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The KKK won't let me play: Ostracism even by a despised outgroup hurts

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Abstract

Previous research has shown that ostracism even by outgroup members is aversive. In this study we examined whether ostracism by a particular type of outgroup, a despised outgroup, was sufficient to inflict emotional distress. We manipulated ostracism using Cyberball, an on-line ball toss game. Ostracized participants reported lower levels of belonging, self-esteem, control, and meaningful existence, and more negative mood, than included participants. Moreover, ostracism by despised outgroup members was no less aversive than ostracism by rival outgroup or ingroup members. Participants differentiated between the groups, however; ostracized individuals reported greater outgroup negativity than included participants only when their co-players were members of the despised outgroup. We interpret these results as evidence for the powerful impact of ostracism and the potential importance of distinguishing between qualitatively different outgroups. Copyright © 2006 John Wiley & Sons, Ltd.

Humans have a fundamental desire to have social connections with others (Baumeister & Leary, 1995). With acceptance, self-esteem is enhanced (Leary, Tambor, Terdal, & Downs, 1995), with social interaction, a sense of control is achieved (Taylor & Brown, 1988), and with recognition, a sense of meaning and worth is maintained (Greenberg, Solomon, & Pyszczynski, 1997). Perhaps not surprisingly then, the negative consequences of social exclusion, rejection, and ostracism are powerful and immediate (Williams, 2001). Targets of these social phenomena have been shown to exhibit a range of negative responses, including diminished cognitive performance (Baumeister, Twenge, & Nuss, 2002), increased aggression (Leary, Kowalski, Smith, & Phillips, 2003; Twenge, Baumeister, Tice, & Stucke, 2001; Warburton, Williams, & Cairns, 2006), and suicide attempts (Williams & Zadro, 2001).

Even under superficial conditions, the immediate experience of ostracism is highly threatening. Studies using Cyberball[1] (Williams, Cheung, & Choi, 2000), in which individuals are led to believe that

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[1]This program can be freely downloaded through this website: http://www.psych.purdue.edu/~kip/Announce/cyberball.htm

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they are playing a virtual ball-toss game with others, have consistently shown that ostracism results in lower self-reported levels of belonging, self-esteem, control, and meaningful existence. Typically, ostracized individuals also report worsened mood. In an fMRI study (Eisenberger, Lierberman, & Williams, 2003), ostracism during Cyberball was found to increase activation in the anterior cingulate cortex, a region that is associated with the experience of physical pain. Both self-report and neuroscientific data therefore suggest that ostracism hurts (also see MacDonald & Leary, 2005).

It is intriguing that individuals can be adversely affected by exclusion even when it does not occur face-to-face and the sources of ostracism are never seen. In fact, the negative impact of ostracism is not diminished by a host of factors that should logically do so. For example, although the effect of ostracism should be attenuated when it can be attributed to external causes (Williams, 2001), individuals who can blame the social exclusion on computer malfunction are still adversely affected (Eisenberger et al., 2003). The identity of the ostracism sources should also moderate its effects (Williams). Being ostracized by dissimilar others should be less upsetting than being ostracized by like-minded individuals. Yet, even though people tend to prefer ingroup members over outgroup members (Hewstone, Rubin, & Willis, 2002), ostracism by outgroup members is no less aversive than ostracism by ingroup members (Smith & Williams, 2004; Williams et al., 2000, 2002). Moreover, the sources of ostracism do not even need to be human for targets to feel its negative consequences. Individuals who are told that they are playing Cyberball with a computer still report having lower levels of belonging, self-esteem, control, and meaningful existence following ostracism (Zadro, Williams, & Richardson, 2004). These findings suggest that people have an in-built mechanism that automatically detects social exclusion and allows its painful effects to be felt (Panksepp, 2003). The immediate experience of ostracism might be so overwhelming that people fail to sufficiently process factors that should render the exclusion trivial. This possibility is consistent with the idea that social exclusion leads to cognitive deconstruction, a state in which individuals avoid meaningful thought (Twenge, Catanese, & Baumeister, 2003).

