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Abstract

Social belonging is an essential human need. Belonging to social groups serves an important role in shaping our social identities. Nonetheless, research indicates that exclusion by ingroup and outgroup members seems equally aversive. The current studies test the hypothesis that unlike more trivial groups (e.g., smoking or computer preferences), highly essentialized groups may lead to differential effects of ingroup versus outgroup rejection. Consistent with this, exclusion and inclusion by racial ingroup members (relative to racial outgroup members) exacerbated the sting of rejection and the glow of inclusion (Study 1). In a second study, direct manipulations of essentialist beliefs about ingroups and outgroups (i.e., political affiliations) led to the same results. These results offer a novel demonstration that essentialized ingroup–outgroup distinctions enhance the sting of social exclusion and the positivity of social inclusion.

Keywords

social exclusion, intergroup relations, ingroup/outgroup, threat, essentialism

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The innate drive to affiliate with others is critical to human survival and well-being (Baumeister & Leary, 1995). The ability to establish and maintain social connections has numerous benefits: Groups provide social support, access to important resources, protection from environmental dangers, and access to potential mates (Buss, 1990, 1991; Duncan et al., 2007). Given these benefits, it should come as no surprise that belonging to social groups is of the utmost importance to virtually all of us. Indeed, Baumeister and Leary (1995) argue that it is so vital to our survival that it counts as one of our basic human needs, along with sustenance and shelter.

Because of the importance of belonging, a great deal of research has focused on reactions to being included and excluded by social groups. The results of this ever-growing line of inquiry have demonstrated a myriad of reactions to social rejection. Many responses appear maladaptive, such as increased aggression (Leary, Twenge, & Quinlivan, 2006), reduced intelligent thought (Baumeister, Twenge, & Nuss, 2002), and impaired self-regulation (Baumeister, DeWall, Ciarocco, & Twenge, 2005), whereas other reactions appear more prosocial and beneficial in nature, such as greater attention to social cues signaling potential reaffiliation (e.g., Bernstein, Sacco, Brown, Young, & Claypool, 2010; Bernstein, Young, Brown,

Sacco, & Claypool, 2008; Gardner, Pickett, & Brewer, 2000; Lakin, Chartrand, & Arkin, 2008; Pickett, Gardner, & Knowles, 2004).

Despite the manifold downstream responses to social rejection, one clear and consistent result emerges: People have a strong, negative, visceral emotional reaction to being socially rejected. Numerous manipulations of social exclusion have been shown to quickly and uniformly induce negative moods (Baumeister & Leary, 1995; K. D. Williams, 2007; see Blackhart, Nelson, Knowles, & Baumeister, 2009, for an alternative account). Moreover, rejection elicits decrements in the fulfillment of a constellation of factors that K. D. Williams and colleagues refer to as four “basic needs”: belongingness, self-esteem, perceptions of control over the environment, and perceptions of leading a meaningful existence (e.g., K. D. Williams & Zadro, 2005). Indeed, across multiple studies, ostracism has

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been found to elicit reductions in all of these basic needs with remarkable consistency (K. D. Williams, 2007). Moreover, such rejection-induced decrements in these basic needs are surprisingly resilient to moderation by individual differences (see K. D. Williams, 2007). For example, excluded persons report decreased positive mood, increased negative mood, decreased fulfillment of their basic needs, and/or increased reports of pain regardless of their trait self-esteem (Leary, Haupt, Strausser, & Chokel, 1998), sex (K. D. Williams & Sommer, 1997), or level of trait social anxiety (Zadro, Boland, & Richardson, 2006). Everyone, it seems, is sensitive to social rejection.

Perhaps more remarkable is that these effects on mood and need fulfillment appear equally strong, regardless of the rejecting source. For example, K. D. Williams, Cheung, and Choi (2000) found that responses to rejection did not differ based on ingroup or outgroup membership. In this work, PC and Mac users were rejected by computer users of either the same or competing computer brand. Regardless, shared or unshared computer preference did not qualify the effects of rejection. More recently, Smith and Williams (2004) replicated similar effects with smokers and nonsmokers. Even rejection by a nonsocial actor appears to have the same effects as rejection by a social actor. Specifically, Zadro, Williams, and Richardson (2004) found that participants' basic needs after being rejected by fellow players in a computerized game were just as threatened regardless of whether they believed they were playing with other participants who chose to reject them, with confederates who were scripted to reject them, or even with a computer programmed to reject them. In all cases, the negative emotional consequences of social rejection are experienced as equally aversive, regardless of the nature of the rejecting party.

In a particularly surprising display of the apparent invariance of reactions to rejection, Gonsalkorale and Williams (2007) found that being rejected by a hated outgroup felt just as negative (i.e., had the same deleterious effects on mood and basic needs) as being rejected by a positively evaluated ingroup. In this research, White Australian participants who identified with either the Labor party or their main political rival, the Liberal party, were led to believe they were playing a computerized ball-toss game (known as Cyberball) with two other participants, who in actuality were computer-controlled avatars. The computer randomly assigned the other "participants" as members of the Labor or Liberal party (e.g., an ingroup or outgroup, depending on participants' party affiliation), or the Australian KKK, an outgroup despised by the majority of participants regardless of political affiliation. Participants were subsequently included or excluded during the game, and at the conclusion of the game rated the fulfillment of the four basic needs as well as their mood. Surprisingly, regardless of who the excluding party was, participants' responses were equivalent; rejection was equally painful regardless of whether the rejection came from an ingroup, an outgroup, or even a despised outgroup. Perhaps Gonsalkorale and Williams's results are most remarkable because the groups they employed are almost

certainly more personally valued group distinctions than those applied in previous work.

