation, then everyone—not only high RS people—should be more willing to ingratiate when given the opportunity to do so.

An alternative explanation for our findings is that rejection, especially by a valued source, enhances liking for and, thus, willingness to ingratiate toward the source. In Studies 1 and 2, men high in RS who were harshly rejected were no more likely than women or low RS men to spontaneously show positivity toward their rejecters in their post-rejection emails. In fact, less positivity was evident. Also working against the enhanced likeability hypothesis is that the target of harshly rejected high RS men's ingratiation did not appear to matter; they were equally willing to ingratiate to the rejection source and to available others. In Study 2 their increased helpfulness toward the experimenter following a harsh rejection was in sharp contrast to the normative pattern of reduced helpfulness in this circumstance (Twenge et al., 2007). In Study 3, the normative willingness to pay more on a date with a novel (non-rejecting) partner was accentuated among men high in RS, consistent with the hypothesis that people will seek to replenish belonging (Maner et al., 2007). Hence, the ingratiation shown by high RS men seems intended to protect the self by enabling the person to exit from a state of feeling rejected than to gain acceptance in a particular social relationship.

Our view that the motivation for post-rejection ingratiation is self-protective rather than altruistically prosocial is consistent with the Dittes and Kelley (1956) finding described earlier in which harsh rejection elicited public conformity that diverged from private beliefs. Such conformity seems intended to serve the instrumental function of gaining acceptance. In Studies 1 and 2, harshly rejected participants initially expressed hostility both privately and openly, but after receiving information about possibilities to ingratiate, those high in RS changed their public intentions to reflect efforts to please others, including their rejecters. More research is needed to determine whether these conflicting views about the rejecter (as target of both hostility and ingratiation) coexist, or whether the hostility is diminished when the possibility to ingratiate is presented in a self-defining situation. Nonetheless, the overall pattern is consistent with work suggesting that ingratiation after harsh rejection reflects a disconnect between negative feelings and positive behavior toward the rejecters (Sleeboos et al., 2006b), a pattern that, in the long term, may result in resentment and erode self-coherence. We cannot, however, rule out the possibility that choosing to ingratiate somehow transforms rejected participants' feelings about their rejecters into more positive ones.

The view that rejection is especially threatening to the self-concept of people high in RS is supported by findings that rejection in valued domains has particularly disruptive effects on the self-concept clarity of such individuals (Ayduk, Gyurak, & Luerksen, 2009). Ingratiation may be only one form of self-protective activity motivated by rejection in such individuals and they may substitute acceptance from the rejecter by drawing upon other sources of positive self-regard (cf. Sleeboos et al., 2006b). Evidence suggesting this was found by Halim and Downey (2004), who showed that relative to low RS people, high RS people put more effort into demonstrating their competence in a verbal achievement task after rejection, but not after acceptance⁴.

⁴A subsample of participants in Study 2 of this paper completed this task as well, and shows patterns consistent with Halim and Downey's (2004) finding.

Dispositional And Contextual Moderators of the Rejection-Ingratiation Link

Dispositional moderators—In contrast to our finding that willingness to ingratiate following rejection was intensified among those high in RS, Maner et al. (2007) showed that fear of negative evaluation (FNE), a disposition that also entails heightened concern about rejection, predicts increased wariness and diminished generosity toward novel interaction partners after rejection. The contrast between these findings illustrates the need for careful attention to delineating precisely how the somewhat overlapping dispositions that incorporate heightened concerns about rejection operate to moderate the effect of rejection (Maner et al., 2007; Sleebos et al., 2006a, 2006b). While both fear of negative evaluation and RS entail a heightened concern with protecting the self from rejection, RS is also characterized by concern about being accepted and valued. A coping style of avoiding situations where rejection is possible may protect against rejection, but it does not offer the opportunities that people high in RS need to gain and maintain acceptance (see Romero-Canyas et al., 2010). Thus, while we might expect FNE to reduce the likelihood of positive overtures following rejection, we might expect RS to increase the likelihood of such overtures if they held the possibility of leading to acceptance. This distinction is supported by data from the subsample of Study 4 that completed a measure of FNE: in the same model, FNE predicts less ingratiation after harsh rejection while RS predicts increased ingratiation.

