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Research Report

Hurting You Hurts Me Too: The Psychological Costs of Complying With Ostracism

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SYCHOLOGICAL SCIENCE



Nicole Legate¹, Cody R. DeHaan¹, Netta Weinstein², and Richard M. Ryan¹

¹Department of Clinical and Social Sciences in Psychology, University of Rochester, and ²Department of Psychology, University of Essex

Abstract

Much research has documented the harmful psychological effects of being ostracized, but research has yet to determine whether compliance with ostracizing other people is psychologically costly. We conducted two studies guided by self-determination theory to explore this question, using a paradigm that borrows from both ostracism research and Milgram's classic study of obedience. Supporting our guiding hypothesis that compliance with ostracizing others carries psychological costs, the results of Experiment I showed that such compliance worsened mood compared with complying with instructions to include others and with receiving no instructions involving inclusion or exclusion, an effect explained by thwarted psychological needs resulting from ostracizing others. Experiment 2 revealed increases in negative affect both when individuals ostracized others and when individuals were ostracized themselves. Our findings point to the robust psychological costs associated with ostracizing other people, with implications for group behaviors.

Keywords

ostracism, autonomy, self-determination theory, compliance, motivation, interpersonal interaction, psychological stress, social behavior

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Individuals generally care about others. People have a great capacity to empathize (Batson, 2009) and to derive psychological benefits from helping others, including strangers (Weinstein & Ryan, 2010). Yet people have also shown a willingness to harm nonthreatening others in compliance with experimenters' directions (e.g., Haney, Banks, & Zimbardo, 1973; Milgram, 1963). Although such findings are often cited to demonstrate people's capacity for inhumane acts, lost from most of these reports is the evidence that the participants themselves frequently suffered when complying with demands to harm or demean other people (see Fromm, 1973).

Herein, we focus on the psychological costs of complying with ostracism, defined as ignoring or excluding others (Williams, 2007). The past 10 years have seen an explosion of research on the suffering caused by being ostracized (e.g., Eisenberger, Lieberman, & Williams, 2003; Zadro, Williams, & Richardson, 2004), but few studies have looked into the experiences of the ostracizer. Drawing from the framework of self-determination theory (SDT; Ryan & Deci, 2000), we expected that ostracism hurts not only the victim but also the perpetrator.

Ostracism Is Painful

Social pain resulting from being ostracized triggers the same neural activation as physical pain (Eisenberger et al., 2003), is fairly immune to individual differences, and occurs even when the source of ostracism is a hated out-group (Gonsalkorale & Williams, 2007). The general belief guiding this literature is that being ostracized is painful because people depend heavily on social connections (Williams, 2009). People can vicariously experience ostracism merely by observing others being ostracized (Wesselmann, Bagg, & Williams, 2009), which suggests that if humans are indeed hard-wired to react negatively to ostracism, perhaps they experience costs when excluding others.

Corresponding Author:

Richard M. Ryan, Department of Clinical and Social Sciences in Psychology, University of Rochester, 355 Meliora Hall, Box 270266, Rochester, NY 14627 E-mail: ryan@psych.rochester.edu

Consequences for the Ostracizer

Descriptive accounts from Milgram's (1963) obedience experiment indicated that although participants asked to inflict physical pain on others were typically compliant, many reported feeling agitated, anxious, and guilty. We expected similar negative psychological experiences to follow compliance in inflicting social pain. This focus is important because pressure to exclude others is all too common, particularly among girls (Crick et al., 1999). People may face requests to ostracize someone for personal reasons (e.g., a friend's request to ostracize a romantic rivalry) or prejudice (e.g., a peer's request to ostracize a target perceived as gay).

