This article was downloaded by: [University of Rochester] On: 13 August 2015, At: 07:07 Publisher: Routledge Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London, SW1P 1WG



# The Journal of Social Psychology

Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/vsoc20

# Righting the Wrong: Reparative Coping After Going Along With Ostracism

Nicole Legate<sup>a</sup>, Cody DeHaan<sup>b</sup> & Richard Ryan<sup>c</sup>

<sup>a</sup> Illinois Institute of Technology

<sup>b</sup> University of Rochester

<sup>c</sup> Australian Catholic University Published online: 12 Aug 2015.



To cite this article: Nicole Legate, Cody DeHaan & Richard Ryan (2015) Righting the Wrong: Reparative Coping After Going Along With Ostracism, The Journal of Social Psychology, 155:5, 471-482, DOI: <u>10.1080/00224545.2015.1062352</u>

To link to this article: <u>http://dx.doi.org/10.1080/00224545.2015.1062352</u>

### PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &

Conditions of access and use can be found at <u>http://www.tandfonline.com/page/terms-and-conditions</u>

## Righting the Wrong: Reparative Coping After Going Along With Ostracism

#### NICOLE LEGATE

Illinois Institute of Technology

#### CODY DEHAAN

University of Rochester

#### RICHARD RYAN

Australian Catholic University

ABSTRACT. Most of the focus within the ostracism literature concerns the negative effects on the ostracized and how they cope following ostracism. Research is now beginning to illuminate negative psychological effects for ostracizers, yet no studies to date have examined their coping responses. This study continues this line of inquiry focusing on experiences of going along with ostracism, both by employing a face-to-face interaction and by exploring prosocial versus antisocial coping reactions in ostracizers. Results reveal that compared to those in a neutral condition, compliant ostracizers suffered because ostracizing someone else frustrated their psychological needs for autonomy and relatedness. Further, when given the chance, ostracizers were more inclusive of the person they previously ostracized. Discussion considers important avenues for future research as well as implications of results.

Keywords: coping strategies, motivation, self-determination theory, sources of ostracism

HUMANS ARE SOCIAL CREATURES, and as a large body of evidence shows, it hurts to be ostracized<sup>1</sup> (see Williams, 2007b, for a review). Being ostracized is painful (e.g., Eisenberger, Lieberman, & Williams, 2003), and produces strong feelings of sadness and anger (Williams, 2009). Although there are factors that exacerbate the pain and distress of ostracism (Bernstein, Sacco, Young, Hugenberg, & Cook, 2010; Sacco, Bernstein, Young, & Hugenberg, 2014), nothing dampens the immediate pain of being ostracized. However, longer-term emotional adjustment after ostracism depends on coping (Williams & Nida, 2011). Research on coping among the ostracized shows that people react in ways that restore the needs that were threatened, such as increasing chances for future inclusion (e.g., being cooperative) to restore a sense of belonging, or with aggressive and antisocial behavior (e.g., Catanese & Tice, 2005) as a way to establish control that was previously lost.

Address correspondence to Nicole Legate, Illinois Institute of Technology, Department of Psychology, 3105 S. Dearborn St., Chicago, IL 60616, USA. E-mail: nlegate@iit.edu

#### 472 THE JOURNAL OF SOCIAL PSYCHOLOGY

As social creatures, people tend to go along with others even when it can do harm (e.g., Milgram, 1963), especially when the consequences of not doing so will likely result in ostracism (e.g., Ouwerkerk, Kerr, Gallucci, & Van Lange, 2005). This may help explain why youth frequently go along with a dominant peer in hurting or ostracizing someone in elementary school years and adolescence (Berndt, 2002; Crick & Grotpeter, 1995; Dodge, Coie, & Lynam, 2008). Ostracism continues in adulthood as well. For example, one study reported that 78% of adults have experienced some form of ostracism at work (O'Reilly, Robinson, Berdahl, & Banki, 2014). This same study found that ostracism was more common than harassment, and also more detrimental. Other research shows that ostracizing others is as prevalent as being ostracized (Faulkner, Williams, Sherman, & Williams, 1997) and that people admit to ostracizing others frequently in their daily lives (Nezlek, Wesselmann, Wheeler, & Williams, 2015).

A few recent studies (Crick, Ostrov, & Werner, 2006; Legate, DeHaan, Weinstein, & Ryan, 2013; Poulsen & Kashy, 2012) have revealed that ostracizing others can be as psychologically harmful as being ostracized. Specifically, prior research (Legate et al., 2013) has found that ostracizing hurts both parties for the same reason: it thwarts people's psychological needs for *autonomy* and *relatedness*. Targets of ostracism felt severed connections that thwarted relatedness (see also Williams, 2009). Yet persons complying in ostracism also suffered lowered relatedness, as well as thwarted autonomy, because they felt controlled or compelled to go along with something that they would not typically choose to do. Insofar as compliance with ostracism is associated with lowered autonomy and relatedness, of interest is examining how compliant ostracizers cope after they ostracize, and particularly whether they try and make amends for the potential harm they have done.