Humans may be predisposed to react strongly to ostracism because of the high costs of social exclusion during human evolution (MacDonald & Leary, 2005). In the evolutionary past, being excluded from a social group would have endangered an individual's overall fitness by reducing access to resources such as food and potential mates. Consequently, social exclusion may be threatening to humans in a similar way to physically dangerous stimuli (e.g., snakes), and humans may respond to ostracism as they do to any fearful stimuli. Reactions to ostracism may be analogous to reactions to horror movies. Most people have strong, automatic reactions to scary films, despite knowing full well that what they are seeing on the screen is not real. Just as there is no evolutionary mechanism to disregard horror movies, humans may be programmed to respond to all types of social exclusion, regardless of whether they are consequential or benign, and whether the ostracism sources are humans or inanimate objects.

Nevertheless, it is possible that under certain conditions, people will not find ostracism distressing, and might even prefer it. Previous studies have demonstrated that ingroup–outgroup distinctions do not moderate the negative impact of exclusion. However, such studies have examined only one type of outgroup, namely rival outgroups (e.g., PC vs. Mac users in Williams et al., 2000). The primary goal of the current study was to investigate the effects of ostracism by a despised, disgusting, loathsome outgroup. We chose the Australian branch of the Ku Klux Klan (KKK) as our despised outgroup. The KKK appears to be as hated in Australia as it is in the United States, as evidenced by widespread censure of an incident in which Australian army soldiers wore white KKK-style hoods to taunt Aboriginal troops (Action taken, 2004). Australian army chiefs publicly condemned the incident as 'deplorable' and 'intolerable', while the Australian Prime Minister described the KKK as an 'abhorrent organization'. Intuitively it seems likely that individuals would not want to be included by such despised outgroups and would feel relieved to be ostracized by them. On the other hand, if the immediate experience of ostracism is so powerful that it prevents targets from processing trivializing information, then even ostracism by a despised outgroup will be aversive. We addressed this issue in the

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current study by comparing the effects of ostracism by despised outgroup, rival outgroup, and ingroup members during a game of Cyberball.

A second aim of this study was to examine attitudinal responses following ostracism. Consistent with evidence that social exclusion can lead to anti-social behaviors such as aggression (e.g., Twenge et al., 2001, Warburton et al., 2006), studies investigating attitudinal responses have found that people tend to derogate those who reject them (Bourgeois & Leary, 2001; Buckley, Winkle, & Leary, 2004). This reaction has been interpreted as a coping strategy that reduces the desire to be accepted and subsequently minimizes the distress of rejection (Bourgeois & Leary). In the current study we were interested not in people's attitudes towards the individuals who ostracized them, but towards the *group* to which those individuals belonged. We predicted that derogation of the ostracism sources' group would occur only when the sources were outgroup members. Individuals who are rejected by a despised or rival outgroup are likely to reaffirm their preference for the ingroup by displaying enhanced negativity towards the outgroup. In contrast, ostracism by ingroup members is unlikely to elicit derogation of the ingroup. Because ostracized individuals are likely to want to maintain membership in their own group, it would not serve them well to derogate the ingroup. To explore how ostracism might influence attitudinal responses, we also measured intergroup feelings after the Cyberball game.

METHOD

Participants and Design

Ninety-eight introductory psychology students from the University of New South Wales participated for course credit. They were randomly assigned to a 2 (inclusionary status: ostracism, inclusion) $\times 3$ (group membership of co-players: despised outgroup, rival outgroup, ingroup) between-subjects design. One participant was excluded from analysis because of suspicion, resulting in the final sample of 97 (71 females and 26 males; *M* age 19.56, $SD = 2.97$).

Procedure

Participants were told that we were investigating the personality of people who support diverse groups within Australia, and that we had recruited a large number of such organizations. Participants were tested individually on a computer. They were first asked to indicate their preference toward one of three groups: the Australian Labor Party (Labor Party), the Liberal Party of Australia (Liberal Party), or the Imperial Klans of Australia. The Labor and Liberal parties, the two largest political parties in Australia, are considered to be rival organizations representing the middle-left and middle-right, respectively. The Imperial Klans of Australia, an internet-based white supremacist group, is an Australian branch of the KKK. We assumed that the Australian KKK would be a despised outgroup for our student sample, and hence all participants would choose the Labor or Liberal Party as the group they supported the most (results confirmed this). After reading through descriptions of the groups and indicating their choice, participants completed four manipulation checks assessing their perceptions of each group (see Table 1 for the items).