Informed by SDT (Ryan & Deci, 2000), we anticipated that the thwarting of basic psychological needs would be responsible for the negative emotional consequences among people who ostracized others. SDT asserts that people have basic needs for autonomy, competence, and relatedness, which are important across cultures and across the life span. Having these needs satisfied promotes people's natural propensity toward psychological growth and well-being, whereas having them thwarted contributes to ill-being and psychopathology (Ryan, Deci, Grolnick, & LaGuardia, 2006). The need for *autonomy* is the need to feel that one's behavior is volitional and self-endorsed. The need for *relatedness* concerns the need to feel connected to and cared for by others. The need for *competence* concerns the need to feel efficacious.

SDT suggests that helping others generally satisfies these needs, whereas hurting others thwarts them. For example, Weinstein and Ryan (2010) showed that volitional acts of helping others benefited the helpers' well-being because these acts satisfied basic psychological needs. Similarly, other SDT research has found that relational goals, relative to selfish goals, better satisfy psychological needs, which in turn leads to better mental health (Niemiec, Ryan, & Deci, 2009). These findings suggest that complying with ostracism may undermine the ostracizer's psychological needs, particularly the need for autonomy, given that ostracizing others is not something that most people would typically choose to do. Ostracizing should also thwart relatedness because it prevents people from connecting with others. We do not see competence as being as affected by ostracism as the other needs and did not focus on it in the present research.

Though sparse, some previous work has looked at the experiences of ostracizers. In this research, participants who ostracized experienced more ego depletion (Ciarocco, Sommer, & Baumeister, 2001) and decreased motivation to make new social connections (Zhou, Zheng, Zhou, & Guo, 2009) relative to participants in neutral conditions. Whereas one study found comparable costs of ostracizing and being ostracized (Poulsen & Kashy, 2011), another found that perpetrators fared better than victims (Zadro, Williams, & Richardson, 2005). These inconsistent findings on the effects of ostracizing versus the effects of being ostracized point to the need for more inquiry. Guided by SDT, we set out to investigate why ostracism might be psychologically costly for perpetrator and victim alike, hypothesizing that ostracism thwarts the psychological needs of both parties.

The Current Research

We hypothesized that negative affect would be higher among people who ostracized others compared with people who did not because engaging in ostracism thwarts one's psychological needs for autonomy and relatedness. In Experiment 1, to conservatively test whether the act of ostracizing is itself costly, we compared compliance with instructions to ostracize another person with compliance with instructions to include others and with a condition with no instructions about inclusion or exclusion. Research in SDT has consistently shown that experiencing a setting as controlling thwarts the need for autonomy and worsens mood (e.g., Weinstein & Ryan, 2010), and we expected to find, as Legault, Gutsell, and Inzlicht (2011) did, that even a controlling message that promotes equality can have costs. Therefore, we expected to find some detriments to autonomy resulting from demands to include others, but we also expected to find that the act of ostracizing others would be even more detrimental. In Experiment 2, we compared the well-documented psychological costs of being ostracized (see Williams, 2007, for reviews) with the costs of ostracizing others.

Experiment I

Method

Participants. Eighty-two undergraduates (62.7% women, 37.3 % men; 54.3% Caucasian, 45.7% other race; mean age = 19.7 years) volunteered.

Procedure. We first had participants complete the 20-item Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988; $\alpha = .86$) to assess baseline mood and the Basic Psychological Needs scale (Ilardi, Leone, Kasser, & Ryan, 1993) to assess state autonomy (example item: "Right now I feel like I am free to decide for myself how to act"; $\alpha = .71$), competence (example item: "Right now I don't feel very competent", reverse-coded; $\alpha = .71$), and relatedness (example item: "Right now I really like the people I'm interacting with"; $\alpha = .76$).