In a comprehensive model focused on responses to social rejection, K. D. Williams (2007) argues that immediate reactions to social exclusion are reflexive and virtually immune to moderating influences. Williams asserts that this reflexive response to rejection is due to the extreme importance of actual or possible social rejection. Given the central nature of group living to human survival and success (Baumeister & Leary, 1995), humans must be keenly aware of threats to belonging (e.g., Haselton & Funder, 2006; Pickett & Gardner, 2005), and as such, the awareness of potential rejection by an outgroup or even by disliked others can be sufficient to elicit the immediate, reflexive, and undifferentiated responses to rejection. From this perspective, because rejection is such a potentially dangerous threat, the immediate flash of negativity and insult to basic needs are equivalently strong, regardless of who is doing the rejection.

Though the failure to find moderation of the immediate pain of rejection by who does the rejecting seems congenial with Williams's model suggesting the importance of an immediate, reflexive response to social rejection (see also Eisenberger & Lieberman, 2005), these findings do seem counterintuitive when understood in the context of the intergroup literature. One of the best replicated effects in social psychology is ingroup bias, or more specifically, ingroup favoritism (e.g., Brewer & Kramer, 1985; Tajfel, 1982; Tajfel & Turner, 1986; see Brewer & Brown, 1998). Put simply, we tend to grant more resources to ingroup members (e.g., Tajfel, Billig, Bundy, & Flament, 1971), regard their work as superior (Ferguson & Kelley, 1964), offer them help more readily (Levine, Cassidy, Brazier, & Reicher, 2002), and engage in greater individuation when processing information about them (Fiske & Neuberg, 1990). Outgroup members, on the other hand, are less accurately remembered (Bernstein, Young, & Hugenberg, 2007), elicit more avoidance behavior (Shah, Brazy, & Higgins, 2004), and are deemed less trustworthy (Voci, 2006) than comparable ingroup members. Even simple pronouns denoting ingroup membership are evaluated more positively than are pronouns denoting the outgroup (Perdue, Dovidio, Gurtman, & Tyler, 1990).

Given this strong and ubiquitous ingroup bias, there is good reason to believe that rejection by valued ingroups should be more painful than rejection by outgroups. Nonetheless, evidence supporting this claim has not been forthcoming. It is possible that this lack of evidence indicates that no relation between ingroup or outgroup status of a rejecter and the negativity of the rejection experience actually exists. Alternately, it may be a result of the types of groups that have been used to examine such relations. Whereas past research has used flexible and permeable groups of low social relevance (e.g., computer preferences, smoking preferences, political preferences), perhaps more *maximal groups* would yield differential results.

Maximal Groups: Essentialism

One possible explanation for why past research has failed to moderate the experience of rejection via ingroup and outgroup distinctions may be that the groups employed in this research were not impactful enough for participants. Indeed, attitudinal groups such as computer and smoking preferences may be relatively mundane group distinctions. Even political parties, although clearly stronger affiliations, may lack the punch yielded by more chronically meaningful groups (Brewer, 2004). On the contrary, it may be that more maximal groups are needed to qualify the effects of rejection. Instead of relying on groups that are based on relatively arbitrary preferences (e.g., computer preferences) or that appear highly permeable (e.g., political affiliations), we propose that subjectively important groups, that appear impermeable, that create a shared group fate, and that appear to have a clear group essence will be most likely to moderate the experience of rejection. In short, groups that are (a) ubiquitous in daily life and functionally affect the distribution of resources and (b) seen as biologically essentialized should yield more powerful effects than the attitudinal groups used in past work.

Thus, we predict that perceptions of groups' *essentialism* are particularly important. Essentialized groups are those viewed as having an underlying structure that is immutable, inborn, deeply rooted, natural, discrete, and informative about people (Bastian & Haslam, 2006, 2007; Haslam, Bain, Douge, Lee, & Bastian, 2005; Haslam, Bastian, Bain, & Kashima, 2006; Rothbart & Taylor, 1992). Essentialized groups are believed to have a biological or genetic component (Keller, 2005) rather than being socially constructed (Haslam et al., 2005).

These perceptions of essentialism have important implications for intergroup relations. Perceiving an outgroup as essentialized is one of the core components of prejudice (Allport, 1954; Haslam, Rothschild, & Ernst, 2002; Keller, 2005) and acts as a means of justifying inequalities between groups (Jost & Banaji, 1994; Sidanius & Pratto, 1999). As beliefs about the essential nature of a group increase, attention to stereotype consistent as opposed to inconsistent information increases (Bastian & Haslam, 2007) along with endorsement of those stereotypes (Bastian & Haslam, 2006). Other research has shown that essentialized outgroups are actually seen as less human; they are denied human emotions only attributed to ingroup members (Leyens et al., 2000; Leyens et al., 2001). With respect to the essence of humanness, people perceive themselves as more essentially human than their peers (Haslam et al., 2005).

