The endearing pain: Group value enhances positivity towards ostracisers

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Abstract

Victims of social exclusion are highly motivated to regain feelings of social connectedness. Some theories suggest that victims of exclusion should prefer inclusive or novel others and derogate the perpetrators of exclusion. Yet, no studies have explored the mechanisms that alter person preferences following exclusion. In two experiments we found that excluded people selectively evaluate ostracisers based on the ostracisers' group membership. Excluded people who valued an ingroup membership evaluated ostracisers from that group more positively than includers from the same group. Ostracisers from an ingroup were also more positively evaluated than ostracisers from another group. These studies show that victims of exclusion do not universally devalue excluders. In fact, the findings indicate that exclusion endears victims to ingroup malefactors.

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Feelings of social connection are vital to well-being, and threats to belongingness are quickly detected and highly aversive (Baumeister & Leary, 1995; Williams, 2009). People respond to ostracism, however, in many different ways. For example, social exclusion can evoke a variety of emotions ranging from anger to sadness to anxiety or fear (see Williams, 2001). Additionally, the responses that social exclusion evoke can range from retaliation (see Leary, Twenge, & Quinlivan, 2006; also Buckley, Winkel, & Leary, 2004; Twenge, Baumeister, Tice, & Stucke, 2001) to withdrawal (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007; Twenge, Catanese, & Baumeister, 2003; Lucas, Knowles, Molden, Gardner, & Jeffries, 2010), but even to increased social sensitivity and renewed efforts toward social connection (Gardner, Pickett, & Brewer, 2000; Gardner, Pickett, Jeffries, & Knowles, 2005; Maner, DeWall, Baumeister, & Schaller, 2007; Williams, Cheung, & Choi, 2000).

Researchers have begun to delineate several ways that we respond to social exclusion experiences and identified factors and mechanisms that determine which responses will occur. For instance, some theories postulate that the aversiveness of exclusion should lead victims to devalue excluders and preferentially seek out novel or inclusive others to regain lost feelings of belongingness (e.g., Baumeister, Brewer, Tice & Twenge, 2007). Yet, the variables that affect victims' perceptions of excluders and includes remain largely unexplored.

Considerable research on social exclusion has focused on the aversiveness of exclusion. This aversiveness likely functions to draw attention to the situation so that the exclusion threats can be remedied quickly and avoided in the future (MacDonald & Leary, 2005). Exclusion cues trigger a social monitoring system that repairs lost inclusion needs (Pickett, Gardner, & Knowles, 2004) by increasing prosocial behaviors (e.g., physical mimicry; Lakin, Chartrand, & Arkin,

2008). These prosocial tendencies satiate the threatened need for belongingness and may also serve to cut short exclusion events by affirming one's value to potential excluders. Yet, people do not seek out such inclusion indiscriminately. Feelings of exclusion not only improve detection of prosocial cues in others (Bernstein, Young, Brown, Sacco, & Claypool, 2008) but also create an increased preference for others displaying those prosocial affordances (i.e., stronger preferences for more affiliative faces; Bernstein, Sacco, Brown, Young, & Claypool, 2010). Thus, interpersonal preferences among the excluded are selective—favoring others who might better restore belonging needs.

It is reasonable to expect that humans respond differently to exclusion depending on its source. Malefactors whom we value may be differentiated from those who are unimportant (or detrimental) to our well being (Petersen, Sell, Tooby, & Cosmides, 2010; Richman & Leary, 2009). For example, responding negatively to a close friend's cold shoulder only serves to further devalue the relationship. In such cases, the excluded party should be more disposed toward reestablishing the valued relationship. Conversely, exclusion by a less-valued associate is less threatening, and a negative disposition toward the excluder might ensure that no further trust is placed in that person. Consistent with this reasoning, Sharp (2010) found that short-term instances of exclusion by friends were often dismissed or trivialized, whereas exclusion by strangers resulted in resentment and bitterness. Interestingly, in the few studies that have demonstrated devaluation of ostracisers, the offenders were strangers to the victim (Buckley, Winkel, & Leary, 2004).