Participants next read a screen announcing that they would play Cyberball, an Internet ball-tossing game designed to help people to practice mental visualization. With the aid of staged phone calls, participants were led to believe that they were playing with two other people taking part in the experiment. In reality, these 'other people' were computer-generated confederates. Participants were told that throughout the game they would be represented by the animated figure on the bottom of the

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Table 1. Means and standard deviations (in parenthesis) of manipulation checks regarding perceptions of the three groups (all scales 1 = 'strongly disagree' to 5 = 'strongly agree')

	Group		
	Despised outgroup	Rival outgroup	Ingroup
I agree with and share the same beliefs as this group	1.28 (0.52)	3.30 (0.66)	3.81 (0.49)
I respect this group, even if I may not agree with it	1.65 (0.96)	3.59 (0.76)	3.68 (0.70)
This group disgusts me	3.90 (1.40)	2.09 (0.75)	1.86 (0.66)
The world would be a better place if this group did not exist	4.24 (0.96)	2.19 (0.67)	1.89 (0.68)

screen. Whenever their animated figure caught the ball, they were to use the mouse to indicate which of their two co-players they wished to throw the ball to. They were instructed to mentally visualize themselves and the others as if they were playing in real life. Participants were told that their co-players were two members of their despised outgroup, rival outgroup, or ingroup. For example, if the participant's ingroup was Labor Party supporters, the rival outgroup was Liberal Party supporters and the despised outgroup was Australian KKK supporters. Throughout the game an icon was displayed next to each animated figure to represent the co-players' and participant's group memberships. Participants were also randomly assigned to conditions of ostracism or inclusion during the Cyberall game. Included participants received the ball roughly one third of the time, whereas ostracized participants were thrown the ball once and never received it again.

After playing Cyberball for approximately four minutes, participants completed several manipulation checks. To assess the effectiveness of the inclusionary status manipulation, participants estimated the percentage of throws they received and rated on five-point scales (1 = 'not at all', 5 = 'very much so') how much they were ignored and excluded during the game. To check the group membership manipulation, participants were asked to think about each of their co-players, and indicate which organization they supported.

Using five-point scales, participants next completed 12 items assessing their perceived levels of belonging, self-esteem, control, and meaningful existence. These items were: 'I felt disconnected', 'I felt rejected', 'I felt like an outsider' (belonging); 'I felt good about myself', 'My self-esteem was high', 'I felt liked' (self-esteem); 'I felt powerful', 'I felt I had control over the course of the interaction', 'I felt superior' (control); 'I felt invisible', 'I felt meaningless', 'I felt non-existent' (meaningful existence). They also completed four bipolar items (good–bad, happy–sad, friendly–unfriendly, relaxed–tense) presented on seven-point scales to indicate their mood. These items have been used in previous studies, including Eisenberger et al. (2003), Williams et al. (2000), and Zadro et al. (2004).

Finally, participants rated on scales from 0 to 100 how warmly they felt towards their ingroup, rival outgroup, and despised outgroup (these feeling thermometers measured intergroup attitudes). After completing all dependent variables, participants were thoroughly debriefed, thanked, and dismissed.

RESULTS

Manipulation Checks

Perceptions of the Groups

As Table 1 shows, participants evaluated the three groups as expected. Notably, participants were significantly more disgusted by the Australian KKK than by their rival outgroup, $F(1, 96) = 128.82$,

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$p < 0.001$, or ingroup, $F(1, 96) = 165.93$, $p < 0.001$. They also respected their rival outgroup significantly more than the Australian KKK, $F(1, 96) = 254.16$, $p < 0.001$.

Group Membership

Eighty-five participants (87.6%) correctly identified the group membership of both co-players. During debriefing, most of the aberrant respondents indicated they knew the correct group membership, but chose to re-interpret the question to mean that they were to guess the group membership based upon their co-players' behavior in the game.

Inclusionary Status

As they were highly correlated (Cronbach's alpha = 0.93), the items 'I was excluded' and 'I was ignored' were combined. Ostracized participants reported that they felt more excluded and ignored, $F(1, 91) = 230.48$, $p < 0.001$, and estimated receiving fewer throws, $F(1, 91) = 443.26$, $p < 0.001$, than those who were included (see Table 2 for descriptive statistics).