Next, participants played *Cyberball*, a computerized balltossing game (Williams, Cheung, & Choi, 2000). All participants were told that the experiment involved the effects of mental visualization during a computer ball-tossing game played with other participants located in another laboratory room (in fact, the "players" were computerized players programmed to behave in a certain way). A staged phone call to the "other experimenter" confirming that the other players were ready augmented the cover story (see Zadro et al., 2004). Participants were informed that performance in the game was unimportant and were instructed to visualize the situation, themselves, and the other players. Participants were randomly assigned to one of three conditions: *ostracizer, neutral*, or *compliance*. In the ostracizer condition, participants read instructions to exclude a specific player (Player B) during the game and received no instructions about the other player (Player A). The game was programmed such that Player A threw the ball twice to Player B but then stopped throwing the ball to Player B for the remainder of the game. In the neutral condition, participants read instructions to throw the ball to other players, and the game was designed so that Players A and B threw the ball to each other and to the participant with roughly equal frequency. In the compliance condition, participants read instructions to throw the ball equally to the two other players; these participants received the ball roughly one third of the time.

Following the game, participants completed the same measures used at baseline, responding in terms of how they had felt during the game (PANAS, $\alpha = .84$; autonomy, $\alpha = .70$; relatedness, $\alpha = .78$).¹

Results

We used analyses of covariance (ANCOVAs) to test the effect of condition on outcomes, including baseline scores, gender, and race as covariates for all analyses. As a manipulation check, we tested whether participants had followed instructions. Participants in the ostracizer condition threw the ball to Player B less frequently than did participants in the neutral condition, F(2, 79) = 42.86, p < .001, a result indicating that these participants generally followed directions. Yet, as in Milgram's (1963) study, some (6) participants in the ostracism condition defied instructions and threw the ball to Player B (M = 13 throws); these participants were not statistically significant in their standing on major study variables, and we excluded them from further analyses to isolate the effects of complying with ostracism. Details about additional manipulation checks can be found in the Supplemental Material available online.

Next, we analyzed the main effect of condition on postgame affect controlling for baseline affect, gender, and race (Fig. 1). Condition predicted postgame affect, F(2, 68) =10.75, p < .001, $\eta_p^2 = .24$, autonomy, F(2, 68) = 31.39, p < .001, $\eta_p^2 = .48$, and relatedness, F(2, 68) = 6.35, p < .01, $\eta_p^2 =$.16. Tukey's post hoc analyses showed that participants in the ostracizer condition had higher levels of negative affect and lower levels of autonomy and relatedness compared with participants in the other two conditions (ps = .001-.02). Unsurprisingly, receiving experimental instructions to include others, compared with receiving no such demands, resulted in lower autonomy (compliance vs. neutral: p = .003) but did not impact relatedness (p > .05) or affect (p > .15). Across all analyses, race and gender were not significant predictors (ps > .05).

To test our expectation that thwarted needs for autonomy and relatedness would mediate the effects of condition on

Fig. 1. Results from Experiment I: mean scores on measures of postgame mood (negative affect) and satisfaction of psychological needs (autonomy and relatedness) as a function of condition (ostracizer, compliance, or neutral), controlling for baseline mood and psychological needs, gender, and race. Error bars represent ±1 SEM.

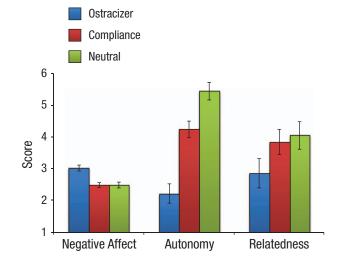
postgame affect, we followed Hayes and Preacher's (2012) mediation script to calculate direct and indirect effects using a multicategorical predictor. We created two dummy codes to examine the relative effects of being in one group (ostracizer condition or complier condition, coded 1) relative to a reference group (neutral condition, coded 0). We used baseline affect and need satisfaction as covariates and found that postgame need satisfaction exerted significant indirect effects in the ostracizer relative to the neutral condition (indirect effect = 0.43; 95% bootstrapped confidence interval, CI: [0.25, 0.63]), with results suggesting full mediation (Fig. 2). Although there was no direct effect of compliance with inclusion on affect, the indirect effect of need satisfaction was significant for participants in the compliance condition relative to participants in the neutral condition (indirect effect = 0.13; 95% CI: [0.01, 0.28]). Findings thus confirmed our expectation that ostracizing others leads to negative affect because it thwarts psychological needs.