A key factor that may influence responses to social exclusion is whether the victim perceives value in a continuing relationship with the excluder. For example, relations with a valued ingroup are important to maintain, and malefactors from valued ingroups should be

treated differently from those who come from less-valued groups (Petersen et al., 2010).

Furthermore, exclusion cues increase the salience and perceived importance of existing group memberships (Knowles & Gardner, 2008). Thus, victims of exclusion should be selective in developing preferences for social others who are most critical to the maintenance of membership in valued groups.

The Present Research

Previous research examining victims' perceptions of excluders has largely ignored the victim's pre-existing association with the malefactor. In the short-term, if exclusion cues emanate from a valued associate it is advantageous to orient affiliation efforts toward them to determine whether exclusion cues are truly threatening or merely false alarms. Merely refocusing affiliation efforts on already inclusive people ignores the social threat of losing the valued associate. Moreover, attempting to re-establish belongingness needs with stigmatized partners (e.g., outgroup members, low-status ingroup members) may result in further exclusion (Kurzban & Leary, 2001). So, at best indiscriminate affiliation maintains the uncertainty surrounding the exclusion cues; at worst it risks further alienation.

Using this logic, we predicted that exclusion would not indiscriminately cause a victim to devalue ostracisers. Rather, we hypothesized that exclusion by a member of a valued ingroup would lead the victim to evaluate the ostraciser more positively than other potential interaction partners. Conversely, excluders from a less-valued group would be evaluated more ambivalently (or negatively) relative to other potential interaction partners. In two experiments we provide novel evidence that evaluations of ostracisers are selective, and that positivity toward excluders is moderated by a group's value to a victim.

Experiment 1 examined two questions: First, are inclusive others indiscriminately preferred to ostracizing others? Second, does ingroup bias predict a preference for ostracisers? Consistent with previous investigations of ingroup preferences following exclusion (Lakin et al., 2008), we used gender as the basis of ingroup and outgroup distinctions. We similarly limited our investigation to female participants because males are less likely to show preferences favoring their own gender (Eagly & Mladinic, 1989; Rudman & Goodwin, 2004). Participants were first included in a computerized ball-tossing task and then excluded. An affective priming task then measured participants' relative preferences for includers and excluders. This task is commonly used to measure affective evaluations of stimuli (e.g., Olson & Fazio, 2001) without explicitly drawing attention to category distinctions (e.g., Fazio, Jackson, Dunton, & Williams, 1995).

Experiment 2 tested a stronger version of our hypothesis by examining whether ostraciser positivity would emerge within novel groups created in the laboratory. We randomly assigned participants to minimal groups by giving them either red or blue t-shirts to wear for the duration of the study. Participants first played an inclusive ball-tossing game with two players, both from the red or blue team. They then played a second game with different players who were both from either the red or blue team. We predicted an interaction between group membership and evaluative bias for one's own group, such that ostracisers would be evaluated most positively when they came from a more valued group.

In both studies participants first experienced a period of inclusion that preceded the exclusion manipulation. Previous studies have found that positive social interactions following exclusion can ameliorate the effects of exclusion (e.g., Twenge, Zhang, Catanese, Dolan-Pascoe, Lyche, & Baumeister, 2011). In the context of the present study, including participants after excluding them would likely eliminate any effects of exclusion. Because the present research is

concerned with understanding how people respond to social exclusion, a post-exclusion inclusion condition was not examined.

Experiment 1: A Selective Preference for Ostracisers Over Includers

In a within-subjects design, female participants were first included and then ostracized by a pair of players consisting of one outgroup (i.e., male) and one ingroup (i.e., female) member. Affective priming measured participants' group value and includer-ostraciser preferences. The evaluative preferences measured by affective priming have been shown to predict subsequent social behaviors (for a review see Fazio & Olson, 2003). The theoretical construct of group value was measured using participants' evaluative preference for their ingroup compared to their evaluative preference for the outgroup. This measure of relative group value allowed us to differentiate people with no (or ambivalent) group preference from those who held a distinct preference favoring their ingroup.