#### SELF-DETERMINATION THEORY FRAMEWORK

To understand why people suffer when they ostracize, as well as give insight into how they might cope, we use a self-determination theory (SDT; Ryan & Deci, 2000) framework. SDT concerns itself with the conditions that lead to growth and human flourishing, as well as those that lead to suffering, aggression, and antisocial behaviors (see Vansteenkiste & Ryan, 2013). Specifically, people thrive when their basic psychological needs for autonomy, competence, and relatedness are met, and they suffer and react defensively when these needs are thwarted. Although the specification of these basic needs arises from a separate tradition than the needs outlined within the needs-threat model of ostracism (Williams, 2009), they overlap in many ways. Relatedness is the need to experience close and caring connections with others and clearly maps onto the need to belong (Baumeister & Leary, 1995); it is experienced when one cares for or is cared for by others, and is thwarted when one experiences isolation or disconnection. Autonomy is the need to experience one's own behavior as volitional, valued, and self-endorsed; it is supported under conditions that allow for meaningful choice, and is thwarted under conditions that are pressuring or coercive. However, autonomy is independent from the need for control (e.g., Seligman, 1975) as one can have control over outcomes without feeling autonomous about the actions entailed (Deci & Ryan, 2000). Competence is the need to feel capable and effective at important life activities, is supported when an individual encounters appropriate challenges with informational feedback, and can contribute to self-esteem (e.g., Steele, 1988), as can the other two needs within the SDT tradition. Similarly, although meaningful existence (Solomon, Greenberg, & Pyszczynski, 1991) is not a need recognized within SDT, satisfaction of autonomy, competence, and relatedness promote a sense of meaning in one's life (Ryan & Deci, 2004).

#### **OSTRACIZING THWARTS NEEDS**

Compliance with ostracizing others can thwart autonomy and relatedness, as people are often pressured to do it (e.g., Dodge et al., 2008), and it functions to disconnect people. Indeed, prior research has demonstrated this (Legate et al., 2013). Importantly, this effect was not due to the act of compliance *per se*, as compliance with requests to be inclusive resulted in smaller costs to autonomy, and did not result in costs to relatedness or mood. Conversely, compliance with ostracism produced significantly larger costs to autonomy, as well as decrements in relatedness and mood. In the present research we will again test whether compliance with ostracizing someone else is need thwarting, and whether need thwarting has emotional costs. We included the need for competence in the model, but had no a priori assumptions about whether or not it would also be thwarted following ostracism. We also extend this previous research by examining coping responses in ostracizers, and particularly propensities toward repairing relations with those they have wronged, an untouched area of research.

#### HELPING SATISFIES NEEDS

According to SDT, people are generally intrinsically motivated to help others, and they derive need satisfactions directly from helping behaviors (Ryan & Hawley, in press; Weinstein & Ryan, 2010). Specifically, when acting in helpful ways people generally feel enhanced competence (for being effective), enhanced relatedness (connecting with others), and enhanced autonomy (because most prosocial behavior is volitional and self-valued). Further, need satisfaction explains, in turn, why helping enhances positive affect and reduces negative affect (Weinstein & Ryan, 2010). In contrast, in complying with ostracism, one is doing social harm rather than helping, diminishing both autonomy and relatedness satisfactions, as Legate and colleagues (2013) demonstrated. Accordingly, we expect that when compliant ostracizers are no longer constrained, they will attempt to "right the wrong" by showing more inclusive behaviors.

Indeed, prior SDT research suggests that under need-satisfying conditions, people tend to be inclusive (Legault, Gutsell, & Inzlicht, 2011) and support the basic needs of others (Deci, La Guardia, Moller, Schiener, & Ryan, 2006). Following from this, we expect when the pressure to ostracize is removed, ostracizers will cope by showing more inclusive behaviors that may also restore their thwarted needs. Specifically, we expect that when given the chance to interact with the person they previously ostracized, individuals will go out of their way to include, as opposed to continuing to ostracize.

#### PROSOCIAL AND REPARATIVE COPING

Just as those who have been ostracized or hurt must cope with the pain of ostracism (Williams & Nida, 2011), so do the individuals who have hurt others. However, very little work has examined

how people cope when they do harm. Generally, research has found that "doing good" in the form of prosocial behavior helps people when they are feeling bad (e.g., Grant & Sonnentag, 2010; Schaller & Cialdini, 1988) and has been associated with better coping (Midlarsky, 1991), and with reduced depression over time (Musick & Wilson, 2003). When examining prosocial and antisocial coping responses side by side, prosocial coping is related to adjustment, whereas antisocial coping predicts depressive symptoms (Monnier, Cameron, Hobfall, & Gribble, 2000).