Experiment 2

In Experiment 2, we aimed to replicate the pattern of results from Experiment 1, as well as to compare the costs of ostracizing with those of being ostracized. Recognizing that ostracism may evoke distinct negative emotions in the victim and the perpetrator, we also differentiated our measure of negative affect (see Petersen, Gravens, & Harmon-Jones, 2011).

Method

Seventy undergraduates (74.3% women, 25.7% men; 60% Caucasian, 40% other race; mean age = 19.4 years) participated.



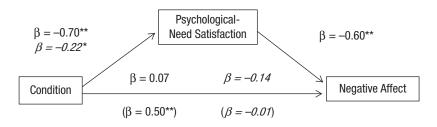


Fig. 2. Results from Experiment 1: mediation model of the effect of condition on negative affect as mediated by the thwarting of psychological needs for autonomy and relatedness. Standardized path coefficients are shown. For paths with two coefficients, values in regular type show results for the ostracizer condition, and values in italics show results for the compliance condition. On the path from condition to negative affect, parenthetical values represent the direct effect without controlling for the mediator, and values outside parentheses represent the effect when the mediator is included in the model. Asterisks indicate significant coefficients (*p < .05, **p < .001).

Procedures were identical to those in Experiment 1, except that we replaced the compliance condition with a condition in which participants were victims of ostracism.

After completing the baseline measures used in Experiment 1 (α s = .75–.86), participants were randomly assigned to three conditions: *ostracized, ostracizer*, and *neutral*. In the ostracized condition, participants read instructions to throw the ball to the other players. These participants received the ball twice at the beginning of the game but did not receive the ball again for the remainder of the game. As in Experiment 1, participants in the ostracizer condition, participants read instructed to exclude Player B. In the neutral condition, participants read instructions to throw the ball to other players. All participants completed the same postgame measures used in Experiment 1 (α s = .80–.89).

Results

Using the analytic approach employed in Experiment 1, we verified that participants in the ostracizer condition threw the ball to Player B less frequently than did those in either the neutral condition or the ostracized condition, F(2, 67) = 427.35, p < .001. Four participants (all female) in the ostracizer condition defied instructions to not throw the ball to Player B (M = 13 throws) and were excluded from further analyses.

Condition predicted overall affect, F(2, 60) = 11.01, p < .001, $\eta_p^2 = .27$, such that participants in the ostracized and ostracizer conditions experienced more negative affect than those in the neutral condition did. To assess more differentiated negative emotional experiences, we conducted a factor analysis and found three factors of negative affect with eigenvalues above 1: distress, shame and guilt, and anger. Condition had an effect on all three factors, Fs(2, 60) = 12.43-21.44, ps < .001, $\eta_p^2 = .29-.42$. Post hoc analysis indicated that participants in the ostracizer condition felt more guilt and shame than did participants in the two other conditions, that participants in the ostracized condition felt more anger than

did participants in the two other conditions, and that participants in both the ostracizer and the ostracized conditions felt more distress than did those in the neutral condition (all ps < .01; Fig. 3).

Condition also predicted postgame autonomy, F(2, 60) = 65.92, p < .001, $\eta_p^2 = .69$, and relatedness, F(2, 60) = 13.13, p < .001, $\eta_p^2 = .30$. Participants in the ostracizer condition experienced lower autonomy compared with participants in the other two conditions (ps < .001), whereas participants in the ostracized condition and participants in the neutral condition did not differ in their levels of autonomy. Participants in both the ostracized condition and the ostracizer condition experienced lower relatedness than did participants in the neutral condition, ps < .01. Victims of ostracism reported marginally lower relatedness than did perpetrators of ostracism (p = .10).

