Ostracism

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Key Words

ignoring, social exclusion, rejection, silent treatment

Abstract

In this review, I examine the social psychological research on ostracism, social exclusion, and rejection. Being ignored, excluded, and/or rejected signals a threat for which reflexive detection in the form of pain and distress is adaptive for survival. Brief ostracism episodes result in sadness and anger and threaten fundamental needs. Individuals then act to fortify or replenish their thwarted need or needs. Behavioral consequences appear to be split into two general categories: attempts to fortify relational needs (belonging, self-esteem, shared understanding, and trust), which lead generally to prosocial thoughts and behaviors, or attempts to fortify efficacy/existence needs of control and recognition that may be dealt with most efficiently through antisocial thoughts and behaviors. Available research on chronic exposure to ostracism appears to deplete coping resources, resulting in depression and helplessness.

Contents

INTRODUCTION

> If no one turned round when we entered, answered when we spoke, or minded what we did, but if every person we met "cut us dead," and acted as if we were nonexisting things, a kind of rage and impotent despair would ere long well up in us, from which the cruelest bodily tortures would be a relief; for these would make us feel that, however bad might be our plight, we had not sunk to such a depth as to be unworthy of attention at all. (James 1890/1950, pp. 293–94)

> Socially, Mack and the boys were beyond the pale. Sam Malloy didn't speak to them as they went by the boiler. They drew into themselves and no one could foresee how they would come out of the cloud. For there are two possible reactions to social ostracism—either a man emerges determined to be better, purer, and kindlier or he goes bad, challenges the world and does even worse things. This last is by far the commonest reaction to stigma. (Steinbeck 1987/1945, pp. 250–51)

Belonging is a fundamental requirement for security, reproductive success, and mental health (Baumeister & Leary 1995, Smith et al. 1999). The past decade has witnessed a proliferation of research interest on what happens when the person does not belong, through acts of ostracism, social exclusion, and rejection. These interrelated interpersonally aversive phenomena have been woven in our social fabric for eons, practiced not only by humans, but also by other social animals. Indeed, these powerful behavioral strategies provide strength and resiliency to this fabric. The group that ostracizes becomes more cohesive (Gruter & Masters 1986). Thus, it is somewhat perplexing that these powerful and universal processes have only recently attracted attention in social psychology. Perhaps one reason for our current fascination with the processes and consequences of social exclusion is that we are searching for explanations for what appears to be a recent surge in seemingly irrational and socially intolerable behaviors that have appeared worldwide: random acts of monstrous violence. In news reports that we consider almost routine now, we are bombarded with stories of incidences in which individuals, often students in high school, have wielded weapons and, without apparent concern for their own survival, have shot and killed many of their peers and teachers. We have witnessed peoples' willingness to conduct terrorist acts against countless and unknown others, again with plausible certainty that in carrying out these acts, they will perish with the victims. Since 1994, in U.S. schools alone, there have been more than 220 separate shooting incidents in which at least one person was killed and 18 episodes that involved multiple killings (Anderson et al. 2001). Mass shootings (or attempts that have been intercepted by authorities) at schools and other public places are occurring with increasing frequency in the United States as well as in a growing number of other countries (see Newman 2004 for a sociological/ethnographic perspective on school shootings).

Although the reasons for this apparent upsurge in violence are still not clear, a recent line of investigation has linked such incidents with growing social isolation (Twenge 2000), and further evidence is beginning to emerge that experiences of social exclusion may have played a motivating role in the actions of many shooters. In a case analysis of 15 post-1995 U.S. school shootings, Leary et al. (2003) suggest that chronic social rejection in the form of ostracism, bullying, and/or romantic rebuff was a major contributing factor in 87% of cases. Studies of Martin Bryant, who, in 1996, killed 35 people at a popular tourist attraction at Port Arthur, Tasmania, suggest that he felt lonely and isolated (Bingham 2000, Crook 1997). Robert Steinhauser, who killed 16 people at his ex-high school in Erfurt, Germany, in 2002, though not a social outcast (Lemonick 2002), had been greatly upset by a significant act of exclusion—expulsion from his school. In 2005, at Valparaiso High School in Indiana, a 15-year-old boy held hostage and slashed with two sharp-edged blades—one described as a machete—seven of his classmates. When peers were asked about this boy, it was reported, "He was so invisible at Valparaiso High School this fall that students who sat next to him in Spanish class didn't know his name" ("7 Valparaiso High Students Hurt in Stabbing Rampage," *Indianapolis Star*, Nov. 25, 2004). The consequences of being ostracized, either intentionally or unintentionally, seem to be a thread that weaves through case after case of school violence.

But what would drive an individual, or a group of individuals, to violate all laws of instinctual human survival to carry out these most heinous and violent acts? As the following review suggests, ostracism and other forms of social exclusion often lead to changes in behavior that are likely to garner social approval and increase the likelihood of social acceptance and inclusion. But evidence also supports a link between being a target of ostracism and targeting others for acts of violence. Furthermore, under certain conditions, this link may be so strong that it

Ostracism: ignoring and excluding individuals or groups by individuals or groups

Rejection: an explicit declaration that an individual or group is not wanted

Social exclusion: being kept apart from others

Aggression: intention to harm other living beings

obliterates concerns for acceptance and liking by others and even for self-preservation, self-regulation, or inevitable future punishment. Ostracism may lead to other maladaptive decisions and behaviors precisely because of a need to belong (Baumeister & Leary 1995) and to be accepted by others. Ostracism can cause such a strong desire to belong, to be liked by someone, perhaps anyone, that individuals' ability to discriminate good from bad may be impaired to the point that they become attracted to any group that will have them, even cults and extremist groups. Political scientist Paul James of Royal Melbourne Institute of Technology indicated in a television interview (on January 14, 2003) that the profile of Australian citizens who had recently joined terrorist groups like Al Qaeda was of individuals who felt isolated, marginalized, or excluded within their society and who were attracted to the intense face-to-face connectedness that these extremist groups have to offer. Joining and following the dictates of extremist groups can also fulfill needs for control and recognition because these groups promise retribution and worldwide attention.

By all accounts, ostracism occurred long before it was named (*ostrakismos*) around 500 B.C., when Athenians cast their votes on shards of clay, *ostraca*, to determine whether a member of the community, usually a former political leader, should be banished for a period of 10 years. Indeed, ostracism, defined here as being ignored and excluded, has been observed in almost all social species (e.g., primates, lions, wolves, buffalos, bees); in anthropological accounts of tribes from around the world; in modern industrialized nations; in governmental, religious, military, penal, and educational institutions; in informal groups and in close relationships (relational ostracism, or the silent treatment); in playgrounds; and by children, adolescents, and adults (see Gruter & Masters 1986; Williams 1997, 2001). It appears that ostracism is pervasive and powerful.

Psychology's interest in ostracism and related phenomena such as social exclusion and rejection was largely implicit for the first century. Schachter's (1951) research on opinion deviance in group discussions found that if those who disagreed with the group did not yield to communicative attempts to conform to the group's opinion, they would face expulsion from the group. Indeed, a common—often untested—theme of all research in social influence, including obedience, conformity, compliance, and social inhibition, was that people caved to the real or imagined pressures of others to avoid rejection and exclusion. Thus, while fear of anticipated rejection and exclusion was tacitly acknowledged as a motive for many social behaviors, there was little direct investigation into the consequences of experiencing rejection and exclusion.