The importance of context—In addition to highlighting differences in coping goals of individuals concerned with rejection, the present research validates an approach that merges the wisdom of the classic social psychologists' emphasis on studying the rejection-ingratiation link in situations of singular value to the population of interest with process perspectives on personality which emphasizes how experience shapes the dispositional processes that get activated by rejection cues (Mischel & Shoda, 1995). In the specific case of gender, the findings support Horney's (1937) claim that culture, perhaps reflecting biology, mediates the self-protective dynamics that individuals develop and deploy under threat by shaping the motivational value that women and men attach to particular social tasks and social relationships.

Future Research and Limitations of the Present Studies

The next step for this line of work is to establish whether the post-rejection ingratiation efforts of those high in RS are limited to essentially benign prosocial behavior or, as our prior correlational research suggests, extend to actions that are socially problematic or that compromise the attainment of other goals the individual values. Additionally, future studies should explore how the available form of ingratiation impacts the likelihood of rejectees choosing to use the opportunity. The studies in this paper included measures of ingratiation selected to be potentially beneficial to the rejecter *and* which allowed the rejectee to emphasize qualities that were socially desirable and would boost their social value in the self-defining situations we had selected, e.g., spending money to boost status after a group rejection and gift-giving to highlight nurturance after a dyadic rejection. Perhaps opportunities to benefit the rejecter that further demean the rejectee are less likely to be used after harsh rejection.

Future studies should carry out explicit between-subjects manipulations of the revocability of the rejection to establish whether behavior that would benefit the rejecter only emerges when it is clear that participants would interact with the rejecter again. Although Maner et al. (2007) found that the expectation of interaction is a necessary condition for such prosocial behavior, Sleebos et al. (2006b) and our Study 4 findings suggest that this condition may not always be necessary. Hence, it is worth exploring whether the suggestion

that the rejectee's actions will be positively received by the rejecter even in the absence of future interaction is sufficient to motivate ingratiation after harsh rejection.

Finally, our evidence for gender differences in self-defining situations could be strengthened by a direct test of this claim. Future studies could manipulate the situation in a way that it makes it normatively self-defining for women or men. While we did not include different self-defining situations within one study, Studies 3 and 4 provide evidence that within the same general social domain (online dating), different cues (rejection from a group of people or one individual) can elicit different responses from men and women who are sensitive to rejection. More generally, the importance of self-defining situations for the emergence of the rejection-ingratiation link can also be tested by randomly assigning participants to situations that are framed as being highly relevant or not relevant to the self (cf. Tesser & Moore, 1990; Tesser & Smith, 1980). Concerns with securing acceptance and avoiding rejection should not be activated in situations that are explicitly irrelevant to the self, thus lowering the threat created by rejection and the likelihood of ingratiation.

Implications and Conclusions

This research illuminates circumstances under which people are willing to ingratiate in order to gain acceptance from those who have rejected them. The ability to put effort into being helpful to others and accommodating to their needs can be highly adaptive (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Persistence in efforts to meet the needs of a group or person who was initially rejecting can turn the situation around, leading to ultimate acceptance. However, such efforts can become maladaptive when they subvert other important personal goals or lead to socially harmful behavior. Preventing rejection or escaping from a state of rejection may be one of the underlying motives that drive people to a course of action that may render them susceptible to manipulation and abuse by others (Crocker & Knight, 2005).

Appendix A: Examples of Emails Used in Studies 1 and 2

Below is an example of how one of the emails varied across the three conditions. All of the emails used in the study are available from the authors.

Sections in *italics* varied across conditions, with all other parts of the email remaining the same. The participant was always known as Member 5 or Number 5.

Acceptance Condition

Dear group X, Members 4 and 5

Welcome to the group. No one else has replied to your messages, so let me be the first to do it. From your emails it sounds like you guys will fit right into the group.

I'll start by introducing myself. I'm a student. I'm double-majoring in economics and literature. I'm a senior right now and I don't know what'll be doing after I graduate. I think I'll get a job in the real world and then apply to grad school or maybe a writing program.