People also tend to want to correct past wrongdoings. At the group-level, perceived responsibility motivates people to make reparations for past wrongdoing (e.g., Doosje, Branscombe, Spears, & Manstead, 1998; Dumont & Waldzus, 2014). One study of employees found that helping others was an effective way to cope after hurting others, because helping attenuated the emotional costs associated with doing harm to others (Grant & Campbell, 2007). Closely related to the present work, recent research has revealed that people tend to compensate those unfairly ostracized. Specifically, people tended to compensate an individual who they saw being unjustly ostracized by others (Wesselmann, Wirth, Pryor, Reeder, & Williams, 2013) or after they ostracized someone without sufficient justification to do so (Van Tongeren, Root Luna, & Witvliet, 2015). The current work adds to research on compensation after ostracism by observing what happens when people are given a second chance to interact with people they have personally wronged, whether or not they perceive their own ostracizing behavior as unjust.

#### THE CURRENT RESEARCH

In the current study, we investigated the phenomenon of compliance with ostracism. Extending past research, we created an ostracism experience using a face-to-face interaction paradigm. Following the period of ostracism, we then gave people a second opportunity to include or continue to ostracize the person they had ignored in the face-to-face encounter using a Cyberball (Williams, Cheung, & Choi, 2000) game interaction. In line with prior work (Legate et al., 2013), we expected that complying with ostracizing would yield emotional costs (negative affect) because it thwarts needs for autonomy and relatedness. We chose to examine this meditational pathway because it was demonstrated in prior work (Legate et al., 2013), and is consistent with our theorizing and other research in SDT (e.g., Ryan, Bernstein, & Brown, 2010; Weinstein & Ryan, 2010). We also expected ostracizers to cope in a prosocial manner. Specifically, we predicted that when given the opportunity, ostracizers would include—rather than continue to ostracize—the individual they had previously ignored, even though the other group confederate continued to ostracize.

#### METHOD

Fifty-eight undergraduates (age: M = 20; gender: 46 women, 12 men; race: 58% Caucasian, 25% Asian, 17% other) participated. Each participant was met in the lab by an experimenter and two confederates. The participant and two confederates were seated in separate lab spaces, ostensibly to complete surveys before a "getting to know you" conversation task. Participants completed a baseline measure of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) to assess mood. Items were rated on a scale from 1 (*very slightly or not at all*) to

5 (*extremely*). Our focus, following previous findings of Legate et al. (2013) was on the negative affect subscale ( $\alpha = .80$ ). We used the Basic Psychological Needs scale (BPNS; Ilardi, Leone, Kasser, & Ryan, 1993) to assess state autonomy (sample item: "Right now I feel like I am free to decide for myself how to act";  $\alpha = .81$ ), competence (sample item: "Right now I do not feel very capable", reverse coded;  $\alpha = .82$ ), and relatedness ("Right now I really like the people I'm interacting with";  $\alpha = .82$ ). These items were rated on a scale from 1 (*not at all true*) to 7 (*very true*).

Following this, the experimenter randomly assigned participants to one of two conditions, either the *ostracizer* condition or the *neutral* condition, and silently informed one confederate whether they would be ostracizing or including the target confederate; in all cases the target confederate was naïve to condition. Participants were told they would spend six minutes in a free-form conversation, during which their task was to get to know each other. They picked a name out of a bowl to ostensibly pick one of the other two participants, but both names in the bowl were the target confederate's. In the *ostracizer* condition, participants were instructed to exclude from the conversation, or gestures toward the excluded party. In the *neutral* condition, the experimenter explained that the person whose name was drawn would start the conversation. The informed confederate either went along with ostracism (in the ostracizer condition initially (until he or she noticed being included or ostracized), the target confederate was instructed to always start the conversation. The same two confederates were used for all participants—one male and one female—and their roles were counterbalanced across condition.

Following the conversation, the participant and confederates were taken back to their separate lab spaces, and participants completed the PANAS and BPNS in terms of how they felt during the conversation (negative affect subscale  $\alpha = .89$ ; autonomy  $\alpha = .86$ ; competence  $\alpha = .82$ ; relatedness  $\alpha = .86$ ). They also completed manipulation check questions asking about their *autonomous* and *controlled* reasons for including and excluding (sample item for controlled motivation: "I included [excluded] a participant from the conversation because I felt I should"; sample item for autonomous motivation: "I included [excluded] a participant from the conversation because I valued doing so"), using a modified version of the Self-Regulation Questionnaire (Ryan & Connell, 1989). Items were rated on a scale from 1 (*not at all true*) to 7 (*very true*). To serve as the manipulation check, we collapsed items about inclusion and exclusion into two composites (inclusion:  $\alpha = .95$ ; exclusion:  $\alpha = .80$ ), and in later analyses separated them into autonomous and controlled motives (autonomous inclusion:  $\alpha = .95$ ; controlled inclusion:  $\alpha = .87$ ; autonomous exclusion:  $\alpha = .72$ ; controlled exclusion:  $\alpha = .75$ ).