Although a few scattered studies prior to 1990 examined reactions to being ignored, excluded, or rejected, they had little theoretical foundation or impact (cf. Geller et al. 1974; for a review, see Williams 1997, 2001). Subsequent to this, a model and examples of ostracism were put forth that explicated a taxonomy (various types of ostracism, different modes, motives, etc.), the need-threat notion (ostracism threatens belonging, self-esteem, control, and meaningful existence needs), and short-term (attempts to fortify threatened needs) and long-term (giving up) responses. Additionally, a theory of the need to belong was published that elevated interest in inclusion and exclusion (Baumeister & Leary 1995). In the mid 1990s, a Zeitgeist for research on ostracism surfaced, characterized by a confluence of theories and research interests that gave life to a broad-based and extensive examination of how people respond to acts of being ignored, excluded, and rejected.

In this article, I review the empirical literature that has erupted in the past decade in social psychology on ostracism, social exclusion, and rejection. An active research tradition in developmental psychology on peer rejection includes the topics of bullying, relational, and indirect forms of aggression. For an extensive review of this literature, see Crick

et al. (2004) and Juvonen & Gross (2005). Additionally, most of the research reported here deals with the effect of being excluded or ostracized. A future issue to be explored is the motives and factors that predict when individuals and groups will choose to ostracize others (Foddy et al. 1999, Williams et al. 2003, Zadro et al. 2005).

DEFINITIONS

Despite the large number of studies and chapters devoted to examining the impact of ostracism, social exclusion, and rejection, little progress has been made in determining whether these terms describe separate phenomena or are essentially interchangeable. Although some have attempted to delineate semantic and psychologically meaningful distinctions between ostracism, social exclusion, and rejection (Leary 2001, 2005), virtually no empirical research has established distinctions that lead to different consequences. Ostracism is typically defined as being ignored and excluded, and it often occurs without excessive explanation or explicit negative attention. Ostracism is often operationalized as a process that is characterized as an unfolding sequence of responses endured while being ignored and excluded. Laboratory research on ostracism examines the consequences of being ignored and excluded over several minutes; but field, diary, and interview studies examine ostracism over days, weeks, and years (Williams et al. 2000, 2001). Social exclusion appears to be defined as being excluded, alone, or isolated, sometimes with explicit declarations of dislike, but other times not (Twenge et al. 2001). Typically, the exclusion manipulation occurs either after interaction and separation from the others or as a hypothetical consequence in the future. Rejection (Leary et al. 2005) is typically operationalized as a declaration by an individual or group that they do not (or no longer) want to interact or be in the company of the individual. Again, rejection does not typically involve a protracted episode, but occurs after interaction and separation. Despite these apparent distinctions, investigators do not appear to be wedded to these operational definitions, nor do they consistently use specific terms for specific operations. Thus, I use these terms interchangeably.

AN EVOLUTIONARY PERSPECTIVE?

Because ostracism has been observed in most social species and across time and cultures, it is appropriate to consider an evolutionary perspective on its function and existence. As argued in a volume on ostracism by Gruter & Masters (1986), groups that ostracized burdensome or deviating members became more cohesive, offering their members more security and reproductive opportunities; ostracized members died. Ostracism was functional and adaptive (Barner-Barry 1986). Likewise, organisms that were especially good at detecting or anticipating ostracism were probably most likely to be able to do something about it that might prevent the inevitable loss of group membership, protection, and reproductive opportunities. An ostracism-detection system, therefore, probably coevolved with the widespread use of ostracism. Such a detection system was probably selectively biased to detect any possibility of ostracism, thus leading to an error management system that favored a bias for false alarms over misses (see Haselton & Buss 2000, Schaller et al. 2006, Spoor & Williams 2006). Misperceiving an event as ostracism when it was not ostracism might incur some psychological costs, but missing ostracism when it was about to happen would likely result in death. Thus, humans would expect that we have evolved to detect ostracism in such a way that it would signal an alarm that would serve to direct attention toward determining if ostracism was in fact occurring, and if so, would direct our resources toward coping with it. A good alarm signal would be pain. An immediate painful response to any hint of ostracism would capture the individual's attention and require an appraisal so that action could be taken to

remedy the situation. The research reviewed below supports such strong immediate reactions to even the most minimal forms of ostracism.

Cyberball: a virtual ball–tossing paradigm in which ostracism can be manipulated

PARADIGMS AND MANIPULATIONS OF OSTRACISM, SOCIAL EXCLUSION, AND REJECTION

Several paradigms have enjoyed frequent use in research on ostracism and related phenomena. Undoubtedly, these paradigms themselves may account for some of the discrepant outcomes (i.e., pro- versus antisocial responses), so it is wise to consider each and to note which paradigms are associated with which outcomes.

Ball Tossing

Williams (1997) developed a minimal ostracism paradigm in which participants are ignored and excluded within the context of an emergent ball-tossing game that appears to have no connection with the experiment itself. Participants (two confederates and one actual participant) are told to wait quietly for the experimenter's return, at which point the experiment will begin. One of the confederates notices a ball and starts to toss it around. Once each person has had a chance to catch and throw a few times, participants randomly assigned to the ostracism condition are never again thrown the ball, nor are they looked at or responded to. The two confederates continue playing enthusiastically for another four or so minutes. In the inclusion condition, participants continue to receive the ball approximately one-third of the time.

Cyberball

Williams et al. (2000; see also Williams & Jarvis 2006) developed a virtual analogue to the ball-tossing paradigm that was intended to be more efficient (it requires no confederates) and less traumatic. Instead of an emergent game that occurs ostensibly outside the experiment, researchers inform participants over the computer that the study involves the effects of mental visualization on a subsequent task, and that a game, Cyberball, has been found to work well in exercising their mental visualization skills. Participants are told they are playing with two (sometimes three) others who connected over the Internet (or Intranet) and that it does not matter who throws or catches, but rather that they use the animated ball-toss game to assist them in visualizing the other players, the setting, the temperature, and so on. This cover story, like the emergent game in the ball-tossing paradigm, is meant to assure participants that not getting the ball has no detrimental effects on their performance in the experiment. As in ball tossing, ostracized participants receive the ball substantially less than did the included participants, usually getting only one or two tosses near the beginning of the game. Typically, the game proceeds for 30–50 throws.

Life Alone

Twenge et al. (2001) and Baumeister et al. (2002) developed a personality test, the life-alone prognosis paradigm, in which participants respond to a personality questionnaire, receive accurate introversion/extraversion feedback, and are randomly assigned to one of three additional forms of feedback. In the accepted/high-belonging condition, participants are told that they are the type who has rewarding relationships throughout life; that they will have a long and stable marriage, and have lifelong friendships with people who care about them. In the rejected/low-belonging condition, they are told that they are the type who will end up alone later in life; that although they have friends and relationships now, by the time they are in their mid-20s most of these will disappear. They may have multiple marriages, but none of them will last, and they will end up being alone later in life. As a negative-feedback control condition, participants in the accident-prone condition are

told they will endure a lifetime of accidents and injuries.

Get Acquainted

This paradigm, developed by Nezlek et al. (1997), involves the use of a small group of actual participants engaged in a get-acquainted discussion. They are given examples of topics to discuss (e.g., favorite movies, major in college) and take turns talking within the group setting. Following this discussion, they are separated and asked to identify the individual from the group with whom they would most like to work. A few minutes later, they receive one of two types of feedback concerning how the others voted, that either everyone wanted to work with them (inclusion) or that no one wanted to work with them (rejection).