Thus, we propose that previous research has not found a link between ingroup or outgroup status and the intensity of rejection experience because it has not used these essentialized maximal groups.

The Current Research

Using this logic, we hypothesized that being rejected by a member of an important and essentialized ingroup should feel

worse (i.e., more strongly threaten basic psychological needs) than being rejected by an outgroup member sharing those same characteristics. Conversely, being included by a maximal ingroup member should feel better (i.e., more strongly fulfill basic needs) than being included by a maximal outgroup member. In two studies, we provide novel evidence that the positivity of inclusion and the negativity of exclusion are more potent when they stem from these maximal ingroup members.

Study 1 manipulates the race of confederates who include or exclude participants with the hypothesis that same-race inclusion and exclusion would show exacerbated effects relative to cross-race inclusion and exclusion. We relied here on race because there is extensive evidence that race in the United States is both an important and an essentialized ingroup–outgroup distinction.

First, race is important. Race functionally determines the allocation of scarce resources in the United States, such as educational resources (Chubb & Loveless, 2002), health resources (e.g., American Medical Association, 1990), and hiring decisions (Dovidio & Gaertner, 2000). Race affects who one befriends (e.g., Abel & Sahinkaya, 1962; DuBois & Hirsch, 1990), where one lives (e.g., Kiel & Zabel, 1996), and who one lives among (e.g., Clark, 1986). Second, race is essentialized. Indeed, people in the United States commonly believe that race has a biological basis (Smedley & Smedley, 2005). Such essentialized social categories appear to exacerbate the effects of stereotyping (Hoffman & Hurst, 1990), prejudice, and other important intergroup effects (e.g., Brewer, 1986). For example, M. J. Williams and Eberhardt (2008) found that conceiving of racial group membership as being biologically essentialized led to increased approval of racial inequity and, perhaps more important for the current investigation, led to a disinterest in possible interactions with racial outgroup members. They argue that individuals see racial outgroup members as irrelevant to the self and unworthy of affiliation when the race of the outgroup members is seen as essentialized.

As such, in our first study, we manipulated the race of avatars in a Cyberball ball-tossing game. In this game, participants played with either racial ingroup members or racial outgroup members and were either accepted or rejected by those computerized avatars. This allowed us to independently manipulate whether participants experienced social inclusion or exclusion brought about by members of a racial ingroup or a racial outgroup. If race is a maximal group, and such ingroup–outgroup distinctions affect the experience of being rejected and accepted, rejection by a racial ingroup member should hurt more than rejection by a racial outgroup member. Similarly, acceptance by a racial ingroup member should feel more positive than acceptance by a racial outgroup member. In short, we predict that manipulating this maximal ingroup and outgroup status (i.e., avatar race) should elicit the Ingroup/Outgroup \times Acceptance/Rejection effects that have not been observed in previous research. Being accepted by an important and essentialized ingroup would feel better, and being rejected by an

important and essentialized ingroup would feel worse, than identical treatment by an outgroup member.

Our second study tested a stronger version of our maximal groups hypothesis by directly manipulating the perceived essentialized nature of ingroups and outgroups. Taking a page from Gonsalkorale and Williams (2007), American participants played a game of Cyberball ostensibly with members of their own political party (e.g., Democrats) or the competing political party (e.g., Republican) and were either accepted or rejected by those computerized avatars. Before participants played the game, however, they read a bogus news article that manipulated participants' perceptions of the essentialized nature of political parties. Participants in the maximal condition were led to believe that political affiliations were unchanging, biologically based, and affected multiple dimensions of life. Participants in the control condition, however, were led to believe that political affiliations were diffuse and malleable. We predicted that in the control condition, only a main effect of social rejection should occur, replicating Gonsalkorale and Williams. In the maximal condition, however, we predicted that we would find the Ingroup/Outgroup \times Rejection/Acceptance interaction that has not been seen in previous research.

Study 1

In Study 1, White American participants engaged in a Cyberball computerized ball-tossing game. In this game participants were unwittingly randomly assigned to be included or excluded by two other "participants" who appeared to be playing the game (in actuality, these "participants" were computer-controlled avatars). Participants saw digitized photographs of the other two "participants" and were led to believe these two fellow players could also see a picture of the participant. Importantly, the race of the avatars was manipulated on a between-subjects basis: Some participants believed they were playing with same-race individuals (i.e., White participants saw two White faces), whereas the remaining participants believed they were playing with other-race individuals (i.e., White participants saw two Black faces). During the course of the game, participants were either included or excluded by the avatars (i.e., thrown the ball consistently or not, respectively). After completing the game, participants responded to a questionnaire assessing fulfillment of their basic needs; they were then thanked and debriefed.