Finally, after the initial phase of the experiment was completed, participants were ostensibly given a chance to interact with the same two people with whom they conversed through a virtual ball-tossing game, Cyberball (Williams et al., 2000). Participants were instructed to visualize the situation, themselves, and the other players, but no instructions were given about how to interact with the other players. Participants typed their names, and saw their names and the confederates' names above the computerized images of the players. For those in the ostracizer condition, the game was programmed such that the confederate ostracizing during the conversation continued to ostracize the other confederate; he or she threw the ball twice to the other confederate, but then stopped doing so for the remainder of the game. In other words, this was testing whether the participant would choose to continue to go along with ostracism, or instead include the previously

ostracized confederate. In the neutral condition, both confederates threw the ball equally to the other players (i.e., there was no programmed exclusion). Finally, participants were debriefed, and no participant was able to identify the manipulation or purpose of the study when asked. For materials, please see https://osf.io/knxcg/ on Open Science Framework (OSF), and to access the data please contact the first author.

#### RESULTS

As a manipulation check, we compared groups on questions about their reasons for inclusion versus exclusion. Ostracizers (coded 1) highly endorsed being motivated to exclude (r = .80, p < .001) and those in the neutral group (coded -1) were motivated to include (r = -.81, p < .001). Interestingly, ostracizers tended to endorse both controlled (r = .84, p < .001) and to a lesser degree, autonomous (r = .28, p = .030) reasons for exclusion, while those in the neutral condition endorsed both autonomous (r = -.82, p < .001) and controlled (r = -.69, p < .001) reasons for inclusion. Not surprisingly, ostracizers reported significantly more controlled versus autonomous reasons for exclusion (z = 4.90, p < .001); the neutral group reported marginally more autonomous vs. controlled reasons for inclusion (z = 1.57, p = .058).

Repeated-measures analysis of variance tested Time 1 and Time 2 indicators as a function of condition, controlling for gender in all analyses as gender differences emerged in Time 1 means for relatedness and competence (i.e., females reported greater need satisfaction than males). Preand post-manipulation means by condition are presented in Table 1. Results showed a significant interaction of time by condition for negative affect: F(1, 54) = 17.83, p < .001,  $\eta_p^2 = .25$ , 95% confidence interval (CI) of the effect size (.07, .42). Simple slopes revealed that negative affect did not change in the neutral group (F(1, 23) = .02, p = .875,  $\eta_p^2 = .001$  CI [.00, .04]), while it

Outcome	Time 1	Time 2	F	$\eta_{\rm p}{}^2$	CI
Neg. affect			17.83***	.25	.07, .42
Neutral	1.30(0.33)	1.22(0.33)	0.02	.00	.00, .04
Ostracizer	1.47(0.46)	2.12(0.79)	31.50***	.51	.24, .67
Autonomy			70.57***	.56	.38, .68
Neutral	5.31(0.92)	5.86(0.97)	1.32	.05	.00, .28
Ostracizer	5.33(0.85)	3.31(1.17)	67.71***	.69	.47, .79
Relatedness			2.16	.04	.00, .17
Neutral	5.80(0.76)	5.46(1.05)	0.22	.01	.00, .19
Ostracizer	5.59(0.81)	4.80(1.09)	18.48***	.37	.11, .56
Competence			1.16	.02	.00, .14
Neutral	5.20(0.81)	5.92(1.50)	1.63	.07	.00, .29
Ostracizer	5.15(1.13)	5.52(1.56)	0.16	.01	.00, .14

TABLE 1
Means and Standard Deviations at Time 1 and Time 2 as a Function of Condition: Results of

\*\*\*p < .001.