Other Paradigms

Several other ostracism, social exclusion, and rejection paradigms have been used with less frequency. Ostracism, social exclusion, and/or rejection have been manipulated within the context of a continuous public goods dilemma game (Ouwerkerk et al. 2005), chat rooms (Gardner et al. 2000, Williams et al. 2002), face-to-face conversations (Geller et al. 1974), cell phone text messaging (Smith & Williams 2004), role playing (Williams et al. 2000, Zadro et al. 2005), reliving or imagining rejection experiences (Craighead et al. 1979, Pickett et al. 2004, Williams & Fitness 2004), scenario descriptions of rejection and social exclusion (Fiske & Yamamoto 2005, Hitlan et al. 2006), and a variety of virtual reality worlds (K.D. Williams & A.T. Law, unpublished data).

THEORIES OF OSTRACISM, SOCIAL EXCLUSION, AND REJECTION

Whereas many hypotheses have been proposed to explain specific experimental predictions, there are currently three major theories that attempt to explain and predict the impact and consequences of ostracism, social exclusion, and rejection.

A TEMPORAL EXAMINATION OF RESPONSES TO OSTRACISM

Although only a few theorists have emphasized the importance of examining the impact of ostracism over time (Brewer 2005; Williams 1997, 2001), the extant literature supports the utility of such a temporal framework. As with responses to many situational factors, there are automatic reflexive responses to ostracism that are followed by more deliberative reflective reactions. This temporal examination can be taken further to examine (although perhaps not through experiments) the impact of cumulative instances of frequent exposures to ostracism or to long-lasting episodes of ostracism.

Williams (1997, 2001; Williams & Zadro 2005) proposes the following sequence: (*a*) reflexive painful response to any form of ostracism, unmitigated by situational or individual difference factors; (*b*) threats to the need for belonging, self-esteem, control, and meaningful existence, and increases in sadness and anger; and (*c*) a reflective stage that is responsive to cognitive appraisals of the situation, the sources of ostracism, the reasons for ostracism, and predisposing inclinations that reflect individual differences residing within the target of ostracism, all of which guide the individual to fortify the most threatened needs. If relational needs (belonging and self-esteem) are most thwarted, then ostracized individuals will seek to fortify these needs by thinking, feeling, and behaving in a relatively prosocial manner. If, however, efficacy and existence/recognition needs are most thwarted, ostracized individuals will attempt to fortify these needs, which in many instances may result in controlling, provocative, and even antisocial responses. For individuals who encounter multiple episodes (or single long-term episodes) of ostracism, their ability to marshal their resources to

fortify threatened needs will be diminished, and feelings of helplessness, alienation, and despair will infuse their thoughts, feelings, and actions.

THE SOCIAL MONITORING SYSTEM AND SOCIOMETER THEORY

Another major theoretical perspective that has gained support focuses primarily on how ostracism, social exclusion, and/or rejection thwart the need to belong, in particular (Gardner et al. 2005, Pickett & Gardner 2005), and how a psychological system—the social monitoring system—helps regulate optimal levels of belongingness. When belonging is threatened, the individual is motivated to attend more carefully to social cues, presumably to achieve success in subsequent social interactions. This approach is consistent with Leary et al.'s (1995 and 1998) sociometer theory, which asserts that self-esteem is a gauge of relational valuation that, when low, signals the individual that changes must be made to improve inclusionary status.

COGNITIVE DECONSTRUCTION AND SELF-REGULATION IMPAIRMENT

A third theoretical framework argues that the blow of social exclusion is much like the blow of a blunt instrument, and it causes a temporary state of cognitive deconstruction (Baumeister et al. 2002), much like the affectively flat stage that precedes suicide attempts. This explanation has been offered especially when socially excluded individuals show no signs of mood impact (see also Baumeister & DeWall 2005). Consistent with this explanation of cognitive impairment is the premise that social exclusion impairs individuals' ability to self-regulate, which inhibits their ability to utilize the cognitive/motivational resources that are necessary to avoid impulsive acts and to engage in hedonic sacrifice and delayed gratification. This explanation fits nicely with observations of anger and indiscriminant aggression that sometimes follow social exclusion, and with recent evidence showing impaired inhibition against eating nonnutritive foods and avoidance of less tasty, nutritive foods (Baumeister et al. 2006).

REVIEW OF THE EMPIRICAL FINDINGS

I first review the empirical findings by examining how individuals respond immediately during the ostracism episode, referred to as the reflexive stage. I then review the evidence for mediating impact that might direct future thoughts, feelings, and behaviors, referred to as the reflective stage (these terms are used similarly to those used by Lieberman et al. 2002). Finally, I review the research examining the behavioral consequences of ostracism, social exclusion, and rejection.

REFLEXIVE STAGE: IMMEDIATE IMPACT OF OSTRACISM

A considerable number of studies have assessed reactions to ostracism either during or immediately after the ostracism episode. Usually, the measures taken immediately following the ostracism are asked retrospectively, for example, "How did you feel while you were playing the Cyberball game?" Thus, participants are reporting about their feelings and thoughts as the ostracism episode occurred. This distinction becomes important because the available evidence suggests that the reflexive pain/distress signal is quickly followed by appraisals and coping mechanisms that direct the individual toward thoughts and feelings that alleviate the pain. To be included in this section, the assessments must, therefore, have been taken during or immediately following the ostracism experience and must pertain to their responses during the ostracism experience.

Physiological Responses and Brain Activation

A few studies have examined physiological responses during or immediately following ostracism or rejection experiences. In one study, participants were attached to an impedance cardiograph while they played Cyberball (Zadro 2004). Guided by Blascovich & Tomaka's (1996) challenge/threat model, Zadro compared participants' baseline (waiting) levels to their initial inclusion levels, then their levels during ostracism, and finally to inclusion again. A challenge response is characterized as a functional behavioral reaction to situational demands that the individual has the capacity to handle and that has physiological concomitants of increased blood flow with arterial expansion. Threat, however, is a dysfunctional behavioral response that is accompanied by increased blood flow and arterial constriction. Ostracism did not produce a systematic threat response, but there was evidence for increased blood pressure during ostracism.

Similarly, Stroud et al. (2000) developed the Yale InterPersonal Stressor (YIPS) paradigm, which involved several forms of interpersonal rejection (including active derision) and exclusion within a small-group setting. In comparison with participants who had been engaged in a nonsocial task of searching for letter strings, researchers found the rejected/excluded participants to have significant increases in blood pressure and cortisol levels (in addition to higher self-reported levels of tension). It must be noted that because several abusive/rejection/exclusion acts occurred during the social interaction, and the control group had no social interaction at all, it is not clear which of these acts, if any, produced these effects.

