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When Silence Speaks Louder Than Words: Explorations Into the Intrapsychic and Interpersonal Consequences of Social Ostracism

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Respondents wrote 2 stories, 1 about a time they were given the silent treatment and 1 about a time they used the silent treatment on another. Content analyses indicated that targets who were unable to attribute the ostracism to a specific cause suffered greater threats to belongingness and self-esteem than those who understood the reasons for their treatment. Targets who felt that others were oblivious to their presence reported stronger threats to belongingness, self-esteem, and meaningful existence and were more likely to affiliate with others than were targets who generated alternative reasons for their treatment. People high in self-esteem were more likely than those low in self-esteem to (a) use ostracism as a means of terminating the relationship and (b) terminate relationships with their ostracizing partners. People low in self-esteem, conversely, were more likely to ostracize others in defense against criticism or rejection, ostracize others in general, and report being ostracized by others. Finally, perspective differences indicated that sources portrayed the ostracism as a useful interpersonal tactic that ultimately led to conflict resolution, whereas targets emphasized feelings of withdrawal and resentment.

Social ostracism, colloquially referred to as "the silent treatment," is a widespread form of social rejection. Nearly 70% of American citizens have admitted to using the silent treatment on their romantic partners (Faulkner, Williams, Sherman, & Williams, 1997), and other sources reveal that social ostracism is a common occurrence among school peers (Asher & Coie, 1990; Asher & Parker, 1989; Cairns & Cairns, 1991) and coworkers in organizations (Miceli & Near, 1992). Although decades of research have been devoted to the topic of interpersonal rejection, there remains a paucity of research on social ostracism per se. Further, the existing literature has given foremost attention to the psychology of the rejected individual and virtually ignoring the motivations and goals of the ostracizer (cf. Craighead, Kimball, & Rehak, 1979; Williams, Shore, & Grahe, 1998; Williams & Sommer, 1997).

The purpose of this research was to seek evidence pertaining to several specific theoretical questions about ostracism, as well as to explore in a broader sense how people recall their experiences of ostracizing and being ostracized. Research on social ostracism has relied mostly on labora-

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tory methods, wherein ostracism is manipulated among nonclose relationship partners (i.e., strangers; e.g., Fenigstein, 1979; Williams & Sommer, 1997). Although these studies have uncovered some important consequences of social ostracism, psychologists still know little about how social ostracism functions in real or intact relationships. We sought to correct this limitation by asking respondents to furnish first-person accounts of naturally occurring incidents involving the silent treatment. By using the autobiographical narrative method, we hoped to obtain evidence to complement previous findings as well as test new hypotheses that have been difficult to address using traditional, experimental methods.

NEGATIVE IMPACT

We have theorized in past writings (Williams, 1997; Williams & Sommer, 1997) that the primary sources of negative affect among ostracized targets derive from threats to belongingness, esteem, meaningful existence, and control. Historically, social psychology has viewed these motivations as overlapping to a significant degree. For example, esteem may be lowered by reducing perceived control (Burger, 1984, 1995) or belongingness (Leary, Haupt, Strausser, & Chokel, 1998; Leary, Tambor, Terdal, & Downs, 1995). Threats to meaningful existence may be buffered by high self-esteem, which is achieved through adherence to cultural norms (Greenberg, Pyszczynski, & Solomon, 1995; Solomon, Greenberg, & Pyszczynski, 1991) or the strengthening of interpersonal attachments (Baumeister, 1991). Nonetheless, needs for belongingness, esteem, control, and meaningful existence are conceptually and empirically distinct, and thus each is considered separately in our analysis of the impact of social ostracism on targets.

Preliminary studies yield support for the theorized link between social ostracism and loss of belongingness and esteem. Williams and Sommer (1997) showed that female participants contributed more to a group task if the other members had previously ignored them in a ball-tossing activity, supporting the hypothesis that ostracized targets would try to regain a sense of belongingness. Predmore and Williams (1983) showed that, when given a choice, ostracized participants were less likely than included participants to want to continue working with the ostracizing group but were more likely to want to work with a different group. Geller, Goodstein, Silver, and Sternberg (1974) showed that female participants ignored by two female confederates subsequently reported feeling more alone, dull, anxious, and withdrawn than female participants who were not ignored. Craighead et al. (1979) found that people who imagined being ignored by others made more negative self-referent statements (i.e., generated more negative thoughts about the self) than those who imagined successful social interactions. These effects were replicated in a recent study by Samolis and Williams (1994), who found that participants who imagined being ostracized reported more sadness, disengagement, passivity, rejection, loneliness, and feelings of worthlessness than those who imagined successful attempts at conversation. The results of these studies are consistent with a broader literature revealing that interpersonal rejection is painful and anxiety producing, causing lowered self-esteem (Leary et al., 1995, 1998; Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997), depression (Garber, Robinson, Valentiner, 1997; Leary, 1990), and feelings of hurt and loneliness (Baumeister & Leary, 1995; Leary, Springer, Negel, Ansell, & Evans, 1998).