Method

Participants. Thirty-three female undergraduate students ($M_{\text{age}} = 20.10$, $SD_{\text{age}} = 2.81$) participated for credit in a first-year psychology course.

Materials and procedures. Participants played two consecutive computerized ball-tossing games (Cyberball; Williams & Jarvis, 2006). In each game participants played with a different pair of ostensibly human players. In reality, the other players were computer-controlled; one of the players was represented as a male avatar image (i.e., an outgroup member) and the other player was represented as a female avatar image (i.e., an ingroup member; Vizard Complete Characters, WorldViz LLC, Santa Barbara, CA). The images were randomly selected for each Cyberball game from a set of 15 male and 15 female avatars displaying neutral expressions. The images showed only the faces and shoulders of the avatars

and were fixed to the same height, width and color depth (190 x 215 x 32 bit, stored as bitmap images). In Game 1 participants were included, receiving ten of thirty throws. In Game 2 participants were excluded, receiving only one of thirty throws.

Participants then completed the affective priming task. For each trial a 200 ms avatar prime preceded either a positive or negative target word (8 positive and 8 negative words adapted from Mallan, Lipp, & Libera, 2008). Participants were instructed to categorize target words as pleasant or unpleasant as quickly as possible. Six different avatar images primed word presentations: the male and female inclusive player, the male and female ostracizing player, and two novel avatars, one male and one female. Each prime and target were paired once, and all 96 trials were uniquely randomized for each participant.

Results and Discussion

Ostraciser evaluation score. To test whether there was a bias favoring inclusive or ostracizing players, an ostraciser evaluation score measured the positivity bias for ostracizing players by subtracting the mean evaluation time (in milliseconds) for ostracizing-congruent¹ trials from the mean evaluation time for ostracizing-incongruent² trials. If exclusion caused victims to unselectively devalue ostracisers, they should be slower in evaluating ostracizing-congruent trials and faster in evaluating ostracizing-incongruent trials, resulting in a negative ostraciser evaluation score. The ostraciser evaluation score ($M = -1.60$ ms, $SE = 8.19$) did not differ from zero, $t(32) = 0.20$, $p = .85$, suggesting that there was no preference for the inclusive (Game 1) or ostracizing (Game 2) players. Using the same method of calculation, separate ostraciser evaluation scores were calculated for the ingroup (i.e., female) and outgroup (i.e., male) players from both games.

Ingroup preference score. Ingroup preference scores measured participants' relative preference for their own group relative to the outgroup. To calculate this score we measured participants' response times when categorizing the positive and negative words that were preceded by novel male and female primes. The mean evaluation time for ingroup-congruent³ trials was subtracted from the mean evaluation time for ingroup-incongruent⁴ trials. Ingroup evaluation scores ($M = 14.87$ ms, $SD = 53.60$, $SE = 9.33$) greater than zero reflected a relative preference for novel ingroup members compared to novel outgroup members.

Influence of ingroup preference on ostraciser evaluation. Because we used a within-subject design, two regression analyses examined the effects of ingroup preference on the evaluations of ingroup ostracizing players and outgroup ostracizing players. For evaluations of the ingroup (i.e., female) ostraciser, the model did account for a significant portion of the variance, $R^2 = .123$, $F(1,31) = 4.37$, $p = .04$. Ingroup preference covaried positively with ingroup-ostraciser evaluation ($\beta = 0.35$, $p < .05$). To determine whether victims who displayed high ingroup preference significantly preferred ingroup ostracisers, the analysis was repeated with ingroup evaluation centered at 1 SD above the mean. A significant intercept (intercept = 27.83, $p = .05$) suggested that ingroup ostracisers were evaluated more positively than ingroup includers by those who had a greater ingroup preference (see Figure 1). This supports our hypothesis that ostracism from members of a more valued group leads victims to develop positive inclinations toward the offenders. No significant intercept was found for participants with ingroup evaluation scores 1 SD below the mean. (Figure 1 about here)

Interestingly, for evaluations of the outgroup (i.e., male) ostraciser, the model did not account for significant variance, $R^2 = .017$, $F(1,31) = 0.55$, $p = .47$, suggesting that ingroup evaluation did not affect the relative preferences for male ostracisers and male includers.