Eisenberger et al. (2003) tested participants with a functional magnetic resonance imagery scanner while they played Cyberball over several stages. In Stage 1, called the implicit rejection condition, participants were told they would soon be playing a mental imagery game with two others (who were also in scanners) and who had already begun playing. Participants were told that their computers were not yet hooked up to the other two players' computers, so at first they would simply be watching the other two participants play the game. At some point when their computers were communicating with those of the other two players, they would be thrown the ball, and they could begin playing, too. In Stage 2, they were included. In Stage 3, the other two players apparently intentionally ostracized the participant (explicit rejection). Participants then completed a post-Cyberball questionnaire, which measured the distress during Stage 3. The results of this study showed that regardless of whether the ostracism was unintentional or intentional, it was associated with increased activation of the dorsal anterior cingulate cortex (dACC), a region of the brain that shows activation during exposure to physical pain (and loss of social connections, see Lieberman 2007; but also discrepancy detection, see Miller & Cohen 2001). As support for the pain interpretation, participants' dACC activation in Stage 3 was highly positively correlated with self-reported distress. The right ventral prefrontal cortex showed increased activation, but only during intentional ostracism. This region's function is to moderate the pain response, and consistent with this interpretation, its increased activation was negatively associated with self-reported distress. Additionally, Eisenberger (2006) found that dACC, amygdala, and periaqueductal gray activity during Cyberball-induced ostracism correlated with diary reports of social disconnections (see also MacDonald & Leary 2005).

dACC: dorsal anterior cingulate cortex

Dickerson & Kemeny (2004; see also Dickerson et al. 2004) conducted a meta-analysis of studies examining cortisol levels as a function of social-evaluative threat. Social-evaluative threat was defined broadly as any feedback about the self that others could judge negatively. Cortisol is a hormone that is secreted presumably to rally the organism's

efforts to survive and deal effectively with danger. Gunnar et al. (2003) report higher levels of cortisol levels in children for whom sociometric measures indicated peer rejection.

Self-Reported Distress Levels

Many studies have examined various self-reported levels of distress following ostracism, social exclusion, and rejection. These measures may include assessments of mood (usually sadness and anger), hurt feelings, levels of belonging, self-esteem, control, and meaningful existence, and more direct measures of distress or pain. Several studies have measured self-esteem, finding reductions following temporary or remembered instances of rejection and ostracism (Leary et al. 1995, Sommer et al. 2001, Williams et al. 2000, Zadro et al. 2004). Similarly, a sense of belonging, control, and meaningful existence diminishes following ostracism (Smith & Williams 2004; Williams et al. 2000; Zadro et al. 2004, 2006). At this time, there are few compelling reasons to separate these measures because they usually show high levels of intercorrelation.

Taken together, these studies provide ample evidence that ostracism increases self-reported distress. Williams and his colleagues have shown repeatedly that ostracism increases sadness and anger and lowers levels of belonging, self-esteem, control, and meaningful existence (reviewed by Williams & Zadro 2005). The typical effect size of ostracism on self-reported distress (as measured by moods and need threat) is high, between 1.0 and 2.0. Williams et al. (2000) found a distress pattern that was linearly associated with the amount of ostracism to which the participants were exposed, such that more ostracism (included only twice at the beginning of the game and never again) was more distressing than less ostracism (being included for one-sixth of the throws), which was more distressing than inclusion, which itself was less pleasant than overinclusion. Research has also shown that ostracism increases reports of hurt feelings and pain. When participants were asked to recall a physically painful event or a socially painful event, levels of currently experienced pain were considerably higher when they relived socially painful events, especially those coded as including ostracism (Williams & Fitness 2004). These pain levels, using the McGill pain inventory, were comparable to pain levels observed in meta-analyses (Wilkie et al. 1990) for chronic back pain and even childbirth.

Furthermore, considerable (but not all) research suggests that ostracism-induced distress is very resilient to moderation by situational factors or individual differences. Ostracism-induced distress emerged regardless of initial levels of trait self-esteem. Similarly, Leary et al. (1998) reported that trait self-esteem did not moderate participants' reactions to interpersonal rejection. Smith & Williams (2004) reported increased psychological distress following ostracism during a cell phone text-messaging interaction, and levels of individualism-collectivism did not moderate this effect. Additional studies find no moderation of ostracism-induced distress by individual-difference variables, including introversion-extraversion (Nadasi 1992), participant gender (Williams & Sommer 1997), loneliness and need for belonging (Carter-Sowell et al. 2006), and social anxiety (Zadro et al. 2006).

Ostracism-induced distress has also been resilient to situational variation, even when the situational manipulations would reasonably be expected to affect appraisals of the importance and threat value of ostracism. For instance, as already discussed, dACC activation occurred for both unintentional and intentional ostracism, although it was greater for intentional ostracism (Eisenberger et al. 2003). Self-reported distress measures show even less influence of situational factors. Self-reported distress levels are no higher when participants believe that other players are acting on their own volition compared with when they are told that other players are simply following a script and ostracizing them. Perhaps more surprisingly, in the same study,

self-reported distress was no lower when participants were told they were merely playing with a computer (Zadro et al. 2004). In another study, experimenters convinced participants they were playing Cyberball with similar others (i.e., those holding similar political leanings), rival others (i.e., those leaning toward the views of the major rival political party), or despised others (i.e., those leaning toward the views of the Australian Ku Klux Klan). Despite strong reasons to discount ostracism by an outgroup or, especially, a despised outgroup, the distress of ostracized participants was unmoderated by the psychological closeness of the ostracizing group (Gonsalkorale & Williams 2006). Whether inclusion comes with a cost (50 cents deducted for each throw received) or not, or whether the object being thrown is a ball or bomb (that is expected to explode, "killing off the player with the ball"), participants are still distressed by being ostracized (van Beest & Williams 2006a,b). We have also found that eliminating the human characteristics within a Cyberball-like game, and giving no instructions to mentally visualize the experience, resulted in no distress, but if participants generated agent-volition thoughts, they did show distress (Law & Williams 2006).

In contrast to the evidence reviewed above, several studies show behavioral consequences following the exclusion manipulation, in the absence of personal distress. In particular, the work of Baumeister, Twenge, and their colleagues typically finds no effects of social exclusion on mood, regardless of the type of mood measure employed. These researchers suggest that one consequence of social exclusion is a state of cognitive deconstruction and affective numbness, which may even extend to a lack of physical and social sensitivity (Baumeister et al. 2002, DeWall & Baumeister 2006, Twenge 2005). Although this suggestion is intriguing, there is also evidence by others that ostracism can make individuals more sensitive to social information (Gardner et al. 2000, Pickett et al. 2004). It is important to note that all social exclusion manipulations may not have the same impact, and in this case, it may be that the life-alone paradigm is particularly strong in inducing a sense of helplessness and inevitability. Compared with other methods of manipulating exclusion or rejection, there would seem to be nothing participants could do about their future aloneness, and this realization may induce a concussed state, as the authors suggest.

Taken as a whole, these studies suggest that the immediate or reflexive reactions to ostracism are painful and/or distressing and are resistant to moderation by individual differences or situational factors. Even if moderation is eventually documented, it appears that an immediate and painful reaction to even the slightest hint of ostracism may be an adaptive response that directs attention to the situation, presumably to assess its threat value and to take actions to ameliorate the situation. Manipulating signals (e.g., stigma, attractiveness) may be the best bet for identifying potential moderators because these factors also have strong survival/reproductive value. Moderation may be more likely when ostracism is manipulated less strongly, as could be achieved with partial ostracism conditions.

REFLECTIVE STAGE: RESPONSES TO OSTRACISM FOLLOWING APPRAISAL

A casual review of these studies could easily suggest that ostracized, socially excluded, and rejected individuals are capable of responding in a variety of ways, many of which appear to be quite contradictory. For example, ostracized individuals can be more helpful, positive, and cooperative. They can also be more mean-spirited and indiscriminately aggressive. They are also capable of cognitive and emotional shut down. Finally, they seem to show evidence for fleeing the situation, if that option is available. We often think of the response to threat as falling into one of three categories, fight, flight, or freeze. Taylor et al. (2000) suggest, however, another reaction to threat is to tend-and-befriend (see also

RS: rejection sensitivity

MacDonald & Kingsbury 2006 for discussion of fight-flight-freeze distinctions related to social exclusion). I review the literature using these general categories of response to the initial pain and threat of ostracism, first focusing on research that examines moderation by individual differences and then by situational factors. I then propose a framework within which to view and understand these apparent disparate findings.