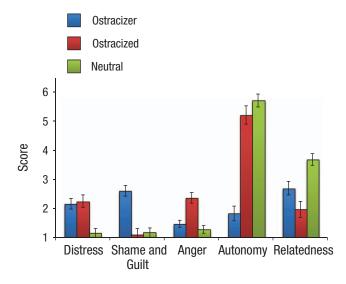


Fig. 3. Results from Experiment 2: mean scores on measures of postgame mood (distress, shame and guilt, and anger) and satisfaction of psychological needs (autonomy and relatedness) as a function of condition (ostracizer, ostracized, or neutral), controlling for baseline mood and psychological needs, gender, and race. Error bars represent ±1 SEM.

We again tested the hypothesis that changes in need satisfaction explain the effects of condition on affect, using the multicategorical mediation test employed in Experiment 1 but changing the second dummy variable to investigate the effects of being in the ostracized condition (coded 1) relative to the neutral condition (coded 0). Changes in need satisfaction exerted indirect effects on affect in the ostracizer condition relative to the neutral condition (indirect effect = 0.41; 95% bootstrapped CI: [0.21, 0.63]) and in the ostracized condition relative to the neutral condition (indirect effect = 0.24; 95%) CI: [0.11, 0.41]). The direct effects of ostracizing or being ostracized on affect were significant when need satisfaction was not controlled for in the analysis (ps < .001), but not when it was (p = .98 and .08, respectively), a pattern of results suggesting full mediation. Thus, being the victim or the perpetrator of ostracism led to higher negative affect, with thwarted psychological needs fully explaining these effects.

Discussion

As social animals, humans typically avoid harming others unless they experience threat or have justification to do so (Solomon, Greenberg, & Pyszczynski, 1991). Yet past experiments (e.g., Milgram, 1963) have suggested that people are willing to cause harm in order to comply with authorities. In the present studies, we explored whether people suffer psychological costs when they comply with directives to cause others social pain because doing so thwarts basic psychological needs.

Across both of our experiments, perpetrators of ostracism incurred psychological costs. Experiment 1 established that these costs were not explained by mere compliance with experimenters' directives. Experiment 2 demonstrated that the affective costs of ostracizing other people were comparable to those of experiencing ostracism as a victim, but that the perpetrators of ostracism showed more thwarting of their need for autonomy than did victims of ostracism or participants in the neutral condition. Results consistently demonstrated that the effect of ostracizing others on affect was fully mediated by the thwarting of psychological needs.

This work informs the need-threat model employed in work on victims of ostracism (e.g., Williams, 2009). According to this model, being ostracized threatens people's need for belonging (Baumeister & Leary, 1995), self-esteem (Steele, 1988), control (Bandura, 1997), and meaning (Solomon et al., 1991), and these threats adversely impact mood. We consider SDT's account of basic psychological needs to be a complementary theoretical approach that lends insight into the psychological dynamics occurring within the compliant ostracizer.

Future studies could supplement this self-report data by using behavioral or physiological responding to examine how ostracizers may suffer. In addition, although most participants who were instructed to ostracize complied, it would be important for future research to investigate differences between compliers and defiers. Studies could also explore ostracism that is more volitional by testing conditions in which participants are given more reason or choices to exclude others, such as in conditions in which the target of ostracism behaves in offensive ways.

These findings shed new light on the psychological dynamics of ostracism, facilitating the understanding of relational aggression and bullying, and complement longitudinal work that has revealed compromised mental health outcomes among relational aggressors (e.g., Crick, Ostrov, & Werner, 2006). Our findings bear on the developmental outcomes of people who are pressured to harm others, with implications for those who act on the basis of prejudice and the social influences (e.g., parents, communities) that encourage it. Extending this work thus represents a critical agenda.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Supplemental Material

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Note

1. Only one item was used to assess postmanipulation competence because our hypotheses did not specifically concern competence.

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