Ostracism may also cause people to question whether their existence is meaningful. Although self-esteem and meaningful existence share some underlying features, the two constructs can be distinguished conceptually. According to terror management theory, symbolic references to death threaten meaningful existence and increase anxiety (Pyszczynski, Greenberg, Solomon, & Hamilton, 1990). Self-esteem, in turn, functions to buffer the anxiety resulting from thoughts of one's own mortality (Greenberg et al., 1992; Harmon-Jones et al., 1997). The silent treatment, we argue, communicates symbolically to targets that, for the duration of the silent treatment, they are dead and meaningless to the source. The silent treatment, then, acts as a prime for mortality salience. Consistent with this notion, in anthropological and sociological accounts, social ostracism is often termed *social death* (Boehm, 1986; Sweeting & Gilhooley, 1992). Williams et al. (1998) asked participants to rate the degree to which meaningful existence was threatened when receiving and giving the silent treatment. Specifically, participants indicated whether they had "increased feelings of not being worthy of attention, feelings like 'I don't exist' or invisibility." Analyses were restricted to incidents in which the silent treatment was used or received for punitive reasons (i.e., to hurt or punish the target). The results indicated that 24% of respondents reported threats to meaningful existence when receiving the silent treatment, compared to only 10% of respondents when giving the silent treatment. Recent role-playing experiments have also indicated that targets of ostracism, but not targets of an argumentative partner, feel unacknowledged, invisible, and meaningless (Zadro, Williams, & Walton, 1999).

Finally, social ostracism deprives targets of a sense of control, especially to the degree that sources continually fail to respond to the targets' repeated attempts at conversation. In an analysis of the communicative purposes of silence, Bruneau (1973) argued that people use social ostracism to assert interpersonal power or place others in a subordinate position. By failing to respond to another's efforts to communicate, the source gains control over the target by placing him or her in a frustrating and aggravating position. In an effort to relieve the awkwardness of the situation and resume control, the target persists in communica-

tion attempts, which are met with further silence. The level of control is thereby augmented for the source and reduced for the target. In support of this view, a few studies have shown that real or imagined ostracism evokes stronger feelings of frustration than real or imagined inclusion (Geller et al., 1974; Samolis & Williams, 1994). Frustration occurs when one's goals are blocked (Dollard, Doob, Miller, Mowrer, & Sears, 1939), essentially when one cannot control the outcome. In another study, Williams and Lawson Williams (1999) found that ostracized targets were more likely than those who were included to engage in subsequent attempts to manipulate the behavior of another (neutral) participant. However, this difference in control-related behavior emerged only when targets were ostracized by two others who were ostensibly friends with one another. When the sources were supposedly strangers, ostracized targets behaved no differently than included targets. Williams and Williams conducted a conceptual replication of this study using Burger and Cooper's (1979) desire for control inventory as the dependent measure. The same interaction emerged, revealing increased desire for control only among those targets who were ostracized by others perceived to be friends. The authors speculated that people who are attempting to establish rapport with an already intact group are at an automatic disadvantage. Their initial lack of control over the responses and behaviors of an intact group is further amplified when they are ostracized, which in turn heightens the need to regain a sense of control.

Taken together, the existing literature suggests that being ignored or silence by others can deprive people of a sense of belongingness, esteem, control, and meaningful existence. We also examine these variables in the present studies. In particular, we focus on two dimensions theoretically related to negative impact (Williams, 1997): causal clarity (attributional ambiguity) of the ostracism and whether the ostracism is attributed to a general lack of regard by others (or perceived as a sign that others are oblivious to one's presence).

CAUSAL CLARITY

Causal clarity refers to the degree to which targets understand why they are being ignored. Causally clear ostracism involves instances in which targets can point to a specific precipitating event, whereas causally unclear ostracism entails situations in which targets perceive the ostracism as mysterious, inexplicable, or seemingly random. Lack of causal clarity is a dilemma faced by many targets of silence because the very nature of silence may preclude the target from receiving an explanation for why he or she is being ignored. We hypothesized that causally unclear ostracism would result in greater psychological distress to its targets than causally clear ostracism.