Moderation by Individual Differences on Coping Responses

Although the blunt blow of ostracism appears to overwhelm personality and individual differences during the exclusion episode itself, dispositions that affect individuals' construal of the ostracism episode ought to moderate the meaning and importance they attach to it and guide appropriate coping strategies.

Fight. A great deal of work by Downey and colleagues has shown that despite generally universal needs for acceptance and belonging, important individual differences exist in how people respond to imagined or actual rejection experiences. These researchers proposed a defensive motivational system that influences and guides perceived appropriate responding in the face of rejection (Downey et al. 2004). Rejection sensitivity, Downey posits, emerges from a history of being repeatedly rejected, and generally leads to maladaptive responses to rejection that may perpetuate further rejection. Individuals who score high on rejection sensitivity (RS) (using the RS questionnaire, Downey & Feldman 1996) tend to chronically expect rejection, to see it when it may not be happening, and to respond to it hostilely. Men who score highly on RS and who are highly invested in a romantic relationship are more likely to have a propensity for violence in that relationship (Downey et al. 2000). A link between RS scores and hostile intention toward people they believed did or could reject them has also been found (Downey & Feldman 1996, Feldman & Downey 1994). Similarly, children scoring high in rejection sensitivity who were presented with an ambiguous rejection scenario (by peers or teachers) were more likely to endorse hostile responses (Downey et al. 1998). In pleasant interactions ending mysteriously without explanation, rejection sensitivity and hostile ideation was strongly linked for females (Ayduk et al. 1999) and males (Ayduk & Downey; reported in Romero-Canyas & Downey 2005). Internet chat partners who abruptly indicated no further interest in interacting were negatively evaluated by high-RS women (Ayduck et al. 1999). Finally, in diary studies, Downey et al. (1998, and reported in Romero-Canyas & Downey 2005) found that following higher reports of rejection, high-RS individuals report higher incidence of relational conflicts.

Individuals who varied in agreeableness were given varying magnitudes of rejection by their partner after they had disclosed information about themselves (Buckley et al. 2004, Study 1). Agreeableness predicted but did not moderate negative reactions to rejection, and any amount of rejection was sufficient to cause increases in sadness, hurt feelings, anger, and antisocial inclinations. In Study 2, these authors used rejection sensitivity as a predictor and manipulated constant or increasing rejection over time. Rejection sensitivity predicted negative reactions but did not moderate the impact of rejection, and increasing rejection was worse than constant rejection.

Jealousy is one response by a partner who is rejected in favor of another. An examination of nonromantic jealousy found that self-esteem played a major role of the rejected partner, mediating the link between the diverted interest of their partner and how much jealousy they expressed, and between jealousy and aggressive responses. When the partner's interest in the rival implied an ego-threat to the participant, the participant's self-esteem dropped and jealousy rose, as did aggression (measured through the allocation of hot sauce) (DeSteno et al. 2006).

One type of fight response is to derogate those who reject and socially exclude.

In a cross-cultural study, it was argued that although members of all cultures negatively experience exclusion, the reaction to exclusion should be culture-specific. For instance, the content of derogation would depend upon the culture's values related to belonging (Fiske & Yamamoto 2005). Specifically, these authors posit that social exclusion violates desires for belonging, control, self-enhancement, trust, and shared understanding. With respect to belonging, they argue that in Western cultures (e.g., the United States) belonging is defined as "belonging widely and loosely," meaning that Westerners have an expectation that their relationships will be more flexible. Because of this, Westerners are more immediately willing to trust and embrace strangers and, therefore, are hurt more by strangers' rejections. Easterners (e.g., Japanese) define belonging as "belonging securely," meaning that they expect their relationship to last for a lifetime; thus, they are more cautious with respect to strangers and have lower expectations and concern for strangers' rejections. Participants from both cultures felt bad after rejection (i.e., negative evaluation from a partner in a scenario study), and about half from each culture reciprocated the rejection of that partner. But, in support of Fiske and Yamamoto's hypothesis, Americans were most trusting of their partners before receiving feedback, and they lowered their impressions of the partner on warmth, competence, and compatibility after rejection. Rejected Japanese participants lowered only their warmth impressions and kept their impressions of competence and compatibility at neutral levels. This research is important in that it is the first to compare cultures with respect to rejection, and it suggests that although rejection is negatively experienced across cultures, it is interpreted and acted upon differently.

Trait self-esteem plays an important role on derogation responses to rejection. Self-esteem played a role in individuals who were somehow mindful of possible acceptance threats from their relationship partners (Murray et al. 2002). For instance, in one study (Murray et al. 2002, Study 3), partners sat back-to-back, presumably writing about one aspect of their partner's character that they disliked. Unbeknownst to the participants, they were actually filling out different forms, and in the acceptance threat condition, the other partner was actually asked to list all the items in their home dwelling, so that it appeared as though the other partner had serious problems with the partner's character. The results indicated that only low-self-esteem partners were likely to exaggerate the problems with their partners and to subsequently derogate their partners and reduce their perceived closeness with them. This suggests that low-self-esteem individuals might be caught in a downward spiral of perceiving rejection when it is not happening and consequently weakening their attachments. Murray's work highlights the importance of rejection experiences within relationships. Other work also examines relational ostracism, also known as the silent treatment, within close relationships. More than two-thirds of Americans surveyed in a national poll indicated that they had given the silent treatment to a loved one, and three-quarters said they had received the silent treatment from a loved one (Faulkner et al. 1997). The silent treatment is characterized by loss of eye contact and communication, and the most common feelings associated with receiving the silent treatment are significant increases in anger and reductions in feelings of belonging, self-esteem, control, and meaningful existence (Williams et al. 1998). Participants asked to write narratives about a time they received (and gave) the silent treatment, how it felt, and how it ended up (Sommer et al. 2001) were shown to respond with self-esteem threat following the silent treatment; low-self-esteem individuals were more likely to reciprocate with the silent treatment.

Researchers found that trait self-esteem (and depression) moderated distress reactions to rejection when rejection was manipulated in the get-acquainted paradigm (Nezlek et al. 1997). Whereas everyone responded with lower temporary feelings of self-esteem

after they learned their peers rejected them, the impact was stronger for those lower in trait self-esteem. In another study (Sommer & Baumeister 2002, Study 1), participants were subliminally primed with acceptance or rejection words and found that in comparison with the acceptance prime condition, rejection primes resulted in more negative self-descriptions for those low in self-esteem, whereas individuals with high self-esteem described themselves with more positive self-descriptions even when primed with rejection.

Flight. Another response associated with scoring high in rejection sensitivity is to avoid interactions where rejection is possible. High scores on the RS questionnaire are correlated with higher scores on social avoidance (Downey & Feldman 1996). By avoiding social situations, opportunities for acceptance are simultaneously diminished, as are chances to practice socially appropriate behaviors. Consequently, high-RS individuals who find themselves in social interactions are more likely to behave inappropriately, often hostilely. Men who are not highly invested in a romantic relationship are more likely to avoid romantic opportunities (Downey et al. 2000).