significantly increased for ostracizers, F(1, 30) = 31.50, p < .001,  $\eta_p^2 = .51$  CI (.24, .67). There was also a significant time by condition interaction for autonomy, F(1, 55) = 70.57, p < .001,  $\eta_p^2 = .56$ , CI (.38, .68) with simple slopes showing no change for those in the neutral condition, F(1, 23) = 1.32, p = .263,  $\eta_p^2 = .05$  CI (.00, .28), while autonomy decreased for ostracizers after the manipulation, F(1, 31) = 67.77, p < .001,  $\eta_p^2 = .69$  CI (.47, .79). There was a nonsignificant trend by condition in how relatedness scores changed before and after the manipulation, F(1, 55) = 2.16, p = .14,  $\eta_p^2 = .04$ , CI (.00, .17). We continued to look at simple slopes because we expected to see a difference by condition; they revealed that relatedness significantly decreased for ostracizers, F(1, 31) = 18.48, p < .001,  $\eta_p^2 = .37$ , CI (.11, .56) whereas it did not change in the neutral condition, F(1, 23) = .22, p = .642,  $\eta_p^2 = .01$  CI (.00, .19). Finally, there was no change in competence by condition, F(1, 55) = 1.16, p = .286,  $\eta_p^2 = .02$  CI (.00, .14) and to be sure we examined simple slopes, neither of which were significant (F(1, 23) = 1.63, p = .215,  $\eta_p^2 = .07$  CI [.00, .29] and F(1, 31) = .16, p = .693,  $\eta_p^2 = .005$  CI [.00, .14]). See Figure 1 for mean scores by condition. There were no gender differences in changes for affect or needs across the two time points.

Next, we tested our expectation that ostracizing leads to more negative affect because it thwarts needs for autonomy and relatedness (aggregated together). This mediation hypothesis was tested using the Process procedure (Hayes, 2013) to obtain bias-corrected bootstrapped estimates based on 10,000 bootstrapping samples. Analyses revealed that ostracizing increased negative affect through autonomy and relatedness need thwarting (indirect effect = 0.32, 95% CI [0.18, 0.46]). In other words, going along with ostracism yielded greater negative affect because it thwarted needs for autonomy and relatedness.<sup>2</sup>

Finally we predicted efforts to repair relations, such that persons in the ostracism condition were expected to show a behavioral compensation after ostracizing another person, manifest in



FIGURE 1 Mean scores on measures of post-conversation negative affect, psychological needs, and throws to previously ostracized confederate as a function of condition (ostracizer or neutral). *Note*. Bars represent standard errors of the means. Negative affect used a scale of 1 to 5, and needs used a scale of 1 to 7. Throw ratio refers to the proportion of throws to the formerly ostracized target confederate compared to the ostracizing confederate (or comparable targets in the neutral group), where 1 indicates an equal proportion of throws to both confederates and a score greater than 1 indicates more throws to the formerly ostracized confederate (or comparable target in the neutral group).

#### 478 THE JOURNAL OF SOCIAL PSYCHOLOGY

differential ball throwing to the previously ostracized player (the target) in the Cyberball game. Following Wesselmann et al. (2013), we defined ball toss behavior as a ratio of throws to the target player compared to throws to the other confederate to account for the unequal number of participant throws across groups (total participant throws by group:  $M_{\text{neutral}} = 20$ , SD = 0.20;  $M_{\text{ostracizer}} = 27$ , SD = 5.05). There was a significant effect of condition: F(1, 53) = 8.68, p = .005,  $\eta_p^2 = .14$ , CI (.01, .31). Interestingly, those in the neutral condition threw the ball equally (throw ratio M = 1.04, SD = .18) to the other two players, while ostracizers threw the ball significantly more to the person they previously ostracized (throw ratio M = 1.40, SD = .69). In line with our prediction, it appears that, on average, ostracizers made a concerted effort to include the formerly ostracized confederate even when the other confederate continued to ostracize.

Having identified the effect that ostracizers attempted to repair the situation with the person they ostracized, a speculative research question concerned the motivation behind it. Thus in a fully post hoc analysis, we extracted the "guilt" item from the negative affect subscale of the PANAS to see if guilt could explain the effect of inclusion after ostracism. We specifically explored guilt as a potential mediator because it is an action-orienting emotion that can drive people to correct past transgressions (Niedenthal, Tangney, & Gavanski, 1994; Tangney & Fischer, 1995). Using the same mediation procedure, we found no indirect effect of ostracizers being more inclusive of the previously ostracized individual compared to those in the neutral condition because of guilt (indirect effect = .003, CI [-.18, .28]). Although ostracizers felt more guilt than those in the neutral condition (B = 1.21, p < .001, CI [.92, 1.51]), guilt failed to explain inclusion after ostracism (see Figure 1).