We had three reasons for predicting this. First, the principle of interpretive control (Rothbaum, Weisz, & Snyder, 1982) states that the ability to understand an aversive or traumatic event is an important step in the coping process. Even in the absence of direct or primary control, interpretive control provides a certain element of order and meaning to life (Janoff-Bulman & Wortman, 1977). Interpretive control should be highest when targets are aware of why they are being ignored. Those who can explain their treatment (whether this involves blaming the self, the source's disposition, or some external event) should cope better than those who remain confused or fail to answer the question, Why?

Second, targets of unclear ostracism may scan their memories for a list of possible misdeeds, offensive statements, or transgressions. The search for an explanation may cause them to generate myriad, self-deprecating attributions for their treatment. This is in contrast to targets of clear ostracism whose knowledge of a particular transgression negates the need for further speculation about their potential shortcomings or wrongdoings. Threats to self-esteem may therefore be strongest among targets of causally unclear ostracism.

Third, causally unclear ostracism may exert a more negative impact on targets because it jeopardizes the perceived stability of the interpersonal bond. Knowledge of a specific cause suggests that the ostracism will likely end at some point. People who are unexpectedly or mysteriously subjected to the silent treatment may not only become confused and hurt but also fearful as to when (or if) the ostracism will end and the relationship will revert back to normal. Causally unclear ostracism may cause targets to question the future stability of their relationships.

Moderate support for the idea that casually unclear ostracism has distinctive consequences on targets was found in a recent study (Ezrakhovich, et al., 1998) For the causal clarity manipulation, half the female participants were led to believe that they were late for the experiment and, as a result, had delayed its completion for the two other participants (who were actually confederates). The remaining half were given no indication of tardiness. Participants were then included or ostracized by the others in an ice-breaking decision task. On a subsequent collective task in which all members had to work hard to achieve group success, ostracized participants in the causally clear condition decreased their efforts. This was in contrast to ostracized participants who were not provided a reason for their treatment; these individuals maintained high productivity by working as hard as their included counterparts. Participants ostracized for causally unclear reasons may have maintained high efforts to increase a sense of cohesion in the group or regain feelings of belongingness. These findings parallel those of Williams and Sommer (1997) who found that female participants ignored for unknown or unclear reasons worked harder collectively than those who worked coactively (individually) or those who were included.

OBLIVIOUS OSTRACISM

Our analysis thus far has considered ostracism as an interpersonal strategy or tactic that is sometimes used in times of conflict. One important way in which social ostracism deviates from other forms of social rejection, however, is in its capacity to affect targets in the absence of any intent on the part of the ostracizer. Oblivious ostracism is defined from the target's perspective and refers to situations in which a person feels so unimportant so as to escape the attention of others (Williams, 1997; Williams & Sommer, 1997). The target perceives no intent or goal on the part of the ostracizer but simply a lack of regard. Oblivious ostracism may be particularly prevalent in social or professional hierarchies wherein newcomers or those of a lesser status are not spoken to by higher ranking individuals (Moreland, 1985; Moreland & Levine, 1982).

We predict that oblivious ostracism will be especially devastating to targets because they may interpret the silence as a sign that they simply do not matter. When the ostracism is perceived as intentional (i.e., motivated by power or control), targets feel ignored because they have angered or hurt their partners. In these cases, targets' knowledge of their abilities to evoke such emotional reactions should reassure them that they are of some value to their partners. Oblivious ostracism, conversely, conveys that targets are simply unworthy of attention and that their existence has no bearing on others. In most cases of ostracism, targets are *objects of inattention* (Williams, 1997). But in the case of oblivious ostracism, targets are genuinely unattended to or disregarded. For this reason, oblivious ostracism may represent a much stronger attack on targets' feelings of belongingness, worth, and meaningful existence than ostracism that is perceived as deliberate.

PERSPECTIVE DIFFERENCES AND EMOTIONAL OUTCOMES

Another goal of these studies was to illuminate differences in sources' and targets' descriptions of their experiences. Autobiographical narratives often yield evidence for perspective biases. Perpetrators will often downplay the long-term negative consequences of their behaviors and maintain that any problems they caused are now solved. By justifying their objectionable behaviors and also denying the long-term impact of these behaviors, perpetrators are able to avoid feelings of guilt or shame. Victims, conversely, emphasize their own suffering and maintain that the transgression continues to have implications for everyday life (Baumeister, Stillwell, & Wotman, 1990). Continued suffering entitles victims to further compensation from the perpetrator and provides a means of eliciting concern and support from others. Thus, perpetrators will attempt to justify and downplay the negative impact of their behaviors, whereas victims will emphasize the lasting implications of their treatment and portray themselves sympathetically (Baumeister et al., 1990; Baumeister, Wotman, & Stillwell, 1993).