Tend-and-befriend. Gender moderated anonymous group-oriented cooperative behavior, such that females were more likely to socially compensate (i.e., work harder on collective compared with coactive tasks) after they had been ostracized in the ball-tossing paradigm (Williams & Sommer 1997). Males, on the other hand, engaged in social loafing following ostracism, as they did following inclusion. In a study that examined potential moderation of social sensitivity by loneliness, Gardner et al. (2005) found that individuals who were high in need to belong, or who were high in loneliness, were more likely to show improvements on memory for social information. On the other hand, high lonely individuals performed less well on a task that measured accuracy in detecting nonverbal expressions. Participants who were higher in need for belonging (Leary et al. 2005) were more sensitive to nonverbal cues (Pickett et al. 2004).

Freeze. Once the initial shock and pain of ostracism is experienced, reflected upon, and appraised, it stands to reason that the individual's personality will moderate the appraisal and subsequent impact of the experience and the amount of time necessary to recover from the threat. After exposure to rejection primes (in comparison with acceptance and misfortune primes), low-self-esteem individuals gave up more quickly on an unsolvable anagram task, whereas high-self-esteem individuals were actually more likely to persist (Sommer & Baumeister 2002, Study 2). Similarly, individuals with low (but not high) self-esteem experienced more interference with rejection (but not acceptance) words in a modified Stroop task (Dandeneau & Baldwin 2004). In their second study, Dandeneau & Baldwin (2004) demonstrated that the interference effect by low-self-esteem individuals could be minimized with conditioning.

Zadro et al. (2006), reasoning that socially anxious individuals might be expected to more quickly or strongly react to an ostracism experience than individuals who were less socially anxious, recruited participants in the normal and extreme ranges of social anxiety to participate in a Cyberball study. Immediately following ostracism, socially anxious individuals were no more distressed than were those with normal levels of social anxiety. After several filler tasks that took approximately 45 minutes to complete, general distress was measured again, and this time, those with normal levels of social anxiety had returned to the nondistress levels reported by included participants. Highly socially anxious participants, however, had only partially recovered; still showing significant distress in comparison with their inclusion counterparts. This study demonstrates that individual-difference variables that are theoretically related to being sensitive to ostracism, exclusion, and rejection, like social anxiety, do exert influence, but

only after a length of time. Although actual reflection was not assessed, this pattern of data suggests that individual differences were more or less successful in allowing participants to cope with the ostracism.

Summary on Individual Differences as Moderators of Coping Responses

One would expect other individual differences to similarly affect coping and recovery from ostracism. Thus, although previous research has not found moderation by introversion-extraversion, individualism-collectivism, need for belonging, and loneliness, individuals high in particular traits like these or others (self-esteem, rejection sensitivity, narcissism, and attachment style, to name a few) may certainly cope differently once the pain is detected. For instance, lonely people may take longer to recover from ostracism and may evidence helplessness more than individuals who are high in need for belonging (Cacioppo & Hawkley 2005). Certain individuals may generate more sinister attributions, negative self-appraisals, and be more likely to generalize their reactions to other situations that might direct them to be more self-protective or antisocial, whereas others may respond by minimizing and compartmentalizing the episode, attributing the ostracism to the peculiarities of the others in a particular situation, or by trying to make themselves more socially acceptable to others. For instance, high rejection sensitivity predisposes females to depressive symptoms (Ayduk et al. 2001). As Sommer & Rubin (2005) explain, the research on self-esteem and reactions to rejection suggests, "The key to predicting how people cope with rejection may lie with their expectations of future acceptance. Positive social expectancies [characteristic of people higher in self-esteem] lead people to draw closer to others, whereas negative expectancies [characteristic of those low in self-esteem] lead them to distance themselves from others" (p. 182). Whether pro- or antisocial routes are determined specifically by an expectation of future acceptance as Sommer and Rubin suggest, or by a sense of control over one's environment (Warburton et al. 2006), requires further examination.

Moderation of Situational Influences on Coping with Ostracism

Situational factors such as those already examined and assessed for immediate responses should also play a more central role in directing the appraisal of ostracism and subsequent behavioral responses. Although many studies have examined behavioral responses following ostracism, social exclusion, and rejection, few have measured intervening cognitive appraisals, perhaps because research efforts feared methodological contamination and interference by intervening measures. Thus, most research in this vein manipulates ostracism, social exclusion, or rejection, alone or in concert with other manipulations, and presents the individual with behavioral choices that are assessed either through self-report or directly.

Tend-and-befriend. Numerous studies using a variety of paradigms and measures indicate that one common response to ostracism is to think, feel, and behave in ways that improve the inclusionary status of the individual. That is, individuals will think or do things that ought to help them be more acceptable to others. Thus, I am using "prosocial" in a broad sense, including not only being helpful, but also including behaviors that should strengthen interpersonal bonds. I should also note that many of these so-called prosocial responses are not necessarily in the best interest of the individual who is engaging in them. In many instances, trying to be more socially acceptable can lead individuals down the path of gullibility and social susceptibility, making them easy targets for social manipulation.

For example, in one study, participants first ostracized or included participants using the ball-toss paradigm (there was also a no-ball-toss control group) and then asked them to

work on an idea-generation task either coactively, in which individuals efforts could be easily assessed and experimenter evaluations would affect only the individual and no others, or collectively, in which their efforts were unidentifiable and experimenter evaluations would be spread across the group (Williams & Sommer 1997). Participants in the no-ball-toss control group demonstrated the typical social loafing effect (Karau & Williams 1993), working less hard collectively than coactively. When ostracized, males were more likely to make other-blame attributions, whereas females were more likely to make self-denigrating attributions. Across all inclusion/ostracism conditions, male participants socially loafed. Ostracized females, however, socially compensated (worked harder in the collective relative to the coactive condition). The authors interpreted the females' social compensation as a strategy to gain favor by helping the group do well on the task. Thus, ostracized females exerted more effort toward a prosocial goal—to enhance the evaluation of the very group that had ostracized them.

Many other studies have now shown a prosocial response to ostracism, social exclusion, and rejection. Cyberball participants who played over the Internet were more likely to conform to a unanimous incorrect majority (of individuals who were not part of the Cyberball game) on a perceptual judgment task than were participants who were included (Williams et al. 2000, Study 2). Ostracized participants were more likely to comply to the foot-in-the-door and door-in-the-face techniques than were included participants (Carter-Sowell & Williams 2005). Ostracized individuals were more likely to favorably evaluate both a legitimate student group (i.e., one that helped its members prepare for the job market) and an illegitimate group (i.e., one that taught its members to bend forks through mind-control and to walk through walls), a finding that indicates that ostracized individuals see others, regardless of their merits, more positively (Wheaton 2001).

Following ostracism (by Cyberball), participants were more likely to engage in nonconscious mimicry of a person with whom they spoke, especially if that person was an ingroup member (Lakin & Chartrand 2005). Nonconscious mimicry has been shown to increase affiliation and rapport (Lakin & Chartrand 2003). Conscious, strategic mimicry of a good citizen's behavior was more likely to occur following a threat of rejection or actual rejection in a public goods dilemma (Ouwerkerk et al. 2005). And, as mentioned previously, several studies have found that following ostracism, individuals become more socially attentive (Gardner et al. 2000, Pickett & Gardner 2005, Pickett et al. 2004). The authors view enhanced social sensitivity as a means for improving success in subsequent social interactions.

Although the time-out literature is primarily based on case studies, there appears to be common acceptance by educators and parents to use time-out as a method for disciplining and correcting the behavior of children (Heron 1987). Time-out is a short period of time in which the child is ignored and excluded, and it can be seen as a socially acceptable use of ostracism. Admittedly circular, it would seem perplexing that such a form of discipline would be so widely used if it were not at least moderately successful at improving the child's behavior and making it more socially acceptable.