Experiment 1 provides novel evidence that exclusion does not condition negative associations to ostracisers indiscriminately. Instead, the value of an ingroup moderates victim's evaluations, and ingroup excluders were found to be preferred to ingroup includers among victims who showed a stronger ingroup preference.

Although these findings are consistent with our hypotheses, there are limitations worth consideration. Foremost, our results relied on groups defined by gender. Previous exclusion studies have treated gender as a salient group cue (e.g., Lakin, Chartrand, & Arkin, 2008), and the female participants in Experiment 1 did show a pattern of preference for their own gender. However, gender is confounded with many social factors (e.g., affiliative appearance, Hess, Adams, & Kleck, 2009; dominance, Lorenzi-Cioldi, Eagly, & Stewart, 1995) that might affect preferences following exclusion.

The results of Experiment 1 should also be interpreted cautiously as our measure of group preference occurred after the exclusion manipulation. Just as a state of hunger accentuates preferences for more satiating foods (Campbell, 1956; Siep et al., 2009), we thought that a state of exclusion would better reveal existing group preferences. However, given that social exclusion may trigger a positive disposition toward novel interaction partners (e.g., Maner et al., 2007), the group preference measure in Experiment 1 may have merely indexed feelings of exclusion via a desire to connect with novel, ingroup others. As this is the first study to show that the evaluation of ostracisers is moderated by group value, it is important to replicate this effect with a less confounded group distinction, a measure of experienced exclusion, and separate indices of group preference and player preferences.

To eliminate the confounds associated with preexisting ingroup and outgroup distinctions, Experiment 2 created minimal groups in a laboratory setting. Previous research

has shown that creating arbitrary ingroup/outgroup distinctions produces strong cognitive and behavioral biases favoring one's own minimal group (e.g., DeSteno et al., 2004; Tajfel et al., 1971). The addition of a fully inclusive condition and a measure of experienced exclusion permitted us to examine the independence of group evaluation and feelings of exclusion. Two separate Go No-go Association Tasks measured participants' group value and ostraciser evaluations. As in Study 1, we measured group value after the ostracism manipulation to assess whether exclusion affected ingroup preferences. We expected that group preferences would be unaffected by the ostracism manipulation. Moreover, we hypothesized that evaluations of ostracisers would be moderated by ingroup evaluations—predicting that stronger preferences favoring a minimal group should be related to more positivity toward excluders from that group.

Experiment 2: Valued Nominal Groups Evoke Positivity Towards Ostracisers

In a between-subjects design, participants were either fully included, excluded by outgroup members, or excluded by ingroup members. Preference for the minimal ingroup was measured separately from evaluations of includers and excluders. We hypothesized that ingroup exclusion would increase ostraciser positivity compared to outgroup exclusion. Moreover, we predicted that ingroup-ostraciser positivity would increase as a function of participants' ingroup preference.

Method

Participants. Fifty-six undergraduate students (26 males; $M_{\text{age}} = 20.36$, $SD_{\text{age}} = 6.22$) participated for credit in a first-year psychology course.

Materials and procedures. Participants first completed a demographics questionnaire and a dot estimation task. Upon completion, each participant was ostensibly assigned to wear

either a red or blue colored shirt based on their dot estimation performance. In reality, shirt colors were randomly assigned. Similar to Experiment 1, participants played two consecutive computerized ball-tossing games; each was played with a new pair of ostensibly human players. Before playing the game, they were photographed and led to believe that other players would see their image during the game. In reality, the other players were computer controlled. Photographs of six female confederates wearing red and blue shirts were randomly selected to represent the other Cyberball players. By random assignment, approximately 40% of participants were outgroup excluded ($n = 21$), first included by same-color players and then ostracized by other-color players. Another 40% were ingroup excluded ($n = 21$), first included by other-color players and then ostracized by same-color players. The remaining participants ($n = 14$) were fully included by both a same-color pair and an other-color pair of players.