We expected that sources and targets would present different interpretations of their experiences. In particular, sources would downplay the negative consequences of their behavior by maintaining that the problem was eventually resolved. Targets, conversely, would be relatively less likely to portray the situation as resolved and instead emphasize the aversiveness of being ignored. We also predicted that sources would emphasize the benefits of having used ostracism on their partners, whereas targets would deny the utility of ostracism as strategy for achieving desirable outcomes.

REASONS FOR SOCIAL OSTRACISM

Our final goal was to explore the reasons that people choose ostracism over other ways of responding to conflict. This aspect of the research was primarily exploratory. Previously (Williams, 1997; Williams & Sommer, 1997), we proposed several motives for social ostracism. However, no studies have examined the reasons that people spontaneously generate for why they ignored, or were ignored by, someone else. The present research attempted to do just this.

STUDY 1

The purpose of Study 1 was to develop a detailed coding scheme and test the hypotheses laid out in the introduction. The predictions were tested using the narrative method, in which perspective functioned as a within-subjects variable. Specifically, college students wrote one story about a time they were exposed to the silent treatment and one story about a time they used the silent treatment on someone else.

There are several advantages to using the narrative method. Narratives are rich in detail, are unconstrained by experimenter preconceptions, and have high external validity. We felt that the advantages of this method compensate for its weaknesses relative to other methods. However, one concern about the narrative method is how people go about choosing which anecdote to report. In the present studies, we asked people to report their most recent experience as opposed to the most memorable experience. This procedure increases the generalizability of the findings because narrators are describing a broad array of situations rather than selecting the most salient or emotionally intense ones.

Our hypotheses for Study 1 were tested using both within-perspective and between-perspective comparisons. First, we predicted that causally unclear ostracism would exert a greater negative impact on targets than causally clear ostracism. Second, we expected that oblivious ostracism would

exert a greater negative impact on targets than intentional ostracism. Third, we compared source and target narratives to find evidence for the hypothesis that sources downplay the negative consequences of their actions and justify their use of the silent treatment, whereas targets emphasize the negative consequences and portray the ostracism as ineffective. Finally, for exploratory purposes, we coded sources' reasons for ostracism to determine why people chose silence over other methods of responding to conflict.

Method

Participants and design. Participants were 167 undergraduates from introductory psychology classes at the University of Toledo. Approximately 54% (n = 90) were women and 46% (n = 77) were men. They received extra course credit for their participation. The data for the present study were gathered immediately following an experimental study investigating the effects of social ostracism on social loafing (Williams & Sommer, 1997). In the experimental study, participants were either ostracized or included by two confederates in a ball throwing activity, or they experienced no social interaction whatsoever (control condition; see Williams & Sommer, 1997, for a complete description of the method and results). As part of the post-experimental questionnaire—and after participants were made aware of the experimental manipulation—participants wrote two personal stories about their prior experiences with ostracism. Of the 334 possible responses, 53 were either absent or too short to code. The remaining 131 source stories and 150 target stories comprised the data for the present study (N = 281).

Procedure. Participants first wrote a story about a time they were the target of the silent treatment. Instructions for the target condition were as follows:

> We are interested in the use and effects of ostracism in interpersonal relationships. By ostracism, we mean the purposeful ignoring or shunning of an individual by others. Perhaps you know it as the "silent treatment." In any case, we would like you to remember the last time you were subjected to the silent treatment. Write down the circumstances that led to you being ignored and how you it made you feel, think, and behave. What were the ultimate consequences of being ignored?

Participants then wrote a story from the source's perspective. Instructions for the source condition were as follows:

> Now, think back to the time you last used the silent treatment on someone else. What led to you using this treatment? Why did you choose silence rather than some other way to deal with the situation (like direct confrontation, arguing, etc.)? What were the outcomes of using the silent treatment on this person?

All participants were debriefed about the purpose of the experiment and the questionnaire (see Williams & Sommer, 1997, for a full description of debriefing procedures).

Reasons for ostracism. The initial list of reasons for ostracism was drawn from Williams' (1997) motives for ostracism. These included punitive (to punish or correct the target; to hurt or seek revenge), timeout (to calm down, cool off, or gain control over one's anger), defensive (to avoid feeling bad, blameworthy, or inferior during an argument; because one always comes out "looking like the bad guy"), oblivious (target perceives that others don't notice him or her), and role-prescribed (socially expected or appropriate ostracism, as between two people in an elevator). Perusal of the present narratives revealed several additional real or perceived reasons for the silent treatment, including confrontation avoidance (to avoid a full-blown argument; because arguing gets one nowhere), to communicate a problem (to communicate one's anger or disappointment in the other's behavior), the silent treatment is easier (because the treatment is easier than fighting; because one is too tired to fight), as a last resort (when confrontation proves ineffective), and to terminate the relationship (to end or sever one ties with the target).