Evidence for tend-and-befriend is also supported by six experiments that showed that socially excluded individuals tried to establish new bonds with others and had more positive impressions of others, as long as the excluded participants anticipated face-to-face interaction with the others and were not themselves high in fear of negative evaluation (Maner et al. 2006).

Finally, some clinical developmental literature deserves a bit of attention. Employing "still face"—a nonresponsive facial expression—on autistic children who ordinarily avoided eye contact and other socially oriented behaviors, Nadel et al. (2005) found that

a single episode of still face led to increased eye contact and social attention in the autistic child. This is reminiscent of the use of shock on autistic children by Lovaas et al. (1965) to increase positive social attention by the child to the shock giver. It is as though, for autistic children, the social pain of shock or inattention by an adult is enough to trigger, at least temporarily, a prosocial orientation.

Fight. In the introduction to this review, I propose that the recent surge of interest in ostracism and related phenomena might be linked to its association with horrific violent events. There is now ample evidence that the link is not merely correlational; ostracism, social exclusion, and rejection are causally linked to a reduction in prosocial behaviors (Tice et al. 2002) and an increase in derogation of the excluder (Bourgeois & Leary 2001), and antisocial behaviors to others who may or may not have been the source of exclusion (Gaertner & Iuzzini 2005, Twenge et al. 2001, Warburton et al. 2006).

In a groundbreaking set of five studies, Twenge et al. (2001) manipulated social exclusion through either the life-alone paradigm or the get-acquainted paradigm, and employed a number of measures of aggression, both direct and indirect, toward others who either had or had not insulted the participants. Regardless of method, measure, or presence of provocation, derogation and aggression (in the form of noise blasts) increased following exclusion. The only instance in which socially excluded participants were not more aggressive was when the target had just praised them (Study 3). Twenge et al. (2006) also have found that making salient other friendly connections reduces the social exclusion→aggression link. Other studies indicate that replenishing a sense of belonging can reduce negative and aggressive consequences of social exclusion (Gardner et al. 2005, Twenge et al. 2006).

Reasoning that ostracism would lead to aggression only if it caused or was associated with an excessively strong control threat, Warburton et al. (2006) argued that aggression was a means to fortify control. Using the ball-toss paradigm, they assigned participants to be either ostracized or included. Afterward, participants were subjected to 10 blasts of highly aversive noise; half of the participants could control the onset of the blasts, the other half could not. Participants were then told through an elaborate cover story that they would be doling out an amount of food to be given to a new participant, whom they learned hated hot sauce. They were also told that the food taster would be required to eat all of the food that the participant doled out. Supporting their hypothesis that control threat underlay the link between ostracism and aggression, a significant increase in hot sauce allocation (their measure of aggression) occurred only in the ostracism-no control condition.

Freeze. Another reaction to stress is to freeze, as we commonly think a deer does when facing a headlight. Such a response could be adaptive in certain circumstances, when fight or flight might be more dangerous, as when predators respond to prey movement. Perhaps a flight or fight reaction to ostracism is similarly unwise, because either response effectively severs one's group membership. Thus, a concussed or affectively numb response may allow an opportunity for a less dysfunctional reaction later. As mentioned above, following the life-alone feedback, participants were more likely to show a reduction in complex cognitive thought. They were, however, more likely to perceive time standing still and to report a sense of meaninglessness, lethargy, and flat emotions (Baumeister et al. 2002, Twenge et al. 2003). Additionally, these authors typically find little or no emotional or mood changes following life-alone feedback, which is consistent with the emotional flatness finding. In further support for this interpretation, participants given the life-alone feedback are more insensitive to physical pain, showing higher thresholds and tolerances (DeWall & Baumeister 2006). They also found reductions in affective forecasting of joy or sadness over a future football

outcome, and less empathy for another individual's suffering for either a socially or physically painful experience. Another study found marginally higher rates of self-defeating behavior (inability or unwillingness to practice for an upcoming math test) following life-alone feedback (Oikawa et al. 2004). It should be noted, however, that Eisenberger et al. (2006) report effects opposite to those of DeWall and Baumeister with regard to pain tolerances when using Cyberball-induced ostracism. It may well be that life-alone feedback produces depression-like symptoms, whereas Cyberball induces anxiety (M. Lieberman, personal communication).

Flight? Only a handful of studies appear to allow an opportunity for flight following ostracism. Ostracized participants (using an early version of the ball-tossing paradigm) were less likely to want to continue working with the group that ostracized them, but were about equally likely to prefer to work alone as to working with a new group (Predmore & Williams 1983). In one Internet Cyberball game, participants were permitted to exit the game when they desired (Williams et al. 2000, Study 1). Completely ostracized participants chose to quit playing more quickly than the included participants (but partially ostracized participants remained in the game longer). Rejected individuals not only derogated their rejectors, but expressed no interest in continuing to work with them (Pepitone & Wilpeski 1960). Similarly, excluded participants avoided looking in the mirror (Twenge et al. 2003). After inducing social acceptance or exclusion in the get-acquainted paradigm and then offering participants a choice to either leave the experiment immediately or to help the experimenter on an ancillary task that had nothing to do with the experiment, nearly all of the rejected participants chose to leave, whereas accepted participants were more likely to stay and help (Tice et al. 2002). Although the authors interpreted this study as showing less prosocial behavior following rejection, another interpretation is that rejected participants took the first opportunity to flee the negatively charged situation.

Summary on Moderation of Situational Factors on Coping with Ostracism

The research to date suggests that situational factors produce a broad arsenal of coping responses to ostracism. As with individual-difference factors, these responses can be characterized as fight, tend-and-befriend, freeze, or flight. Factors such as who is ostracizing (ingroup members or outgroup members) and why, and whether there are options for (or perceived control over) future inclusion, play an important role and deserve further attention. Other factors, such as whether individuals perceive the ostracism to be targeted at them as individuals or at their group memberships, also merit attention as we begin to think of ostracism on a larger scale, when groups, race, culture, religion, and political ideology are the source of ostracism (see, for instance, McCauley 2006).

ACCEPTANCE STAGE: RESPONSES TO CHRONIC OSTRACISM

A third stage of responses to ostracism, social exclusion, and rejection may well be one in which individuals' resources are depleted because they have had to endure long-term ostracism as a result of being continuously or repetitively ignored and excluded by important people in their lives. Whereas there is not much research on this stage yet, there is some supportive evidence.

A review of the literature on depression proposed a social risk theory of depression, which suggests that when individuals have experienced ample social exclusion, they perceive their value to others as low and their presence to others as a burden (Allen & Badcock 2003). In such cases, it becomes especially risky to engage in social interactions because if rejected further, the individual

risks total exclusion. Avoiding losing all possible connections, they argue, is critical to fitness from an evolutionary perspective. Thus, chronically excluded individuals will be hypersensitive to signals of social threat and will send signals to others that they do not wish to chance risky interactions. In this sense, depression is viewed as functional, an interesting but controversial proposition. Nevertheless, this argument suggests a strong link between long-term exclusion and depression. A similar argument is made for highly lonely people: rather than attempting to fortify thwarted needs, they appear more likely to exhibit learned helplessness and alienation (Cacioppo & Hawkley 2005).