We hypothesized that although rejection by a racial outgroup member would still be experienced as negative (K. D. Williams, 2007), rejection by a racial ingroup member should hurt even more. Conversely, while acceptance by a racial outgroup member should feel good and should fulfill basic belongingness needs, we hypothesized that acceptance by a racial ingroup member would feel even better still. Unlike the categories of PC user, smoker, or political party, race is highly essentialized. In short, racial distinctions in the United States are maximal groups, an ingroup-outgroup distinction we predict should moderate the effects of social inclusion and exclusion on mood and basic belongingness needs.

Method

Participants and design. Seventy-three (49 female) White American undergraduates participated for partial course credit.¹ A 2 (inclusionary status: exclusion, inclusion) \times 2 (avatar race: same race, other race) between-subjects design was employed. Participants' self-reported "basic needs" (K. D. Williams, 2007; K. D. Williams & Zadro, 2005) were used as a dependent measure.

Materials. The Basic Needs Questionnaire, adapted from K. D. Williams et al. (2000), poses a series of questions designed to assess four basic social needs that past research has reliably shown to be threatened by experiences of exclusion (e.g., Eisenberger, Lieberman, & Williams, 2003; K. D. Williams et al., 2000; Zadro et al., 2004). Specifically, after exclusion experiences, participants reliably report lower levels of belonging, lower perceived control over their environment, lowered self-esteem, and the belief that they lead a less meaningful existence (for a review, see K. D. Williams, 2007). The questionnaire includes 16 items assessing perceived fulfillment of these four needs (e.g., "I felt disconnected," "I felt I had control over the situation," "I felt liked," "I felt meaningless"). Participants responded to each of the 16 questions using a 5-point Likert-type scale, scored such that higher numbers indicated more fulfillment of the respective need (i.e., higher numbers indicate greater experience of belonging, higher self-esteem, etc.).

Procedure. Participants entered the laboratory and were escorted to private cubicles equipped with a computer. After providing informed consent, participants were instructed that they would participate in a study of reactions to online communications and of mental visualization abilities. Participants were led to believe that because this study was being conducted simultaneously by multiple departments at the university, they would be playing with other university students located throughout the campus. In reality, these other "participants" were simply computer-controlled avatars. Participants were further instructed that they would be able to see a photograph of the two other participants with whom they were playing during the game itself and that the other two participants would be able to see a picture of them. This was done so the race of the avatars could be manipulated. To facilitate the cover story, participants were asked to stand against a wall while the experimenter took a digital photograph of them, which the experimenter then ostensibly uploaded to the computer network before the start of the game. To further bolster the cover story, the experimenter took multiple pictures of participants to ensure the other "participants" would be able to clearly see the photograph. Furthermore, participants were told that if they happened to recognize either of the two people on the computer screen during the game, they should make note of it and tell the experimenter upon completing the study. In actuality, participants' photographs were not uploaded onto a computer network and were immediately deleted upon completion of the experiment; participants' pictures were taken solely to enhance the plausibility of the cover story. Because of the detailed nature

of the cover story, the two experimenters carefully followed the same script.²

After participants had their picture taken, each was seated in an individual cubicle and was instructed to begin the computer-based portion of the experiment (i.e., the Cyberball ball-tossing game). After completing a series of filler questions supposedly measuring “mental visualization” capabilities, participants were directed via the computer to a screen informing them that they would play Cyberball, an Internet-based ball-tossing game ostensibly designed to help people hone their mental visualization skills. Participants were told they would be represented by an animated hand at the bottom of the screen and that the other “participants” would be represented by animated figures on the left and right sides of the screen, respectively. They were told that whenever they were thrown the ball, they could click, using the mouse, on one of the other two players to toss them the virtual ball. On a between-subjects basis, participants saw either two White faces or two Black faces as fellow players. All participants were instructed to mentally visualize their experience during the game. Finally, participants were randomly assigned to either receive the ball roughly one third of the time (inclusion condition) or to receive the ball only twice at the beginning of the game and then never again for the remaining 40 throws (exclusion condition).

Upon completing the game, participants completed the Basic Needs Questionnaire and provided basic demographic information. Upon completion of this ball-tossing task, participants exited their cubicles, were brought to a separate room, were given a thorough debriefing, and were thanked for their participation.

Results and Discussion

Consistent with past research, it was expected that social exclusion would threaten individuals’ basic needs, whereas social inclusion would satisfy the needs. Our prediction, however, was that this main effect of inclusionary status would be qualified by an interaction with the ingroup and outgroup status of the avatars. Inclusion by racial ingroup members should bolster individuals’ basic needs more than being included by a racial outgroup member; conversely, exclusion by a racial ingroup member should lower basic needs more than exclusion by a racial outgroup member. Thus, in line with K. D. Williams’s (2007) argument, we hypothesized that inclusion or exclusion by outgroup members would still affect basic needs; however, we hypothesized that these effects would be exacerbated by a shared maximal ingroup membership.