To measure the psychological threat caused by exclusion, participants completed a shortened version of the Needs Threat Scale (adapted from van Beest & Williams, 2006)⁵. Items were coded such that lower Needs Threat Scale scores indicated lower needs attainment (i.e., greater threat to needs). Because we used a shortened version of the scale—and because the full scale has been found to load heavily onto a single factor (Oaten et al., 2008)—we used an overall Need Threat Scale score in our analyses.

Two Go No-go Association Tasks (GNAT) were computer-administered following the method of Nosek and Banaji (2001). In the tasks, two categories appeared at the top of the screen and a single target stimulus appeared at the center of the screen for each trial. Participants were instructed to press the spacebar when the target stimulus matched one of the categories (i.e., Go trials). All other targets were to be ignored (i.e., No-go trials). In the first GNAT response times for each Go trial were recorded (modified from Nosek & Banai, 2001;

Experiment 5) and longer response windows were used to minimize errors and increase participants' familiarity with the GNAT task. In the second GNAT two shorter response windows were used, and accuracy rates for Go trials were recorded instead of response times (modified from Nosek & Banaji, 2001; Experiment 1). In both GNATs participants were instructed to respond to Go trials as quickly as possible.

The first GNAT measured preferences for novel ingroup members. Target stimuli consisted of 48 positive and negative words and 40 images of previously unseen people wearing red and blue shirts⁶. Target words were a set of 24 positive (e.g., beautiful, friendly, splendid, wonderful) and 24 negative (e.g., angry, gross, sickening, yucky) English words selected from previous GNAT studies (Nosek & Banaji, 2001). Each combination of word category (i.e., "Good" or "Bad") and image category (i.e., "Red Team" or "Blue Team") were presented as headings for four blocks of 48 trials each (12 Go image trials, 12 Go word trials, 12 No-go image trials, and 12 No-go word trials). The target stimuli were displayed for 750 milliseconds or until a response occurred.

The second GNAT measured preferences for the ostracizing and inclusive ingroup and outgroup Cyberball players. The target words were unchanged from the first GNAT. The target images consisted of ten images: four players from the previous ball-tossing games (wearing their respective shirt colors) and six previously unseen people, three wearing red shirts and three wearing blue shirts. The category heading of "Cyberball Player" was shown for both blocks of trials. The category heading of "Good" appeared in the first block and "Bad" appeared as the second heading. Nested in each block were two consecutively ordered sub-blocks with varying response windows (600 ms and 500 ms)⁷. Each nested block

consisted of 32 trials (8 Cyberball Player image trials, 12 non-player image trials, 6 category-relevant word trials, and 6 category-irrelevant word trials).

Results and Discussion

Manipulation check. To check that the two ostracism conditions were more threatening than the inclusion condition, all items of the shortened Need Threat Scale were combined ($\alpha = .76$) and the means were compared across the three treatment conditions. Needs were affected by the treatments, $F(2,53) = 13.29$, $p < .01$, $\eta_p^2 = .334$. Bonferroni-adjusted planned comparisons revealed that ingroup exclusion ($M = 3.44$, $SE = .19$) did not threaten needs more than outgroup exclusion ($M = 3.97$, $SE = .19$), $p = .15$. However, both exclusion conditions did threaten needs more than the fully included condition ($M = 4.96$, $SE = .23$), $ps \leq .01$. This suggests that the ostracism manipulation was successful in eliciting feelings of exclusion despite participants having been included in their first Cyberball game.

Ingroup preference. In the first GNAT, the critical Go trials were those depicting red or blue team members. Four participants' data could not be used due to a malfunction of the GNAT program, and two participants' data were removed from further analyses because they failed to correctly classify any red or blue team members in at least one block. The remaining participants ($n = 50$) were accurate at classifying red and blue team members ($M = 92.42\%$, $SD = 7.34\%$). Accuracy for the critical Go trials did not vary by treatment, $F(2,47) = 0.94$, $p = .40$, $\eta_p^2 = .039$. Response times to correct critical Go trials (i.e., red and blue team trials) were averaged into four variables consistent with the categories in each block: ingroup+good, ingroup+bad, outgroup+good, outgroup+bad.