Oblivious versus intentional ostracism. To test our hypothesis that oblivious ostracism is more threatening to targets than other perceived motives for ostracism, target narratives were further categorized into two groups: those in which targets felt generally unnoticed (oblivious ostracism) and those in which targets perceived that they were being intentionally ignored (all other reasons/motives for ostracism).

Causal clarity. Causal clarity of ostracism referred to whether targets understood why they were being ignored. Target narratives were coded as either causally unclear (target stated that he or she didn't understand the reason for the silent treatment), causally clear (target understood the reason for the treatment), or no mention (causal clarity could not be determined from the available information). All instances of causally clear or unclear ostracism were those in which the target perceived the ostracism to be intentional.

Needs threatened. Narratives were coded for four needs that may be deprived by ostracism—belongingness, control, esteem, and meaningful existence—and two defenses against belongingness and esteem-threat—seeking external relationships and self-affirmation. The belongingness threat referred to perceived loss of, or decrease in, the relational bond ("Our friendship has withered"). The esteem

threat involved downward changes in self-appraisals ("I felt like the scum of the earth"). The control threat was defined according to perceived inability to regulate one's own or others' behaviors or outcomes ("I felt out of control and helpless"). Finally, threats to meaningful existence were defined as concerns as to whether one's presence really matters to anyone ("It made me feel unimportant and insignificant"). Seeking affiliation with others included re-establishing old bonds ("I made new attempts to connect with my friends") or forming new ones ("I sought help from a therapist"). Self-affirmation involved cognitive attempts to emphasize one's positive qualities ("I am a good person") or one's desirability to others ("Many others care about me").

Outcomes and interpretations of silent treatment. Several outcome variables were coded to examine the different ways in which sources and targets recall and describe their experiences. These included ostracism effective in securing desired outcome ("He stopped harassing me right away"; "I changed my methods of communication"), problem talked out or resolved ("We finally talked it out"; "We both apologized the next day"), source gained power or control ("I chose this method so I would not say something I'd later regret"; "It gave the other person all the power"), target reciprocated ostracism ("He completely ignores the silent treatment—behaves as if I'm acting normally"; "I decided to remain firm in my resolve and ignore his behavior), target withdrew ("He didn't try to discuss the situation any further"; "I spoke only when spoken to"), and target resented manipulation ("This treatment made him livid"; "I didn't appreciate having to grovel for forgiveness").

Emotional outcomes. The initial coding scheme consisted of four emotions that were expected to emerge with high frequency—angry, frustrated, hurt, and guilty—plus a default category of other negative emotions. Interrater reliability was based on these five emotion categories. The default category was later reclassified into one of the following: loss of pride, scared (afraid, worried), loss of trust (disappointed, betrayed, bitter), upset, lonely, rejected (unwanted), uncomfortable (anxious, tense), confused, bad (awful, lousy), and stupid.

Results and Discussion

Narrative length. Approximately 26% of the narratives ($n = 72$) were selected randomly and subjected to a word count. On average, target narratives were slightly longer than source narratives (*target* $M = 81.39$ words, $SD = 39.02$; *source* $M = 68.36$ words, $SD = 29.96$).

Interrater agreement. All narratives were coded by the first and third authors.[1] For each variable, coders recorded a *yes* or *no* indicating whether that variable was present versus absent, respectively. Approximately 26% of the narratives ($N = 72$, 36 in each perspective) were coded by both authors to assess interrater reliability. Kappa values were as follows: reasons (.73 to 1.00, $M = .89$); causal clarity (.83); needs threatened (.78 to .87, $M = .81$); emotions (.53 to 1.00, $M = .86$); outcomes/resolutions (.49 to 1.00, $M = .85$); type of relationship (.85). Half the codings provided by each rater were selected randomly for use in the final analyses. Correlations among coded variables ranged from –.26 to .38 ($M = .00$).

Effects of prior experimental manipulation. Participants in Study 1 completed the narratives after participating in an experiment in which they were ostracized, included, or in which no social activity occurred (control). Preliminary analyses were conducted to examine whether participants' stories varied as a function of the experimental condition to which they were assigned. A series of chi-square analyses were conducted in which experimental condition was entered as the independent variable, and each category coded in the present study was entered as a dependent variable. Analyses were conducted for both source and target narratives. The number of significant effects for experimental condition ($n = 4$) did not exceed that expected by chance ($n = 4$), and thus all analyses reported subsequently are collapsed across experimental conditions.