Related to this, we explored our manipulation check items concerning motivation for exclusion in another fully post hoc analysis in an effort to better understand the motivation driving differential throwing behavior. In a simultaneous mediation model using the same procedure, we tested for indirect effects of both autonomous and controlled reasons for exclusion, and found that excluding for controlled reasons mediated the effect of being an ostracizer on throw behavior (controlled motives indirect effect = -.34 CI [-.60, -.08]; autonomous motives indirect effect = .01 CI [-.04, .06]). In other words, those who ostracized tended to do so out of a sense of pressure and coercion (B = 1.14, p < .001, CI [.93, 1.36]), but the more they felt pressured and coerced, the *less* they threw the ball to the person they previously ostracized (B = -.30, p = .002, CI [-.48, -.12]).<sup>3</sup>

#### DISCUSSION

A handful of studies have found that ostracism is not just painful for the target—it can hurt those compliant in it too (e.g., Poulsen & Kashy, 2012). In the current study, we replicated and extended Legate et al. (2013) showing that compliance in ostracizing another person leads to negative affect, mediated by lowered experiences of autonomy and relatedness. We found this pattern using a different and highly palpable face-to-face ostracism paradigm, in which participants had to actively ignore the target person in front of them, thus increasing the generalizability of these findings. Second, beyond testing affective outcomes, we also used Cyberball behavior as a dependent variable to see whether ostracizers made reparations to their "victims." Results confirmed that they did: ostracizers threw the ball more to the person they previously ostracized compared to the other player, whereas those in the neutral condition threw the ball equally to the other two players.

It seems then that people who complied in ostracizing another made concerted efforts to include the person they ostracized when given the opportunity. In line with self-determination theory, this supports the notion that ostracizing others, and more generally causing social harm, is something people do for mostly controlled reasons (a notion these data supported); and when people do ostracize, it frustrates needs for autonomy and relatedness. Moreover, the current data suggest a desire to repair harms done. Although people may comply with ostracism, doing so thwarts their psychological needs. When this pressure is removed, they then act in ways that tend to satisfy autonomy and relatedness needs, potentially as a way to regain homeostasis. In other words, *inclusion*, as opposed to continued ostracizing, may help to restore emotional balance.

Exploratory analyses suggested that this reparation effect was not explained by guilt, or by feelings of pressure. When people felt pressure to ostracize, they actually threw the ball less to the person they previously ostracized, further suggesting that people are not making attempts to repair wrongdoing out of pressure, defensiveness, or because they feel like they should. Interpreted through cognitive dissonance theory (Festinger, 1962), findings may also suggest that people who ostracized out of pressure are motivated to move away from the source of their discomfort-the individual they ostracized-to reduce dissonance. However, because we cannot know people's motives for repairing relations without directly measuring it—a limitation of this work-these remain speculative interpretations. In the absence of guilt or feelings of pressure being able to account for this reparation effect, understanding their behavior as coping aimed at need restoration seems plausible. However, without data showing that inclusion restored people's needs for autonomy and relatedness—another limitation of the work—this interpretation is also speculative. As such, future research should measure basic needs satisfaction before and after an opportunity to repair relations with the ostracized confederate. Understanding motivational dynamics underlying reparative coping reactions in ostracizers thus represents a critical area of future research.

This research tested consequences and coping among those who complied, or went along with ostracism, as opposed to cases of ostracism that occur in the absence of coercion and pressure. It is likely that the motivational dynamics differ between internally motivated ostracizers and the compliant ostracizers we are studying. We began to examine this issue by measuring people's motives for exclusion, finding that people mostly ostracized others because they felt pressured or coerced, linking to Zadro and Gonsalkorale's (2014) category of "induced sources" of ostracism. Future research should therefore explore ostracism that occurs more out of the participant's own volition. Specifically, it would be informative to compare those who initiate versus those who are induced to ostracize on resultant mood, basic needs, and coping responses. Additionally, future research should compare the two needs traditions—the needs—threat model of ostracism and the needs within SDT—to determine overlap as well as unique contributions of each when studying both targets and sources of ostracism.

Despite limitations, this work is the first to examine coping reactions among compliant ostracizers, and provides initial evidence that people compliant in ostracizing others are motivated to "right the wrong" when given the opportunity to do so. Findings extend our insights into the psychological and relational dynamics of ostracism, and point to important opportunities to intervene with people who go along with harming others. Focusing on the fact that people who harm must cope too, this work suggests that people are motivated to reconcile and correct past wrongdoings when they are removed from the source of pressure to ostracize.



#### NOTES

- 1. There is a debate about the use of the terms *ostracism, exclusion,* and *rejection,* and throughout this paper we only use the term *ostracism* for parsimony. The definition of *ostracism* in Williams (2007a) is most consistent with the phenomenon we are studying here.
- Because tests of mediation cannot determine causality, we explored two alternative models, which can be found on the study's OSF page (https://osf.io/z82hm/).
- 3. To see additional post hoc tests of mediation we ran, please see the OSF page, https://osf.io/z82hm/

### AUTHOR NOTES

Nicole Legate is an Assistant Professor in the Department of Psychology at the Illinois Institute of Technology. Cody DeHaan is a doctoral candidate in the Department of Clinical and Social Sciences in Psychology at the University of Rochester. Richard Ryan is a Professor in the Institute for Positive Psychology and Education at Australian Catholic University.