A three-way mixed model ANOVA (image Target [ingroup / outgroup] $\times$ word Valence [+good / +bad] $\times$ Treatment [ingroup excluded / outgroup excluded / fully included]) was

conducted on response times to image targets. Analyses revealed a single main effect for Valence, $F(1, 47) = 18.09$, $p < .001$, $\eta_p^2 = .278$, that was qualified by a Valence $\times$ Target interaction, $F(1, 47) = 7.07$, $p = .01$, $\eta_p^2 = .131$. Follow-up paired comparisons confirmed that response times in the good context were faster for ingroup targets ($M = 475.14$, $SE = 6.38$) than outgroup targets ($M = 496.23$, $SE = 8.38$), $t(50) = 2.00$, $p = .05$. Response times in the bad context did not differ between the ingroup ($M = 471.20$, $SE = 5.64$) and outgroup targets ($M = 464.40$, $SE = 5.38$), $t(50) = 1.04$, $p = .30$. Importantly, Treatment did not affect response times, all $F_s < 1.8$, $p_s > .30$. Together, these analyses demonstrate that participants displayed an ingroup positivity-bias regardless of inclusion status.

A single ingroup preference score was calculated by subtracting reaction times to congruent trials⁸ from incongruent trials⁹ ($M = 27.89$, $SE = 10.24$). An ingroup preference score of zero indicates no evaluative preference for either the ingroup or the outgroup. The remaining analyses examined data from only the two excluded treatments ($n = 39$)¹⁰.

Player evaluation scores. Evaluations of the Cyberball Players were measured using d' , a signal detection measure that estimates the ease with which the Players were categorized in positive (good words) and negative (bad words) contexts¹¹. The d' measure simultaneously considers hits (correct classifications of players) and false alarms (incorrect classification of a non-player as a player). Although participants were instructed to discriminate players from Non-Players in the task, participants' correct classifications (i.e., hits) of inclusive players (Game 1) and the excluding players (Game 2) were measured separately. Four separate d' -prime measures were calculated: two measuring how easily the excluding players were categorized in the +good and +bad word blocks and another two measuring how easily the

inclusive players were categorized in the respective blocks. Each regression analysis used data from 20 outgroup excluded participants and 19 ingroup excluded participants.

Includer positivity was calculated by subtracting inclusive+bad d' scores from inclusive+good d' scores¹². Excluder positivity scores were similarly calculated. Positivity scores greater than zero indicate that a player was easier to classify in +good context and scores less than zero indicate that a player was easier to classify in the +bad context.

Inclusive player evaluations. The exclusion group variable was categorically coded (i.e., +1 ingroup exclusion, -1 outgroup exclusion). A regression analysis predicted includer positivity using exclusion group and ingroup preference. The model did not account for a significant portion of variance in ingroup preference, $R^2 = .07$, $F(3,35) = 0.94$, $p = .43$. There were no main effects for exclusion group or ingroup preference (β s $< |0.15|$, p s $\geq .37$), nor was there an interaction between exclusion group and ingroup preference ($\beta = -0.25$, $p = .18$). This suggests that neither the source of exclusion nor the magnitude to threatened needs affected participants' evaluations of inclusive players.

Excluding player evaluations. A hierarchical regression analysis predicted ostraciser positivity using exclusion group and ingroup preference. The model accounted for a significant portion of variance in ingroup preference, $R^2 = .32$, $F(3,35) = 5.57$, $p < .01$. Ostraciser positivity was unaffected by ingroup preference ($\beta = 0.18$, $p = .26$); however, participants excluded by the ingroup showed greater ostraciser positivity than those excluded by the outgroup, ($\beta = 0.31$, $p = .03$). The predicted interaction between group membership and ingroup preference emerged, ($\beta = 0.52$, $p < .01$; see Figure 2). We recentered the exclusion group variable at the ingroup (+1) and outgroup (-1) levels to examine the simple slopes and intercept. When excluded by the ingroup, ingroup preference scores positively covaried with

ostraciser positivity ($\beta = 0.70$, $p = .01$) and resulted in levels of ostraciser positivity significantly greater than zero (intercept = 0.91, $p = .01$). However, when excluded by the outgroup, ingroup preference scores negatively covaried with ostraciser positivity ($\beta = -0.34$, $p = .04$). (Figure 2 about here).