Causal clarity. We compared causally unclear and causally clear narratives to determine whether unclear ostracism resulted in greater threat. (Narratives that made no allusion to clarity were omitted from analyses.) Causal clarity was difficult to ascertain in source narratives (i.e., sources rarely speculated on whether the target was able to generate an attribution for the treatment), and thus analyses were restricted to target narratives. Dependent measures included four needs threatened by ostracism (belongingness, self-esteem, control, and meaningful existence) and two defenses against threat (affiliation and self-affirmation). The results are presented in the top half of each row in Table 1. The findings indicate that causally unclear ostracism predicted stronger threats to belongingness, $\chi^2(1, N = 82) = 3.77$, $p = .05$, $\phi^2 = .05$, and self-esteem, $\chi^2(1, N = 82) = 7.07$, $p < .05$, $\phi^2 = .09$, than causally clear ostracism. There were no significant effects for the remaining variables, $\chi^2 \leq 1.36$, $ps > .10$, $\phi^2 \leq .02$. Causally unclear ostracism thus appeared to threaten a sense of security within the relationship and also made people feel worse about themselves. Contrary to expectations, causally unclear ostracism was not associated with greater perceived loss of control than causally clear ostracism. Further, unclear ostracism did not increase psychological defenses against threat.

[1]The third author was blind to hypotheses throughout the coding process. After content analyses were completed for both Studies 1 and 2, this author was informed of the hypotheses and the theoretical bases for the predictions.

TABLE 1
Percentage of Targets Reporting Threat to Psychological Needs and Ego-Defenses as a Function of Causal Clarity

Causal clarity		*Causally Unclear*[a]	*Causally Clear*[b]
Threat to belongingness	Study 1[c]	45	23
	Study 2[d]	29	15
Threat to self-esteem	Study 1	40	13
	Study 2	39	15
Threat to meaningful existence	Study 1	0	7
	Study 2	4	8
Threat to control	Study 1	5	10
	Study 2	0	13
Target seeks affiliation with others	Study 1	5	2
	Study 2	21	13
Target self-affirms	Study 1	7	10
	Study 2	4	8

[a]$n = 20$, $n = 28$. [b]$n = 62$, $n = 39$. [c]$n = 82$. [d]$n = 67$.

TABLE 2
Percentage of Targets Reporting Threats to Psychological Needs and Ego-Defenses as a Function of Perceived Motive for Ostracism

Motives for Ostracism		*Other Reasons for Ostracism*[a]	*Oblivious Ostracism*[b]
Threat to belongingness	Study 1[c]	22	65
	Study 2[d]	13	40
Threat to self-esteem	Study 1	9	22
	Study 2	16	60
Threat to meaningful existence	Study 1	2	9
	Study 2	5	20
Threat to control	Study 1	7	0
	Study 2	13	0
Target affiliates with others	Study 1	6	22
	Study 2	13	40
Target self-affirms	Study 1	11	13
	Study 2	3	0

[a]$n = 54$, $n = 38$. [b]$n = 23$, $n = 5$. [c]$n = 77$. [d]$n = 43$.

Oblivious ostracism. Oblivious ostracism was compared with all other reasons for ostracism to determine whether oblivious ostracism was more psychologically threatening to individuals. Analyses were restricted to target narratives. The results are presented in Table 2. Dependent measures included the four threatened needs and two defenses against threat. The results for Study 1 are presented in the top half of each row. Compared to other perceived reasons for ostracism, oblivious ostracism predicted greater threats to belongingness, $\chi^2(1, N = 77) = 13.10$, $p < .05$, $\phi^2 = .17$. Additionally, oblivious ostracism was associated with higher affiliation with others, $\chi^2(1, N = 77) = 4.54$, $p < .05$, $\phi^2 = .06$. There were no significant differences for the remaining variables, $\chi^2 \leq 2.22$, ps $> .10$, $\phi^2 \leq .03$. These findings suggest that the failure to be noticed by others may deprive the basic need for belongingness, and that such deprivation surpasses that created by ostracism that is perceived as intentional or deliberate. The findings further suggest that targets may respond to oblivious ostracism by seeking relationships with others.

Perspective differences. Source and target narratives were compared to examine whether individuals' interpretations of events depended on the situational role or perspective they took. Before testing for perspective differences, we had to address a statistical concern related to the within-subjects nature of our data set. Chi-square techniques assume independence of groups. Technically, source and target perspectives were not independent because they were completed by the same respondents. We viewed this as problematic only if there emerged negative correlations between the two perspectives, such that respondents were less likely to include certain pieces of information in their target narratives if they included it in their source narratives. Negative correlations would artificially inflate frequency differences between perspectives and lead to interpretive problems. Positive correlations, conversely, would work against the hypotheses, such that true differences between perspectives would be difficult to detect. To assess the potentially biasing properties of our within-subjects approach, we correlated sources' and targets' responses on each of six outcome variables for which we planned to examine perspective differences. Five of the six correlations were small and nonsignificant, ranging from –.03 to .11. The only exception to independence of perspectives was for the category of target withdrawal, in that source and target perspectives correlated positively (r [116] = .21, $p < .05$, two-tailed).