Self-Reported Belonging, Self-Esteem, Control, and Meaningful Existence

The three items assessing each category were combined. Cronbach's alpha coefficients were as follows: belonging = 0.91, self-esteem = 0.77, control = 0.73, and meaningful existence = 0.81. There was a main effect for ostracism, such that ostracized participants perceived that their levels of belonging, self-

Table 2. Means and standard deviations (in parenthesis) of variables as a function of inclusionary status and group membership of other players

	Ostracism			Inclusion			
	Despised ($n = 16$)	Rival ($n = 16$)	Ingroup ($n = 17$)	Despised ($n = 16$)	Rival ($n = 16$)	Ingroup ($n = 16$)	Ostracism vs. inclusion effect size (η^2)
Belonging[a]	2.25 (1.16)	2.08 (1.13)	2.59 (1.20)	4.17 (1.08)	4.25 (0.77)	3.98 (0.82)	0.442
Self-esteem[a]	2.23 (0.96)	2.21 (0.98)	2.67 (0.95)	2.83 (0.73)	3.23 (0.76)	2.97 (0.88)	0.123
Control[a]	1.75 (0.81)	1.35 (0.35)	1.57 (0.47)	2.35 (0.86)	2.79 (0.73)	2.54 (0.72)	0.353
Meaningful existence[a]	2.46 (0.80)	2.15 (1.14)	2.61 (1.17)	4.17 (0.92)	4.25 (0.84)	4.02 (0.85)	0.459
Mood[b]	4.44 (1.41)	3.83 (1.52)	5.10 (1.33)	4.92 (1.15)	5.38 (0.94)	5.41 (0.93)	0.086
Manipulation checks							
Excluded/ignored[c]	4.31 (1.01)	4.72 (0.60)	4.15 (1.21)	1.53 (0.88)	1.47 (0.72)	1.93 (0.75)	0.705
% Throws	5.13 (8.85)	2.44 (2.69)	4.24 (5.59)	35.44 (8.12)	40.75 (10.28)	35.19 (9.89)	0.820

[a]Each score represents the average of three questions presented on five-point scales (1 = not at all, 5 = very much so).
[b]This was an average of 4 seven-point bipolar items (higher scores indicate more positive mood).
[c]This was an average of two questions presented on five-point scales (1 = not at all, 5 = very much so).

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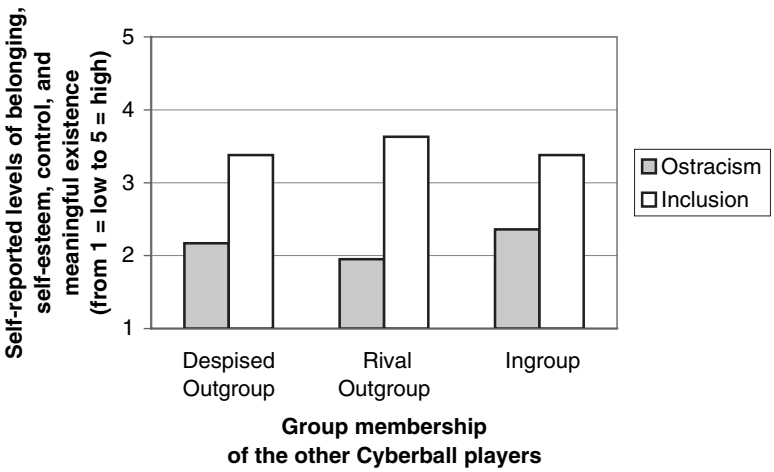

Figure 1. Mean self-reported levels of belonging, self-esteem, control, and meaningful existence (combined) as a function of inclusionary status and group membership of other players

esteem, control, and meaningful existence were lower than included participants, Fs > 13.18, ps < 0.001. This effect can be seen in Figure 1, which depicts a composite score of belonging, self-esteem, control, and meaningful existence ratings (Table 2 lists descriptive statistics and effect sizes for each dependent variable separately). No main effects for group membership were found, Fs < 0.97, ps > 0.38.

Inclusionary status did not significantly interact with the co-players' group membership for belonging, self-esteem, and meaningful existence,[2] Fs < 1.35, ps > 0.25. However, the interaction approached significance for control, $F(2, 91) = 3.02$, $p < 0.06$, $\eta^2 = 0.040$. Follow-up analyses indicated that ostracized participants reported that they had significantly less control than included participants in all three group membership conditions, Fs > 6.46, ps < 0.02 (see Table 2 for descriptive statistics). However, a contrast analysis comparing control scores in the despised outgroup condition to control scores averaged over the ingroup and rival outgroup conditions, revealed that the magnitude of the ostracism effect was moderated by condition. Specifically, ostracism reduced control to a lesser degree when the sources were from the despised outgroup, $F(2, 91) = 4.18$, $p < 0.05$, although this effect was small in size, $\eta^2 = 0.028$.