To test this hypothesis, we first calculated each of the four basic needs (belongingness, perceived control, self-esteem, meaningful existence) separately for each participant. Because these four basic needs were highly interrelated ($\alpha = .94$), we averaged them together to form a composite Basic Needs Score,³ which was submitted to a 2 (inclusionary status: exclusion vs. inclusion) \times 2 (avatar race: same race vs. other race) between-subjects ANOVA. This revealed a significant main

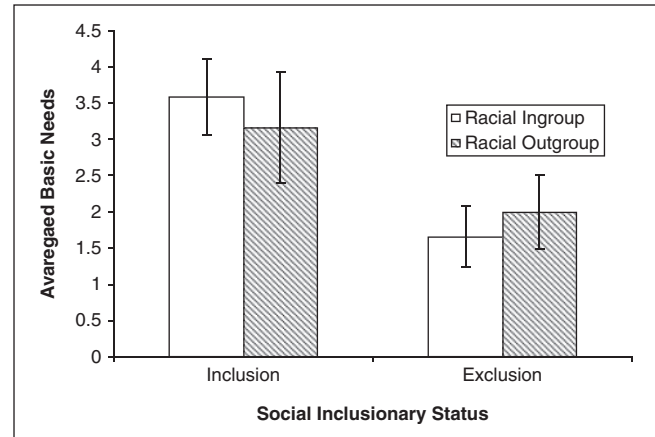


Figure 1. The effect of inclusion or exclusion on basic needs as a function of the ingroup or outgroup status of the confederates. Basic needs were measured in Study 1 on a 1-5 scale. Error bars represent standard deviations.

effect of inclusionary status, $F(1, 69) = 135.42, p < .001, \eta_p^2 = .66$, such that included participants ($M = 3.38, SD = .091$) had more fulfilled basic needs than did excluded participants ($M = 1.84, SD = .098$). This main effect was qualified by our predicted Inclusionary Status \times Avatar Race interaction, $F(1, 69) = 8.12, p = .006, \eta_p^2 = .115$ (see Figure 1). Simple effects analyses revealed that participants included by fellow ingroup members ($M = 3.60, SD = .53$) had significantly more satisfied basic needs than did participants included by racial outgroup members ($M = 3.17, SD = .76$), $t(37) = 2.32, p = .023, d = .67$. Among excluded participants, this pattern was reversed; being excluded by a racial ingroup ($M = 1.66, SD = .42$) felt marginally worse than being excluded by a racial outgroup ($M = 1.99, SD = .51$), $t(32) = 1.73, p = .088, d = .72$.

These results offer clear initial evidence in support of our main hypothesis: The effects of exclusion and inclusion on individuals’ basic needs are moderated by the racial ingroup or outgroup status of those responsible for the exclusion or inclusion. Although exclusion always hurts, it appears to hurt somewhat less when it comes from a racial outgroup. Conversely, the experience of inclusion is always good, but it is experienced as especially positive when it comes from a racial ingroup. Past research and theory have indicated that initial reactions to social exclusion and inclusion on this same index of basic belongingness needs appear unconditionally automatic and thus insensitive to moderation (e.g., K. D. Williams, 2007). However, the current results suggest that when accepters or rejecters are members of essentialized ingroups, the subjective experience may be magnified, for better and worse.

Although Study 1 provides novel evidence of moderation of the basic needs based on the racial ingroup or outgroup membership of others who exclude or include participants, they do not clarify why race serves as a moderator of these effects. Indeed, as it was used in Study 1, race likely confounds multiple psychological phenomena. Although it is an ingroup–outgroup

distinction, it is also confounded with group power or status (the ingroup here was also the high-status racial group), with the frequency of the groups (Whites are more frequent than Blacks in the United States), with preexisting cultural stereotypes, and with culturally consensual prejudices. Although we hypothesize that the effects are driven by the essentialized nature of the categories, Study 1 does not clearly demonstrate this. Second, given that to our knowledge this is the first study to show an Inclusionary Status \times Group interaction, it seems important to replicate this phenomenon with a different ingroup–outgroup distinction. Study 2 was created to address both of these concerns.

Study 2

In Study 2, we directly manipulated participants' perceptions of the essentialized nature of political affiliations. Politically partisan American participants were then included or excluded during a Cyberball game by members of their own political party (e.g., Democrats) or by members of the competing political party (e.g., Republicans).

Employing a direct manipulation of the essentialized nature of political affiliations affords multiple benefits. First, political affiliation is the same category distinction used in Gonsalkorale and Williams (2007), who found that group status did not moderate the effects of social exclusion. Thus, if as we predict, Gonsalkorale and Williams found null results because participants believed this group distinction to be unimportant and malleable, we should replicate that null in our control (unessentialized) condition. However, in our maximal condition, we should replicate the Inclusionary Status \times Group interaction observed in Study 1. Moreover, such a three-way interaction would be very difficult to explain via any preexisting status differences, frequency differences, or stereotypes about the political parties. Instead, if the Inclusionary Status \times Ingroup/Outgroup interaction occurs only in the maximal condition, not in the control condition (wherein political affiliation is believed to have no essentialized basis); this would provide direct support for our maximal group hypothesis.