Here in school I do a lot of things; sometimes I think I'm spreading myself too thin. For one, I write for a campus publication, the literary magazine. I enjoy writing fiction; it's my favorite activity. I also do some theater stuff, but behind the scenes kind-of-stuff. I like to play soccer when the weather allows it. I live in a small apartment complex with a big courtyard, so I'm playing a lot of soccer now with some of my neighbors. Like Member 4, I like to draw, and like Number 5 I like [SOMETHING THE PARTICIPANT SAID THEY LIKED].

This study is turning out to be something. *We're getting some pretty cool people in the group.* What else would you guys like to know about me?

Mild Rejection Condition

Dear Group X

So, we have new members in the group. No one else has replied to your messages right now, so I guess I'll be the first to do it. Maybe we'll all be able to see whether or not you'll fit in the group.

... Like Member 4, I like to draw.

Like I said, we might be getting more people than we need. Maybe you guys should tell us more about you to be sure you're in the right place. Anyway, *what else would you like to know about me?*

Harsh Rejection Condition

Dear group X

So, we have new members. No one else has replied to your messages, so I guess I'll be the first to do it. Personally, I don't think you'll fit in the group, but I'm supposed to reply anyway.

... like Member 4, I like to draw, but unlike Number 5 I hate *[SOMETHING THE PARTICIPANT SAID THEY LIKED]*.

This study is turning out to be something. I don't see why we need to get more people in the group. Are you new guys sure that you're in the right group? Ask your research person to be sure.

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Figure 1 (A)

Figure 1 (B)

Figure 1 (C)

Figure 1. Predicted values from regression model for money spent on meeting with rejecters for participants 1 standard deviation below (Low RS) or above (High RS) the mean RS score in each study

Notes.

1. Error bars represent standard errors of the predicted values from the regression equation.
2. All predicted values control for hostile mood before the acceptance/rejection feedback and for the investment index.
3. Subfigure A is for participants in Study 1, subfigure B is for participants in Study 2 and subfigure is C for participants in Study 3. All predicted values control for hostile mood before the acceptance/rejection feedback and for the investment index.

Figure 2. Predicted values from the regression models for time elapsed before participants 1 standard deviation below (Low RS) or above (High RS) the mean RS score began to collect the thumbtacks in Study 3

1. Error bars represent standard errors of the predicted values from the regression equation.
2. All predicted values control for hostile mood before the acceptance/rejection feedback and for the investment index.

Figure 3. Predicted values from regression model for money spent on meeting with a prospective date (not the rejecter) for participants 1 standard deviation below (Low RS) or above (High RS) the mean RS score in Study 1

Notes.

1. Error bars represent standard errors of the predicted values from the regression equation.
2. All predicted values control for hostile mood before the acceptance/rejection feedback and for the investment index.

Figure 4. Predicted values from regression model for value of chosen gift for the rejecter for participants 1 standard deviation below (Low RS) or above (High RS) the mean RS score in Study 4

Notes.

1. Error bars represent standard errors of the predicted values from the regression equation.
2. All predicted values control for hostile mood before the acceptance/rejection feedback and for the positive/excited mood before the task.
3. The dependent variable is a scale from 1 to 6, consistent with the presentation of the gifts to the participant. Substituting the monetary value of each gift yields the same pattern.

Means and Standard Deviations for Indexes of Rejection and Hostile Mood after Manipulations Across Studies 1, 2 and 3