The results are presented in Table 3. Sources were more likely than targets to indicate that the source got what he or she wanted, $\chi^2(1, N = 281) = 29.47$, $p < .05$, $\phi^2 = .11$, that the source gained control, $\chi^2(1, N = 281) = 21.40$, $p < .05$, $\phi^2 = .08$, and that the issue had been talked out or resolved, $\chi^2(1, N = 281) = 4.43$, $p < .05$, $\phi^2 = .02$. Target narratives, conversely, were more likely to portray the target as reciprocating the ostracism, $\chi^2(1, N = 281) = 9.29$, $p < .05$, $\phi^2 = .03$, withdrawing, $\chi^2(1, N = 281) = 8.09$, $p < .05$, $\phi^2 = .03$, and resenting the manipulation, $\chi^2(1, N = 281) = 6.78$, $p < .05$, $\phi^2 = .02$.[2]

[2]We wanted to ensure that participants were not describing qualitatively different experiences in their source and target narratives. Chi-square analyses revealed that sources and targets were equally likely to describe incidents with relatives (source = 15%; target = 13%) coworkers (source = 2%; target = 3%), spouses (source = 28%; target = 19%), and other (or noncodable) relationships (source = 9%; target = 15%, $p > .10$) ($\chi^2 \leq 2.61$, ps $> .10$, $\phi^2 \leq .01$). However, targets were significantly more likely than sources to describe friend/roommate relationships (source = 26%; target = 40%), $\chi^2(1, N = 281) = 6.20$, $p < .05$, $\phi^2 = .02$.

These findings indicate that any differences obtained between perspectives would be necessarily confounded with type of relationship, possibly creating an alternative explanation for the results. To unconfound perspective and relationship effects, we computed partial chi-squares using the maximum likelihood chi-square method. Removing the variance shared with relationship type (i.e., the relationship type main effect and relationship × perspective interaction) did not appreciably alter the results. All perspective differences remained significant in the predicted direction.

TABLE 3
Percentage of Respondents Reporting Various Outcomes/Resolutions Associated With the Silent Treatment as a Function of Perspective

Outcomes/Resolutions		*Source*[a]	*Target*[b]
Ostracism effective in securing desired outcome	Study 1[c]	23	2
	Study 2[d]	30	4
Problem talked out/resolved	Study 1	22	13
	Study 2	22	14
Source gained control	Study 1	17	1
	Study 2	23	9
Target reciprocated ostracism	Study 1	7	19
	Study 2	8	17
Target withdrew	Study 1	5	16
	Study 2	3	10
Target resented manipulation	Study 1	6	16
	Study 2	3	20

[a]n = 131, n = 111. [b]n = 150, n = 104. [c]n = 281. [d]n = 215.

These perspective differences indicated that sources and targets of ostracism portrayed or recalled their experiences differently. Sources emphasized the utility of ostracism as a means of achieving power and control, whereas targets focused more on their own withdrawal and resentment. Sources were also more likely than targets to portray the incident as resolved. Assuming that narrators did not choose to describe qualitatively different scenarios when switching between perspectives, the present findings suggest that attitudes about the silent treatment depend largely on perspective. Social ostracism is viewed as effective and justifiable when giving it but not when receiving it.

Emotional outcomes. We recorded the adjectives that sources and targets used to describe their emotional experiences prior to, during, or following the silent treatment. The results are shown in Table 4. Because most ostracism occurs within the context of an interpersonal conflict, we expected high levels of anger among both sources and targets. Yet, targets were expected to experience a disproportionately high number of additional negative emotions stemming from the source's response to conflict. The percentage of narratives coded into each emotion category is displayed in the left half of Table 4. All emotion categories for which the minimum expected frequency was less than five were analyzed using the Fisher's exact test. As expected, anger was a prevalent emotion among both target and source narratives, $\chi^2(1, N = 281) = 0.43$, $p > .10$, $\phi^2 \leq .01$. However, compared to sources, targets were significantly more likely to report feeling guilty, $\chi^2(1, N = 281) = 4.04$, $\phi^2 = .01$, frustrated, $\chi^2(1, N = 281) = 9.74$, $\phi^2 = .04$, pride loss, $\chi^2(1, N = 281) = 7.40$, $\phi^2 = .03$, lonely, $\chi^2(1, N = 281) = 9.06$, $\phi^2 = .03$, and uncomfortable, $\chi^2(1, N = 281) = 9.06$, $\phi^2 = .03$ (all ps < .05). All other comparisons were nonsignificant ($\chi^2 \leq 3.54$, ps > .10, $\phi^2 \leq .01$). The total number of negative emotions was also calculated; targets reported significantly more negative emotions than sources, $t(115) = -4.96$, $p < .05$, two-tailed ($r = .42$). The results suggest that ostracism involves more diffused negative experience for targets than for sources.