General Discussion

These findings are the first to show that victims' evaluative judgements of ostracisers are affected by shared group memberships. In Experiment 1, we tested whether includers and ostracisers were evaluated differently following exclusion. Contrary to previous assumptions that the pain of exclusion leads an excluded victim to perceive ostracisers as hostile and unlikable (e.g., Maner et al., 2007), we found that exclusion per se does not condition negative responses to ostracisers. Importantly, in Experiment 2 we manipulated group membership cues using shirt colors, leading participants to perceive themselves as a member of a nominal group. Consistent with previous nominal group research, participants showed a general preference for novel ingroup members, and crucially this ingroup preference occurred independent of feelings of exclusion. This suggests that ingroup preferences were unaffected by the inclusion/exclusion conditions. Our findings revealed that victims were more positive toward ingroup excluders, and we again showed that the ingroup preference further predicted positivity towards ingroup ostracisers.

One potential limitation of the present studies is that our measurement of ingroup evaluation occurred after the exclusion manipulation in both experiments. An alternative explanation for our findings might be that an individual difference variable such as the need for belongingness (Baumeister & Leary, 1995) increases positivity toward ingroups after social exclusion, and that this individual difference, not a pre-existing ingroup bias, drove

positivity toward ostracisers. There are almost certainly individual difference variables that affect a person's propensity to show ingroup bias; in the present experiments we found a great amount of variance in our group evaluation measures. However, if this alternative explanation is correct, it is not clear why evaluations of ostracisers improve whilst evaluations of inclusive others do not. In addition, ingroup preference did not differ between the excluded treatments and the included treatment in Experiment 2, suggesting that exclusion did not affect ingroup positivity. Most importantly, we demonstrated that ingroup ostracisers were more positively evaluated even controlling for the positivity bestowed by the ingroup preference. This means that even if our ingroup evaluation measure is confounded with individual difference measures, ostracisers from ingroups were still evaluated more positively than ostracisers from outgroups.

The present studies illustrate a need for exclusion research to consider the value of social relationships when measuring the psychological impact on victims. As with other exploitive acts, the milieu matters. The physical pain caused by an injury may endure, but the social consequences may sometimes be positive, depending on who inflicted the injury. In fact, exploitive physical harm is a common method for strengthening social bonds between victims and offenders (e.g., hazing). We contend that social pain is no different. If a valued friend gives us the cold shoulder or hurls an insult, we are more likely to ingratiate ourselves and seek out a cause for the act than we are to lash out aggressively. When social exploitation is perceived, the value of the malefactor is vital to deciding whether to punish or reconcile (Petersen et al., 2010).

Together with other recent studies that demonstrate differences in the effects of ingroup and outgroup exclusion (e.g., Bernstein et al., 2010), the present findings further reveal that

the psychological effects of ostracism depend on who is excluding whom. Although Bernstein and colleagues (2010) showed that exclusion from trivial groups was less psychologically threatening than ostracism from more essentialized groups, we found that exclusion affected evaluations of ostracisers regardless of whether it was a valued essentialized group (i.e., gender) or a valued trivial (i.e., shirt color) group. In addition, Experiment 2 demonstrated that such ostraciser positivity effects were independent of psychological threat—suggesting that the cognitive processes that guide social evaluations following an exploitive act are independent of the act’s aversiveness.

From a broader perspective, the current results may help to explain conflicting findings regarding why victims of exclusion are sometimes prosocial and sometimes not. Previous studies examining post-exclusion behaviors have rarely accounted for shared group memberships, and none, as far as we know, have measured the value of the group as a factor in predicting reactions to exclusion. Post-ostracism derogation might be expected toward members of low-valued groups, as affiliation with such parties is potentially prone to stigmatization or ostracism from a more valued group. The present experiments make clear that social processes like ingroup value may moderate the social consequences of ostracism and other forms of rejection.