Method

Participants and design. One-hundred and thirty-eight (61 female) American undergraduates participated for partial course credit. One-hundred and twenty-eight of the participants were White, one was Black, three were Asian, four were Hispanic, and two identified as Other. This experiment employed a 2 (essentialism: high, low) \times 2 (inclusionary status: exclusion, inclusion) \times 2 (group status: ingroup, outgroup) between-subjects design. Participants' self-reported "basic needs" again served as our primary dependent measure.⁴

Materials. To manipulate perceptions of the essentialism of political parties, two fake newspaper articles were designed. In the maximal condition, political affiliation was described

as a social group that is stable and unchanging. Participants were told: "Members of political parties share deep-seated attitudes, and although someone may occasionally vote for a candidate of a different party, political affiliation tends to be a life-long thing," and "Political tendencies are like being left-handed or right-handed—you're born feeling more natural using one hand or the other." Over the course of the article, it was clearly asserted that political affiliation is far more ingrained than was previously believed. In contrast, the control condition (low essentialism) manipulation took the opposite stance, indicating that political affiliation is highly mutable and has no biological basis.⁵

Procedure. Participants entered the laboratory and were escorted to private cubicles equipped with a computer. After providing informed consent, participants were instructed that they would participate in two separate tasks, one on memory and one on reactions to online communications and of mental visualization abilities. Participants were first asked to read one of the two fake newspaper articles via the computer and were told they would be asked to recall five facts from the article following the reading task. After reading the articles and performing the memory task, they were directed to the second portion of the study, which followed the procedure of Study 1 with two exceptions: First during the mental visualization questionnaire, which is administered before Cyberball and is used as part of the cover story, participants were asked about their political affiliation. Second, in Study 1, the avatars in Cyberball were both White, but this time, they were identified as being a member of either the Democratic or Republican party via a corresponding party symbol appearing next to the face of the avatar (i.e., a blue donkey is the symbol of the Democratic party and a red elephant is the symbol of the Republican party). To account for this additional information, participants were told that some information would be provided next to each person's face but were not specifically told why the information was given. At the conclusion of the study, political affiliation was collected along with other demographic information. All other procedures were identical to Study 1.

Results and Discussion

We hypothesized that for participants for whom political groups were manipulated to be perceived as being low in essentialism (control condition), exclusion by these groups should decrease basic needs whereas inclusion should increase them, as shown in all previous research. However, for those in the maximal condition (highly essentialized), we predicted that exclusion should feel worse for ingroups than for outgroups whereas inclusion should feel better for ingroups than for outgroups.

In the same procedure as our initial studies, we formed a composite average of the four basic needs ($\alpha = .94$) and subjected these scores to a 2 (essentialism: high, low) \times 2 (inclusionary status: exclusion, inclusion) \times 2 (group status: ingroup, outgroup) between-subjects ANOVA with participants'

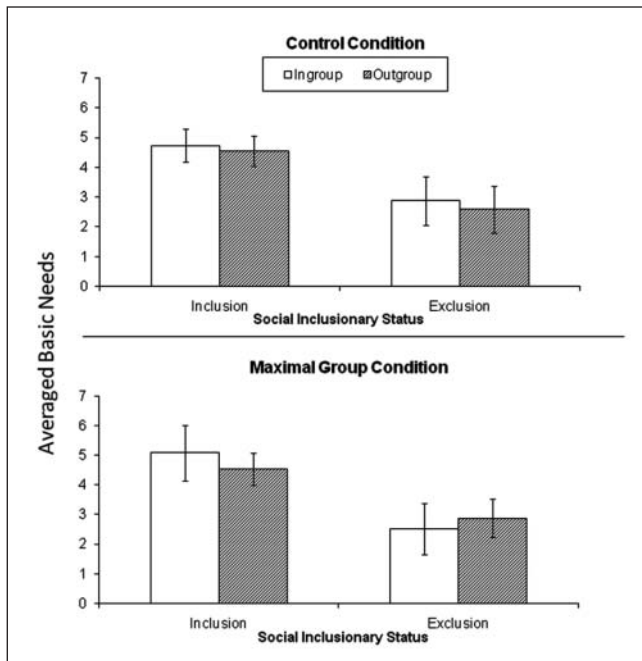


Figure 2. The effect of inclusion or exclusion on basic needs as a function of the ingroup or outgroup status of the confederates and whether the group status was seen as the maximal condition (bottom panel) or the control condition (top panel). Basic needs were measured in Study 2 on a 1-7 scale. Error bars represent standard deviations.

composite basic needs score as the dependent measure. This revealed the predicted three-way interaction among essentialism, inclusionary status, and avatar's group, $F(1, 130) = 4.28$, $p = .04$, $\eta_p^2 = .03$. We decomposed this three-way interaction across the essentialism variable into two 2 (inclusionary status: exclusion, inclusion) \times 2 (group status: ingroup, outgroup), one at each level of essentialism. Among participants in the control condition, only a main effect of inclusionary status was present, $F(1, 62) = 125.72$, $p < .001$, $\eta_p^2 = .67$; included individuals ($M = 4.66$, $SD = .54$) had more satisfied basic needs than excluded individuals ($M = 2.75$, $SD = .81$; see Figure 2, top panel). Neither a main effect of group status ($p > .15$) nor the interaction between group status and inclusionary status ($p > .76$) was present. This directly replicates the findings from Gonsalkorale and Williams (2007) as well as previous studies, all showing that group status does not moderate the powerful effects of social exclusion.