Zadro (2004) conducted and coded 28 interviews with long-term targets of the silent treatment or ostracism. She reports strong themes that long-term targets had learned to accept what short-term targets fight: rather than seeking belonging, they accepted alienation and isolation; rather than seeking self-enhancement, they accepted low self-worth; rather than seeking control, they expressed helplessness; and rather than provoking recognition by others of their existence, they became depressed and avoided further painful rejection. These themes, of course, are from a sample of individuals who sought to be part of the study, so they should be viewed with caution. Cause and effect are impossible to determine with this study, so it is possible that people who think little of themselves and who withdraw are likely targets for ostracism. Nevertheless, it is important to conduct studies like this to learn how individuals who face continuous isolation from their loved ones, friends, or society cope or fail to cope.

Although speculative, experiments employing the life-alone paradigm, or those that examine highly lonely individuals, may be tapping into this third temporal stage of exposure to ostracism in that the life-alone paradigm projects long-term exposure to ostracism, and loneliness appears to remove motivation to fortify thwarted needs, thus leading to acceptance and helplessness.

A NEED-THREAT/NEED-FORTIFICATION FRAMEWORK

There are several possible explanations for why ostracism might be especially likely to lead to aggression (see also Leary et al. 2006). First, ostracism has been shown to threaten at least four fundamental needs: to belong, to maintain reasonably high self-esteem, to perceive a sufficient amount of personal control over one's social environment, and to be recognized as existing in a meaningful way. Although belonging and self-esteem threats may motivate individuals to please others, control and meaningful existence threats might motivate aggressive and provocative responses. When these motives compete, there may be ambivalent response tendencies (Warburton & Williams 2005). Which tendency surfaces may depend on the method of measurement or the behavior that is measured. Behaviors seen and easily interpreted by others may evoke seemingly positive approach tendencies; but underlying feelings or easily disguised behaviors may reflect antisocial tendencies. For instance, in a study by Echterhoff et al. (2005), a very mild form of exclusion was used through feedback that negated a shared reality with another individual, which threatened another core need, shared understanding (Fiske 2004; see also Pinel et al. 2006 regarding the importance of shared understanding). In that study, participants showed overt signs of connecting with that individual while at the same time covertly rejecting that individual's communication. Similarly, Williams et al. (2003) reported a study in which, following ostracism, participants were no more derogatory toward an oppressed outgroup on explicit measures, but yielded more negative associations to that group (than included participants) when tested with an implicit measure.

The pro- or antisocial response tendency may also depend upon which need or need cluster is most threatened. There may be instances in which the control and meaningful existence desires are so strong that they simply outweigh concerns for belonging and being liked. Existential concerns (e.g., "I exist and I matter") and desires to believe one has an impact on others, when threatened strongly, may supersede desires to fulfill belonging and being liked by self and others. When individuals are unilaterally ignored and excluded, they lose control over the social interaction, which increases frustration and anger. Ostracism is also a painful reminder of one's insignificance that reminds individuals what life would be like if they did not exist. Ostracized individuals report a feeling of invisibility, that their existence is not even recognized. In this case, a desire to be noticed may supplant a desire to be liked. Both control and meaningful existence, if sufficiently threatened by ostracism, might lead to behaviors that garner control and attention from others. In this regard, antisocial behaviors may be as good or better to achieve these goals. Aggression researchers regard aggression as an act of control (Tedeschi 2001). In order to be recognized (either positively or negatively) by the largest audience, it may be far easier to achieve this sole goal by committing a heinous act than by behaving prosocially (consider this thought: How could you become world famous in an hour, with your name splashed across all newspapers and news programs?).

Thus, although speculative, one way to find harmony with the various reactions that people have to ostracism, social exclusion, and rejection is to recognize that these aversive interpersonal behaviors have multiple effects on the individual and can result in an intrapsychic battle between fundamental needs. When belonging and self-esteem are particularly threatened, we might be more likely to observe prosocial responses; that is, responses that serve to increase the individual's inclusionary status. As discussed above, responses that serve this goal might be adaptive in the sense that they may clue individuals into undesirable behaviors in themselves that they can minimize, but they may also be maladaptive in the sense that they may try too hard to please others, becoming vulnerable to manipulation and perhaps even losing a sense of self. If control and meaningful existence are particularly threatened, more antisocial reactions may be expected because antisocial acts achieve control and demand attention. It is perhaps not surprising, then, that certain manipulations that imply inevitability of long-term exclusion and strip away any sense of personal control, like those used in the life-alone paradigm, might yield more antisocial or depressed reactions than do temporary and relatively minimal forms of acute ostracism, like ball tossing and Cyberball. Research is needed to determine whether variations in methods can account for variations in responses.

SUMMARY

The research on ostracism, social exclusion, and rejection has proliferated in the past decade, and we have benefited from a considerable amount of theory and knowledge about these processes and their impact. Of course, there are still more questions than answers. Clearly, even for very brief episodes that have minimal mundane realism, ostracism plunges individuals into a temporary state of abject misery, sending signals of pain, increasing stress, threatening fundamental needs, and causing sadness and anger. It is also clear that exposures to short episodes of ostracism, social exclusion, and rejection lead to robust behavioral consequences, many of which can be characterized as potentially dysfunctional to the individual's well-being, such as becoming socially susceptible to influence and social attention, antisocial and hostile, or temporarily catatonic. But just as clearly, we need to understand better the role of personality variables and situational factors that lead individuals toward these different behavioral paths, and we need to discover whether there are more functional responses that can be or are made by

individuals. Ostracism occurs not only in dyads and small groups, but also at the societal and global level, and it is perhaps even more important to discover how groups who are ostracized within their city, nation, or in the world community respond. Groups might be buffered from some threats (e.g., they can seek each others' support to maintain a sense of belonging), but they might also be predisposed to responding provocatively and hostilely, to gain attention and respect (see Hogg 2005 and Jetten et al. 2006 for social identity perspectives on intragroup and intergroup rejection experiences). It is thus also important for researchers to turn their attention to groups that are being ostracized, in order to uncover the complex dynamics by which they respond and cope.

SUMMARY POINTS

1. Ostracism is adaptive for groups because it eliminates burdensome members and maintains their cohesiveness and strength.
2. Ostracism is painful and distressing to those who are ostracized. Detecting ostracism is adaptive for the individual so that corrections can be made in order to increase inclusionary status.
3. Cognitive factors (such as who is ostracizing and why) and personality factors of the ostracized individuals appear to have little influence in determining the detection of ostracism or the pain that it initially brings.
4. With time to reflect on the ostracism experience, cognitive, personality, and situational factors appear to moderate the speed of recovery and the type of coping response chosen (e.g., aggressive or prosocial).
5. Ostracism can lead to a variety of responses, including (*a*) behaviors that reflect the desire to be liked and get re-included, (*b*) antisocial and aggressive behaviors, (*c*) a stunned and affectless state, and (*d*) attempts to flee the situation. Understanding which response path is chosen is the current challenge for researchers.
6. There is the potential for ostracized individuals to be more receptive to extreme groups that show an interest in the individual, and at the same time, if these groups are also ostracized by the dominant society, they may be predisposed to act in such a way to attract recognition and attention, possibly through violence.

FUTURE ISSUES

1. It remains to be demonstrated whether ostracism, social exclusion, and rejection are synonymous psychologically, can be distinguished operationally, and can be shown to have different consequences.
2. More research is needed that determines under what conditions ostracism leads to attempts to be re-included versus attempts to lash out and aggress.
3. More research is needed on the ostracism of small (and large) groups and on how ostracism affects individual and group-related cognitions, emotions, and behaviors.
4. Can ostracism be coped with successfully, without making individuals become aggressive or overly susceptible to social influence?

5. Can therapies be developed to assist individuals who endure frequent or lengthy episodes of ostracism?

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