In fact, there is good reason to think that these implicit preferences should affect social behaviors following exclusion. Previous studies have demonstrated that social exclusion decreases self-control (Twenge, Cantanese, & Baumeister, 2002). This depleted inhibition, coupled with the urgency to resolve the threat, likely decreases a victims' opportunities to deliberate on their preferences—leading to ideal conditions under which implicit, automatically activated attitudes might guide behavior (Fazio & Olson, 2003). Future research will need to

establish how preferences for ostracisers translate to reconciliatory behavior. For now, our findings do suggest that social exclusion from a valued group endears ostracisers to their victims.

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List of Figures

Figure 1. Greater ingroup (i.e., female) preference predicted more positive evaluations of ingroup ostracisers (compared to inclusive ingroup members). Participants with high ingroup preference scores (+1 SD) showed significant positivity toward ingroup ostracisers ($\dagger p = .05$). Ingroup ostraciser evaluation scores greater than zero represent greater positivity toward ostracizing players than inclusive players. Scores less than zero represent greater positivity toward inclusive players than ostracizing players. Note: $*p < .05$

Figure 2. Ingroup preference scores positively covaried with ingroup ostraciser positivity and negatively covaried with outgroup ostraciser positivity. Ingroup (i.e., same shirt color) ostracisers were rated more favorably than outgroup (i.e., other shirt color) ostracisers. Ingroup-ostracized participants with a high ingroup preference (+1 SD) showed levels of ostraciser positivity significantly greater than zero. Overall, low ingroup preference predicted relatively more positivity toward outgroup ostracisers and less positivity toward ingroup ostracisers, however, there was no evidence that these values differed from zero. Ostraciser positivity scores greater than zero represent stronger positive evaluations; values less than zero represent stronger negative evaluations. Note: $*p < .05$

Footnotes

¹ (ostracizing_player + positive_target_words) and (inclusive_player + negative_target_words)

² (inclusive_player + positive_target_words) and (ostracizing_player + negative_target_words)

³ (female_primes + positive_target_words) and (male_primes + negative_target_words)

⁴ (male_primes + positive_target_words) and (female_primes + negative_target_words)

⁵ Two items measured each of four needs: belongingness, control, meaningful existence, and self-esteem.

⁶ The images used to depict previously unseen red and blue team members were selected from a database of 200 photographs of undergraduate students wearing red and blue shirts. A set of 20 red shirt and 20 blue shirt photographs were selected from the database such that each set was matched for gender and ethnicity. All player and non-player photographs were fixed to the same height, width and color depth (190 x 215 x 32 bit, stored as bitmap images) and were similarly composed.

⁷ Two response windows were used to gradually increase the difficulty of the task. These response windows are short enough to produce sufficient errors for d-prime analyses but not so short as participants become frustrated with the task (for further discussion see Nosek & Banaji, 2001).

⁸ (ingroup + good) and (outgroup + bad)

⁹ (ingroup + bad) and (outgroup + good)

¹⁰ A 2 (Gender) × 2 (Treatment [ingroup excluded / outgroup excluded]) ANOVA confirmed that ingroup bias was not affected by exclusion treatment, $F(1,35) = 0.18$, $p = .68$. There was also no main effect of Gender, $F(1,35) = 0.82$, $p = .37$, or a Gender × Treatment interaction, $F(1,35) = 0.71$, $p = .41$. For these reasons gender was not considered in further analyses.

¹¹ Due to the smaller response windows (600ms and 500ms) in the second GNAT, the percent of correctly categorized “Go” trials was low ($M = 65.61\%$, $SE = 2.62\%$) and was found to vary by condition. In such cases analyses of accuracy data from the GNAT is preferential to analysing response latencies (Nosek & Banaji, 2001).

¹² Both includer positivity and excluder positivity scores were normally distributed (skew < |0.5|). Combining the +good and +bad d' scores as ratios produce more skewed distributions, but when normalized the ratio scores produce similar regression results.