However, for participants in the maximal group condition (political parties are essentialized), a different story emerged. Though the same significant main effect of inclusionary status was present, $F(1, 68) = 142.69$, $p < .001$, $\eta_p^2 = .68$, the predicted interaction between inclusionary status and group status was also significant, $F(1, 68) = 6.66$, $p = .012$, $\eta_p^2 = .09$ (see Figure 2, bottom panel). Simple effect analyses revealed that participants included by fellow ingroup members ($M = 5.09$, $SD = .93$) had more satisfied basic needs than those included by outgroup

members ($M = 4.54$, $SD = .53$; $p = .033$, $d = .72$). Participants excluded by ingroup members ($M = 2.52$, $SD = .86$) felt worse than those excluded by outgroup members ($M = 2.89$, $SD = .64$) though this did not reach conventional significance ($p = .15$). Thus, as predicted, group status did moderate the effects of social exclusion or inclusion on individuals' basic needs but only under circumstances where individuals believed the groups to which they belong are essentialized.

General Discussion

In two studies, we found support for the hypothesis that the effect of social exclusion and inclusion on individuals' basic needs is moderated by the ingroup and outgroup relationship between the interacting parties, but only for groups considered essentialized. Inclusion is more fulfilling to one's basic belongingness needs when it comes from an ingroup as opposed to an outgroup member, and exclusion by an ingroup feels worse than exclusion by an outgroup. Although we replicated the previous literature indicating that rejection threatens basic needs and inclusion fulfills them, these effects were moderated by the ingroup or outgroup status of participants' ostensible interaction partners. These findings are consistent with our hypothesis and, to the best of our knowledge, represent the first demonstration that the ingroup and outgroup relation between interactants moderates the immediate effects of rejection on belongingness need fulfillment.

Moreover, in Study 2, we manipulated perceptions of essentialism directly, leading participants to believe political parties were or were not essentialized group distinctions. Among participants who believed their political parties were not essentialized, the same main effect pattern found numerous times previously (e.g., Gonsalkorale & Williams, 2007) was replicated. Nonetheless, when participants were led to perceive political groups as having an essentialized basis, the effect of inclusionary status on basic needs was moderated by ingroup and outgroup status. Once again, this is noteworthy because we used identical groups used in previous work (see Gonsalkorale & Williams, 2007) in which only a main effect had been found. We thus replicated prior work and extended it to show a particular circumstance under which those same groups can act as moderators of reactions to inclusion and exclusion.

This serves as seminal evidence that group status can moderate the effect of social exclusion or inclusion on the fulfillment of basic psychological needs. We have argued that the essentialized nature of the groups themselves plays an important role in these effects. With respect to race, this category is highly salient in many everyday situations and is one of the few social categories ascribed to us, making it potent in our social cognition (Brewer, 1986). Such central groups may be perceived to afford great potential benefits when they accept us yet may pose greater perceived danger when they exclude us. Moreover, our lay theories of race make membership in racial groups effectively immutable (Fiske & Neuberg, 1990;

Smedley & Smedley, 2005), with the hypodescent of race being a clear characteristic of this effect (Peery & Bodenhausen, 2008). The previous research documenting unmoderated effects of exclusion on individuals' basic needs levels relied on preference groups, such as computer, smoking, or political preferences, whose membership and effects may be more ephemeral. Insofar as race plays a central role in identity, in social interaction, and in the distribution of resources in a society, this more potent group distinction may elicit more potent effects as documented in our first study.

Although some categories (e.g., race) are seen as inherently biologically essentialized, essentialism can also be manipulated. Thus, many groups can be made to be seen in a more or less essentialized manner and thus elicit the stronger feelings associated with inclusion or exclusion found in our second study that utilized political party affiliation. Essentialized groups are seen as more highly entitative (Brewer & Kramer, 1985) and may be more likely to elicit stronger responses due to the heightened category salience and perceived immutability (Brewer, 2004; Hoffman & Hurst, 1990). Essentialized ingroups are more important to our social identities whereas essentialized outgroups warrant less attention and less desire for affiliation (M. J. Williams & Eberhardt, 2008). As a consequence, it seems that only more essential groups should lead to the moderation documented in our studies.

Despite the fact that ingroup and outgroup status qualifies the effects of inclusion and rejection, we interpret our findings as a true testament to the power of social rejection. Rejection is such a fundamental threat to social survival that even when rejected by groups generally unimportant to most of our social lives (e.g., computer use preference), we nonetheless still feel the pain of the experience. Across both of our studies, inclusion and exclusion by outgroup members had a clear and potent effect on basic need fulfillment. As a further example of this, one-sample *t*-test analyses (combining the data from both experiments) provided evidence that exclusion and inclusion, regardless of the ingroup or outgroup status of the confederates, led to significant decreases and increases in basic needs as compared to the midpoints of the basic needs scale, all $ps < .03$. Thus, exclusion by outgroups did lead to a decrease in basic needs while inclusion by outgroups led to an increase. Williams and colleagues have clearly articulated why this is the case. Their model identifies that individuals confronted with social rejection respond with an automatic, reflexive reaction to the experience, which makes individuals aware of their threatened needs and prepares them for action (K. D. Williams, 2007; K. D. Williams & Zadro, 2005). In this model, social rejection is experienced as a sort of physical pain meant to alert individuals to the dire situation they may be facing (Eisenberger & Lieberman, 2005). Such reactions are therefore difficult to eliminate, and the current work is a testament to this. Inclusion and exclusion even from outgroups elicit basic needs effects. Nonetheless, we believe the current work does provide novel evidence that at least

some ingroup–outgroup distinctions are sufficiently important to make both the pain of exclusion and the joy of inclusion more poignant.