#### REFERENCES

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529. doi:10.1037/0033-2909.117.3.497
- Berndt, T. J. (2002). Friendship quality and social development. Current Directions in Psychological Sciences, 11, 7–10. doi:10.1111/1467-8721.00157
- Bernstein, M. J., Sacco, D. F., Young, S. G., Hugenberg, K., & Cook, E. (2010). Being "in" with the in-crowd: The effects of social exclusion and inclusion are enhanced by the perceived essentialism of ingroups and outgroups. *Personality* and Social Psychology Bulletin, 36, 999–1009. doi:10.1177/0146167210376059
- Catanese, K. R., & Tice, D. M. (2005). The effect of rejection on antisocial behaviors: Social exclusion produces aggressive behaviors. In K. D. Williams, J. P. Forgas, & W. Von Hippel (Eds.), *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 297–306). New York, NY: Psychology Press.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social psychological adjustment. *Child Development*, 66, 710–722. doi:10.1111/j.1467-8624.1995.tb00900.x
- Crick, N. R., Ostrov, J. M., & Werner, N. E. (2006). A longitudinal study of relational aggression, physical aggression, and children's social-psychological adjustment. *Journal of Abnormal Child Psychology*, 34, 127–138. doi:10.1007/ s10802-005-9009-4
- Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin*, 32, 313–327. doi:10.1177/0146167205282148
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268. doi:10.1207/S15327965PLI1104\_01

- Dodge, K. A., Coie, J. D., & Lynam, D. (2008). Aggression and antisocial behavior in youth. In W. Damon & R. M. Lerner (Eds.), *Child and adolescent development: An advanced course* (pp. 437–472). Hoboken, NJ: John Wiley & Sons, Inc.
- Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilty by association: When one's group has a negative history. *Journal of Personality and Social Psychology*, 75, 872–886. doi:10.1037/0022-3514.75.4.872
- Dumont, K., & Waldzus, S. (2014). Group-based guilt and reparation in the context of social change. Journal of Applied Social Psychology, 44, 331–341. doi:10.1111/jasp.12224
- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. Science, 302, 290–292. doi:10.1126/science.1089134
- Faulkner, S., Williams, K., Sherman, B., & Williams, E. (1997, May). The "silent treatment": Its incidence and impact. Paper presented at the meeting of the Midwestern Psychological Association, Chicago, IL.
- Festinger, L. (1962). A theory of cognitive dissonance (Vol. 2). Redwood City, CA: Stanford University Press.
- Grant, A. M., & Campbell, E. M. (2007). Doing good, doing harm, being well and burning out: The interactions of perceived prosocial and antisocial impact in service work. *Journal of Occupational and Organizational Psychology*, 80, 665–691. doi:10.1348/096317906X169553
- Grant, A. M., & Sonnentag, S. (2010). Doing good buffers against feeling bad: Prosocial impact compensates for negative task and self-evaluations. Organizational Behavior and Human Decision Processes, 111, 13–22. doi:10.1016/ j.obhdp.2009.07.003
- Hayes, A. F. (2013). An introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY: Guilford Press.
- Ilardi, B. C., Leone, D., Kasser, R., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology*, 23, 1789–1805. doi:10.1111/j.1559-1816.1993.tb01066.x
- Legate, N., DeHaan, C. R., Weinstein, N., & Ryan, R. M. (2013). Hurting you hurts me too: The psychological costs of complying with ostracism. *Psychological Science*, 24, 583–588. doi:10.1177/0956797612457951
- Legault, L., Gutsell, J. N., & Inzlicht, M. (2011). Ironic effects of antiprejudice messages: How motivational interventions can reduce (but also increase) prejudice. *Psychological Science*, 22, 1472–1477. doi:10.1177/0956797611427918
- Midlarsky, E. (1991). Helping as coping. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 238–264). Thousand Oaks, CA: Sage.
- Milgram, S. (1963). Behavioral study of obedience. The Journal of Abnormal and Social Psychology, 67, 371–378. doi:10.1037/h0040525
- Monnier, J., Cameron, R. P., Hobfall, S. E., & Gribble, J. R. (2000). Direct and crossover effects of prosocial and antisocial coping behaviors. *Journal of Family Psychology*, 14, 570–584. doi:10.1037/0893-3200.14.4.570
- Musick, M. A., & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. Social Science & Medicine, 56, 259–269. doi:10.1016/S0277-9536(02)00025-4
- Nezlek, J. B., Wesselmann, E. D., Wheeler, L., & Williams, K. D. (2015). Ostracism in everyday life: The effects of ostracism on those who ostracize. *Journal of Social Psychology*, 155(5), 432–451.
- Niedenthal, P. M., Tangney, J. P., & Gavanski, I. (1994). "If only I weren't' versus "If only I hadn't": Distinguishing shame and guilt in counterfactual thinking. *Journal of Personality and Social Psychology*, 67, 585–595. doi:10.1037/ 0022-3514.67.4.585
- O'Reilly, J., Robinson, S. L., Berdahl, J. L., & Banki, S. (2014). Is negative attention better than no attention? The comparative effects of ostracism and harassment at work. *Organization Science*. doi:10.1287/orsc.2014.0900
- Ouwerkerk, J. W., Kerr, N. L., Gallucci, M., & Van Lange, P. A. (2005). Avoiding the social death penalty: Ostracism and cooperation in social dilemmas. In K. D. Williams, J. P. Forgas, & W. Von Hippel (Eds.), *The social outcast: Ostracism, social exclusion, rejection, and bullying* (pp. 321–332). New York, NY: Psychology Press.
- Poulsen, J. R., & Kashy, D. A. (2012). Two sides of the ostracism coin: How sources and targets of social exclusion perceive themselves and one another. *Group Processes & Intergroup Relations*, 15, 457–470. doi:10.1177/1368430211430517
- Ryan, R. M., Bernstein, J. H., & Brown, K. W. (2010). Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms. *Journal of Social and Clinical Psychology*, 29, 95–122. doi:10.1521/jscp.2010.29.1.95
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749–761. doi:10.1037/0022-3514.57.5.749