Mood

The four mood items were averaged to form a single scale (Cronbach's alpha $= 0.92$). The ostracism main effect was significant, with ostracized participants reporting more negative mood than included participants, $F(1, 91) = 9.62$, $p < 0.01$ (see Table 2 for descriptive statistics). Approaching significance was the main effect for group membership, $F(2, 91) = 2.72$, $p < 0.07$, $\eta^2 = 0.043$. Follow-up contrasts indicated that mood was more positive in the ingroup condition ($M = 5.25$, $SD = 1.14$) compared to the

[2]As noted by a reviewer, non-significant effects can sometimes be a function of inadequate power. We conducted a *post-hoc* power analysis to examine whether our sample was sufficiently large to detect inclusionary status × source interactions for a range of effect sizes. Cohen's (1988) effect size conventions for ANOVA define f values of 0.40, 0.25, and 0.10 as large, medium, and small. According to the computer program G*Power (Faul & Erdfelder, 1992), for $N = 97$, groups $= 6$, numerator df $= 2$, and $\alpha = 0.05$, the power of the F test equals 0.94, 0.57, and 0.13 for $f = 0.40$, 0.25, and 0.10. Thus, our study had sufficient power to detect large effects and moderate power to detect medium effects, but low power to detect small effects.

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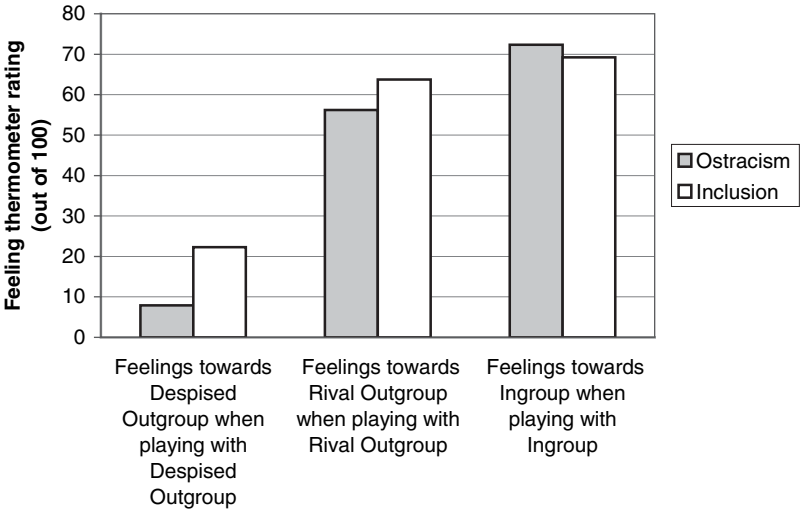

Figure 2. Mean feeling thermometer scores as a function of inclusionary status and group membership of other players

average of the rival and despised outgroup conditions ($M = 4.64$, $SD = 1.37$), $F(2, 91) = 5.38$, $p < 0.05$, $\eta^2 = 0.049$. However, mood did not significantly differ between the despised outgroup condition ($M = 4.68$, $SD = 1.29$) and the other conditions[3] (combined ingroup and rival outgroup $M = 4.93$, $SD = 1.35$), $F(2, 91) = 0.87$, $p = 0.35$. The interaction between inclusionary status and co-players' group membership was not significant, $F(2, 91) = 2.38$, $p = 0.10$.

Intergroup Feelings

To examine whether inclusionary status influenced intergroup feelings, participants' feeling thermometer ratings of the group they played with in Cyberball were standardized and analyzed using a between-S ANOVA, with inclusionary status and group membership as independent variables. The main effect of inclusionary status was significant. Ostracized participants gave lower ratings to their co-players' group than did included participants, $F(1, 91) = 4.58$, $p < 0.05$, $\eta^2 = 0.046$. Inclusionary status interacted with group membership, $F(1, 91) = 3.16$, $p < 0.05$, $\eta^2 = 0.062$. As Figure 2 shows, ostracized participants' feeling thermometer scores were significantly lower than included participants' scores when their co-players were from the despised outgroup, $F(1, 93) = 8.97$, $p < 0.01$, but not when they were from the rival outgroup, $F(1, 93) = 1.76$, $p = 0.19$, or ingroup, $F(1, 93) = 0.30$, $p = 0.59$.