Table 1

	Acceptance	Mild Rejection	Harsh Rejection	Main Effect of Condition	Effect Sizes (<i>d</i>)		
					A	B	C
(A) Study 1							
Rejection Index	2.87 ^a (1.23)	4.30 ^b (1.14)	5.03 ^c (.89)	$F(2, 122) = 37.55, p < .001$	1.30	1.96	.66
Hostile Mood	1.15 ^a (.29)	1.58 ^b (.70)	1.88 ^b (.88)	$F(2, 122) = 11.28, p < .001$	.64	1.10	.45
(B) Study 2							
Rejection Index	2.60 ^a (.90)	4.20 ^b (1.14)	4.83 ^c (.93)	$F(2, 176) = 61.47, p < .001$	1.5	2.09	.59
Hostile Mood	1.14 ^a (.37)	1.45 ^b (.57)	1.72 ^c (.71)	$F(2, 176) = 12.05, p < .001$	.54	1.00	.47
(C) Study 3							
Rejection Index	2.87 ^a (.95)	3.99 ^b (.99)	4.48 ^c (.93)	$F(2, 119) = 28.36, p < .001$	1.05	1.51	.46
Hostile Mood	1.15 ^a (.35)	1.63 ^b (.72)	1.89 ^b (.82)	$F(2, 119) = 12.90, p < .001$	.73	1.13	.40

Paired comparisons:

Different superscripts indicate that values significantly different from each other at $p < .09$

Notes:

1. Means are unadjusted means. Values in parentheses are standard deviations. The F statistics are from ANOVA.
2. Cohen's d are used for effect sizes. These were computed by dividing the difference between the compared means by the pooled standard deviation of the three conditions. A = acceptance – mild rejection, B = acceptance – harsh rejection, C = mild rejection – harsh rejection.
3. In ANCOVA analyses, the levels of each variable before the manipulation were entered as covariates and sex was entered as another fixed factor and allowed to interact with the condition variable. The interactions of sex and condition were non-significant, but the main effects of condition remained. The main effect of sex reached significance only for the index of rejection in Study 3, such that women felt, on average, more rejected than men across conditions (women $M = 4.55$ ($SD = 1.33$), men $M = 3.92$ ($SD = 1.37$), $F(1, 88) = 29.18, p < .05$).
4. Regression analyses with RS interacting with sex and condition revealed no effect of RS, except in Study 3 in the rejection conditions, as reported in the text.

Means and Standard Deviations for the Index of Hostility and the Index of Positive Behaviors in the Second Email to the Internet Group in Studies 2 and 3

Table 2

	Acceptance		Mild Rejection		Harsh Rejection	
	Email Hostility	Email Positivity	Email Hostility	Email Positivity	Email Hostility	Email Positivity
(A) Study 1						
Women	1.22 (.50)	2.80 (.99)	1.43 (.94)	2.39 (.92)	3.00 (1.89)	2.01 (.94)
Men	1.08 (.24)	2.77 (1.17)	1.53 (.89)	2.25 (.92)	2.92 (2.05)	1.68 (.62)
(B) Study 2						
Women	1.00 (0.00)	4.42 (.63)	1.53 (.99)	2.83 (1.02)	2.00 (.91)	2.04 (.96)
Men	1.17 (.33)	3.78 (.88)	1.61 (1.14)	2.58 (1.14)	2.38 (1.62)	2.04 (.76)

Note: These are unadjusted means. Values in parentheses are standard deviations.
The means and SD's from Study 2 reported in this table are for the 90 Caucasian American participants.

Means and Standard Deviations for Indexes of Rejection, Hostile Mood after the Manipulation in Study 4

Table 3

	Control Condition	Novel Harsh Rejection	Match Harsh Rejection	Test of Control Condition VS. Harsh Rejections	Effect Sizes (<i>d</i>)
					A B
Rejection Index	2.29 ^a (.72)	3.02 ^b (.94)	3.08 ^b (.97)	$F(1, 105) = 19.07, p < .001$	.83 .90
Hostile Mood	1.44 ^a (.70)	1.83 ^b (.80)	1.84 ^b (.88)	$F(1, 105) = 6.13, p < .05$	.49 .50

Paired comparisons:

Different superscripts indicate the groups are significantly different from each other at $p < .05$. Same superscripts indicate that the groups are not significantly different.

Note:

1. Means are unadjusted means. Values in parentheses are standard deviations. The F statistics are from ANOVAs in which the fixed factors were condition and sex.
 2. Cohen's d are used for effect sizes. These were computed by dividing the difference between the compared means by the pooled standard deviation of the three conditions.
- A = control – novel harsh rejection, B = control – match harsh rejection.