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. doi:10.1037/0003-066X.55.1.68
- Ryan, R. M., & Deci, E. L. (2004). Avoiding death and engaging life as accounts of meaning and culture: A comment on Pyszczynski, Greenberg, Solomon, Arndt, and Schimel (2004). *Psychological Bulletin*, 130, 473–477. doi:10.1037/ 0033-2909.130.3.473
- Ryan, R. M., & Hawley, P. (in press). Naturally good? Basic psychological needs and the proximal and evolutionary bases of human benevolence. In M. Leary, & K. W. Brown (Eds.), *The psychology of hypoegoic behavior*. New York: Guildford Press.
- Sacco, D. F., Bernstein, M. J., Young, S. G., & Hugenberg, K. (2014). Reactions to social inclusion and ostracism as a function of perceived in-group similarity. *Group Dynamics: Theory, Research, and Practice*, 18, 129–137. doi:10.1037/gdn0000002
- Schaller, M., & Cialdini, R. B. (1988). The economics of empathic helping: Support for a mood management motive. Journal of Experimental Social Psychology, 24, 163–181. doi:10.1016/0022-1031(88)90019-4
- Seligman, M. E. P. (1975). Helplessness: On depression, development, and death. San Francisco, CA: Freeman.
- Solomon, S., Greenberg, J., & Pyszczynski, T. (1991). A terror management theory of self-esteem and its role in social behavior. In M. Zanna (Ed.), Advances in experimental social psychology (pp. 93–159). New York, NY: Academic Press.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 21, pp. 261–302). New York, NY: Academic Press.
- Tangney, J. P., & Fischer, K. W. (1995). Self-conscious emotions: The psychology of shame, guilt, embarrassment and pride. New York, NY: Guilford Press.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23, 263–280. doi:10.1037/ a0032359
- Van Tongeren, D. R., Root Luna, L. M., & VanOyen Witvliet, C. (2015). Insufficient justification for rejection elicits compensatory behavior. *Journal of Social Psychology*, 155(5), 527–534.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. doi:10.1037/ 0022-3514.54.6.1063
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, 98, 222–244. doi:10.1037/a0016984
- Wesselmann, E. D., Wirth, J. H., Pryor, J. B., Reeder, G. D., & Williams, K. D. (2013). When do we ostracize? Social Psychological and Personality Science, 4, 108–115. doi:10.1177/1948550612443386
- Williams, K. D. (2007a). Ostracism. Annual Review of Psychology, 58, 425–452. doi:10.1146/annurev.psych.58.110405. 085641
- Williams, K. D. (2007b). Ostracism: The kiss of social death. Social and Personality Psychology Compass, 1, 236–247. doi:10.1111/j.1751-9004.2007.00004.x
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. Zanna (Ed.), Advances in experimental social psychology (Vol. 41, pp. 279–314). New York, NY: Academic Press.
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). CyberOstracism: Effects of being ignored over the Internet. Journal of Personality and Social Psychology, 79, 748–762. doi:10.1037/0022-3514.79.5.748
- Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. Current Directions in Psychological Science, 20, 71–75. doi:10.1177/0963721411402480
- Zadro, L., & Gonsalkorale, K. (2014). Sources of ostracism: The nature and consequences of excluding and ignoring others. Current Directions in Psychological Science, 23, 93–97. doi:10.1177/0963721413520321

Received December 22, 2014 Accepted June 11, 2015