To examine whether participants rated the three groups differently, a three-way mixed model MANOVA was conducted on raw feeling thermometer scores, with inclusionary status and group membership as between-subjects factors, and feeling thermometer as the within-subjects factor. There was a significant difference in feeling thermometer scores given to the three groups, $F(1, 93) = 433.34$, $p < 0.001$. Follow-up analyses indicated that participants felt significantly warmer towards their

[3]This result refutes the possibility that mood accounted for the negative effect of ostracism by the despised outgroup. Specifically, it could be argued that because people do not like the KKK, any interactions with them (not just those involving ostracism) would be aversive. However, if this were the case, mood would be worse when the co-players were members of the KKK.

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rival outgroup ($M = 58.39$, $SD = 15.78$) than the despised outgroup ($M = 11.86$, $SD = 13.35$), $F(1, 91) = 422.49$, $p < 0.001$, and towards their ingroup ($M = 70.35$, $SD = 15.47$) than their rival outgroup, $F(1, 91) = 47.13$, $p < 0.001$. None of the interactions were significant, Fs < 1.77, ps > 0.18.

DISCUSSION

The results of our study suggest that ostracism even by a despised outgroup hurts. Consistent with previous research, ostracized individuals reported worse mood, and lower levels of belonging, self-esteem, control, and meaningful existence, than those who were included. More importantly, the group identity of the sources generally did not moderate the negative effect of ostracism (only in the case of perceived control was there a marginally significant interaction between inclusion-ostracism and source identity), which suggests that overall, ostracism by the despised outgroup was no less aversive than ostracism by the ingroup or rival outgroup. In contrast, attitudinal responses were clearly influenced by the sources' group membership, with ostracized individuals reporting more negative attitudes towards their co-players' group only when that group was despised. Together, these findings suggest that although ostracism by a despised outgroup can enhance negativity towards that group, being ostracized by a hated group may be as distressing as ostracism by groups that are not despised.

These findings indicate that, perhaps because people are hard-wired to detect it, ostracism is an unpleasant experience, regardless of whom or what is doing the ostracizing. Together with evidence from previous studies (e.g., Eisenberger et al., 2003; Williams et al., 2000; Zadro et al., 2004), our data suggest that, at least during or soon after experiencing it, ostracism is so powerful that targets are unable to make use of trivializing information to dismiss the importance of the social exclusion. Our findings are also consistent with evidence that belonging is valued even from undesirable groups. For example, in a recent study (Wisman & Koole, 2003), people whose mortality was made salient preferred to sit with others who opposed their worldview than to sit alone.

We did not find clear evidence that ostracism by the despised outgroup was less distressing than ostracism by the other groups. Specifically, no interactions between inclusionary status and sources' group membership emerged on perceived belonging, self-esteem, meaningful existence, or mood. Despite the fact that our participants were aware of the sources' group membership, and reported that they liked their ingroup more than the rival outgroup, and disliked the despised outgroup the most, one interpretation could be that the manipulation of source was not salient enough to interact with the inclusion-ostracism manipulation. We do not find this account plausible for a number of reasons. First, icons representing the sources' group membership were visually presented on the computer screens throughout the Cyberball game. For the despised outgroup, this meant that we displayed a white hooded individual next to each animated figure representing the co-players (see Figure 3). Second, there was a marginally significant effect of ostracism source on mood ratings, such that participants reported more positive mood when they played with their ingroup. A possible reason for this finding is that interacting with ingroup members boosts mood by reminding people of their belonging in a group regardless of what happens in the Cyberball game. Third, a non-significant trend appeared to suggest that the group identity of the sources moderated the effect of ostracism on self-reported control. Specifically, ostracism by the despised outgroup appeared to reduce control to a lesser extent compared to exclusion by the ingroup and rival outgroup. Although speculative, one explanation for this pattern is that there were differences across conditions in participants' degree of predictive control (see Skinner, 1995). As people might expect members of an extreme minority to interact only with each other, predictive control may have been highest in the despised outgroup condition. More research is required to clarify