Despite the strengths of this research, there are some questions left unanswered. As noted earlier, and perhaps most interesting, is why participant sex did not affect the results given the computer avatars were always male. Sex, like race, is an essentialized group (Bastian & Haslam, 2006). Nonetheless, in neither study did the match or mismatch between participant sex and avatar sex interact with social inclusionary status to effect participants' mood and basic needs. Given that sex is an essentialized group, this seems somewhat at odds with our rationale. We believe this is true because sex operates very differently than do most ingroup–outgroup distinctions. Unlike most group distinctions, men and women form collaborative rather than competitive relationships to meet shared goals such as mating and child rearing. Second, men and women are in near constant contact with one and other. Men and women work together daily. We live together and raise families together. Finally, and perhaps most importantly, sex does not create an ingroup bias. Although virtually all other social groups create an ingroup preference, sex does not. Instead, both men and women prefer women. This powerful effect, known as the “women are wonderful” effect, leads individuals of all types of backgrounds to evaluate women more positively than men (Eagly & Mladinic, 1989). Thus, insofar as the ingroup magnifies inclusion and exclusion in part because we like the ingroup, sex is one ingroup–outgroup distinction that should not elicit such effects.

We also believe that this research may lead to important questions about how behavioral outcomes differ following social exclusion by essentialized or nonessentialized ingroups and outgroups. Given the findings in this article, we believe it is possible that such behavioral outcomes may be enhanced, but perhaps not attenuated, by perceived essentialism. Perhaps rejection by any group will elicit antisocial or prosocial responses to some degree, but when being rejected by an essentialized ingroup, the responses are magnified. This has the dangerous implication that ingroups seen as most essentialized will be the groups that elicit both the most prosocial acts from rejected members and the most serious and consequential acts of aggression and violence. Given the prevalence of aggressive acts such as school shootings, perhaps victims of social exclusion do not only see their victims as being high in entitativity (see Gaertner & Iuzzini, 2005), but perhaps they also see them as being essentialized. If this is the case, then breaking down perceptions of entitativity might not be enough to decrease aggressive responses against the entirety of groups who have engaged in rejection, so long as the victims of it still see the groups as having traits that are inborn, immutable, and everlasting.

In these studies, we only used the Cyberball paradigm to manipulate rejection experiences, and thus it is reasonable to question the extent to which these findings might generalize to other paradigms (e.g., perhaps in which rejection is manipulated after a short, in-person meeting with other participants).

We agree this is an important but still open question. However, if we were to speculate, we would predict few differences at all. We see no reason to believe that the effects of perceived essentialism on rejection are so fickle as to vanish in the presence of others. In fact, a rejection manipulation in which rejection occurred in person might elicit a stronger response on people's basic needs when interacting with a perception of essentialism; perhaps the salience of one's race or political affiliation may be even greater in a "face-to-face" setting, and thus perhaps it would be more heavily relied on as a cue to attend to and fix the situation. Nonetheless, it is an empirical question.

Groups are essential to human survival, but some groups are more essentialized than others. It appears, then, that these ingroup and outgroup distinctions do matter when it comes to inclusion and exclusion. However, it is a testament to how powerful the threat of rejection must be when only the most important of group distinctions can moderate the effects of rejection. Even then, rejection by outgroups is still experienced as a threat to one's most basic psychological needs. The current evidence suggests that although rejection is a painful experience in all cases, some experiences of rejection and acceptance are felt more keenly than others.

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Notes

1. There was no effect of participant sex in either study. It never interacted with the current highest order interactions (i.e., never yielding a four-way interaction) and it never interacted with any of the lower order interactions; this is considered in the Discussion.
2. Results did not differ across experimenters.
3. Treating each of the four basic needs as individual dependent variables has no effect on the interaction pattern (all $ps < .07$).
4. Study 2 measured the basic needs on a 1-7 scale while Study 1 used a 1-5 scale. This change was performed simply to allow for more variability in participant responses in Study 2.
5. These manipulations were pretested to ensure that they did in fact manipulate perceived essentialism of the groups. Twenty-two participants (12 female) not taking part in the study read either the maximal newspaper article or the control article. They then responded to a six-item measure examining perceptions of how essential political parties are. Items included "Genetics and family are more important in determining people's political affiliation than personal choice" and "People are born into their political party." All questions were measured on a 7-point Likert-type scale, with higher numbers indicating a greater perception of essentialism in political parties. Results revealed significant differences in the expected direction; participants believed political

parties were significantly more essentialized if the participants read the maximal condition article ($M = 5.44$, $SD = .65$) than if they read the control article ($M = 3.39$, $SD = .41$), $t(20) = 8.85$, $p < .001$. The manipulation of essentialism seems to have been effective.

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