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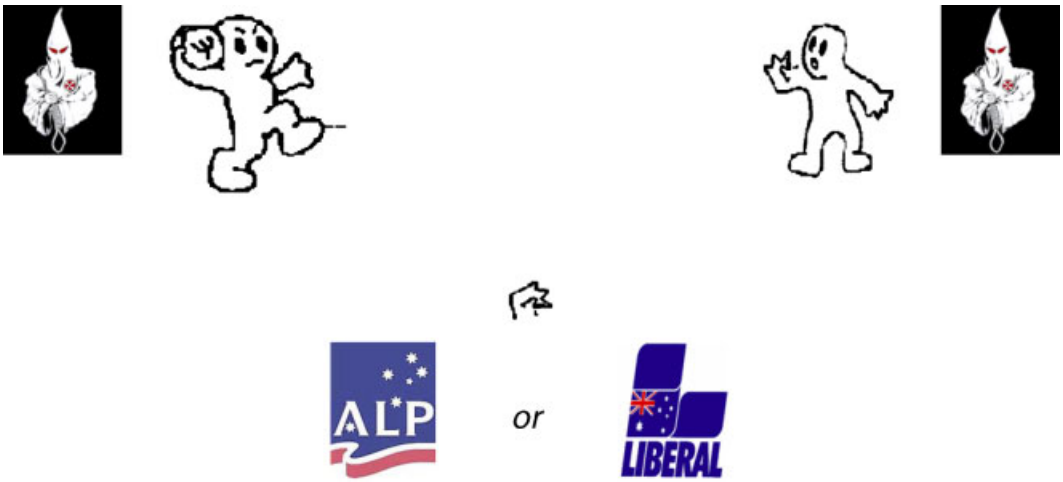

Figure 3. Visual depiction of despised outgroup condition in Cyberball. The participant's icon was either the ALP or Liberal icon, depending on their preference

whether control is influenced differently to belonging, self-esteem, and meaningful existence, when interacting with a despised outgroup.

The finding that attitudinal responses were influenced by the sources' group membership also refutes the possibility that this manipulation was not sufficiently salient. In line with expectations, ostracism by ingroup members did not result in negativity towards the ingroup. Also as predicted, participants who were ostracized by the despised outgroup derogated this group to a greater extent than did included participants. This finding is consistent with evidence that people feel negatively towards those who reject them (Bourgeois & Leary, 2001; Buckley et al., 2004). Surprisingly, however, ostracism did not provoke negativity towards the rival outgroup. To make sense of this finding, it is worth noting the difference between feeling thermometer ratings of the two outgroups, averaged across inclusion-ostracism conditions. While participants felt decidedly cold towards the despised outgroup, the mean rating for the rival outgroup was above the scale mid-point. It is possible that the mere mention of a more extreme and disliked outgroup made the rival outgroup seem more desirable and therefore less susceptible to derogation following ostracism. It is socially acceptable to display prejudice towards racists and members of the KKK (Crandall, Eshleman, & O'Brien, 2003). Thus, the finding that ostracism led to outgroup derogation only when the sources belonged to the despised outgroup can be interpreted as evidence that ostracized individuals displayed anti-social responses only when social norms permitted. Irrespective of how they might be interpreted, these results highlight the importance of acknowledging that not all outgroups are the same.

Whether it is inflicted by unseen others, computers, or, as the present study demonstrates, despised outgroup members, ostracism is aversive. This evidence strengthens the view that humans are highly sensitive to cues signaling social exclusion. What this research does not say is that, with thoughtful reflection, reactions will remain the same despite one's feeling about the sources' group membership. We believe given enough time to consider the implications of ostracism by a despised group, individuals will be able to dismiss the negative reaction, and perhaps even rejoice in the memory that they were ostracized by despised others. Perhaps with time, individuals who *were* included by the despised outgroup may become uncomfortable with that inclusion, and the fact that they continued to

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play with these despised group members. Zadro, Bowland, and Richardson (2006) have shown a similar reflective process following Cyberball ostracism in a recent study of participants who were high and low in social anxiety. Initially, both groups reacted equally negatively to ostracism. However, after 45 minutes, those low in social anxiety had recovered: their mood states were as positive as included individuals and their self-reported levels of belonging, self-esteem, control, and meaningful existence were also at inclusion levels. In contrast, those who were high on social phobia had only partially recovered, suggesting that factors that would logically interact with ostracism do so after individuals have had time to reflect on the ostracism episode. Future research on ostracism by ingroups and outgroups of various sorts (rival and despised) should incorporate a reflective time period to examine the possibility that coping reactions will interact as a function of ostracism and source membership.

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