Reasons for ostracism. Table 5 lists the reasons that sources and targets generated for the silent treatment. We use the term *reasons* here because some of these categories offer little insight as to the underlying motive for the silent treatment. For example, *silent treatment easier* may reflect a low effort means of punishing the target or a passive way of defending the self from character attacks. To avoid misclassifying ambiguous statements into the theoretically generated motive categories, we simply listed verbatim the reasons provided by the narrator. In addition, sometimes narrators listed multiple reasons for using the silent treatment, and their narratives were coded accordingly. For example, a man may have explained that he used the silent treatment to make his girlfriend feel bad for what she had done (punitive) and also to gain control over his anger (timeout).

The frequency of reasons generated by targets was consistently lower than that generated by sources, with the exception of oblivious ostracism (which is defined primarily from the target's perspective). This may be due in part to the fact that sources were specifically queried as to why they chose the silent treatment over other methods of dealing with conflict. Replicating previous research (Williams et al., 1998), punitive emerged as the most frequent reason for ostracism in both source and target narratives. Another frequent reason cited by sources was the desire to avoid a confrontation. A small percentage of sources reported using the silent treatment as a deliberate means of pushing others away.[3]

Limitations of Study 1. The order in which source and target narratives were completed was not counterbalanced; all participants completed the target narratives first. This left open the possibility that many of the differences achieved between

[3]We chose not to test for significant perspective differences on the dimension of reasons/motives for ostracism. We had no predictions regarding extent to which sources and targets would generate various reasons for the silent treatment; this aspect of the content analyses was primarily exploratory. Further, sources were asked why they chose to silence their partners, which may have contributed to the relatively higher percentage of reasons/motives generated by sources compared to targets.

TABLE 4
Percentage of Respondents Reporting Various Emotional Outcomes as a Function of Perspective

	Study 1[a]		*Study 2*[b]	
Emotions	*Source*	*Target*	*Source*	*Target*
Angry	34	31	32	34
Frustrated	2	11	14	16
Hurt	4	9	5	16
Guilty	4	10	4	7
Loss of pride	1	7	2	10
Scared/afraid/worried	1	1	0	12
Loss of trust (disappointed/betrayed/bitter)	2	1	5	6
Upset	8	7	5	4
Lonely	0	7	0	2
Rejected/unwanted	0	3	0	7
Uncomfortable/anxious/tense	0	7	3	6
Confused	1	4	3	4
Bad (awful/lousy)	2	4	1	1
Stupid	0	3	0	1
Total number of negative emotions	.57	1.00	.72	1.26

[a]n = 281, source n = 131, target n = 150. [b]n = 215, source n = 111, target n = 104.

TABLE 5
Percentage of Narratives Reflecting Each Reason for the Silent Treatment

Motives for ostracism (Williams, 1997)	*Study 1*[a]		*Study 2*[b]	
	Source	*Target*	*Source*	*Target*
Punitive	43	27	30	21
Timeout	16	3	25	5
Defensive	7	4	7	9
Oblivious	2	15	0	4
Role prescribed	0	1	0	0
Additional reasons/motives				
Confrontation avoidance	30	3	25	5
To communicate a problem	16	3	13	1
Silent treatment easier	0	1	11	0
As a last resort	10	0	30	4
To terminate the relationship	4	1	5	0

Note. Column percentages do not sum to 100 because motive categories are not exhaustive.
[a]n = 281, source n = 131, target n = 150. [b]n = 215, source n = 111, target n = 104.

the two conditions resulted from order effects rather than true perspective differences. Source narratives were somewhat shorter than target narratives. Thus, participants may have become tired during the end of the experiment, accounting for the overall lower percentage of emotion categories generated in the source narratives. Condition effects may have also contributed to some of the perspective biases that emerged. We sought to correct this methodological flaw by conducting a second experiment in which we counterbalanced the order in which respondents completed the two narratives.

STUDY 2

The first purpose of Study 2 was to replicate the findings from Study 1 in an older, professional sample after counterbalancing the order in which participants completed the narratives. The second purpose was to investigate the effects of trait self-esteem on the use of, and reactions to, social ostracism. Nearly all of the experimental work examining individual differences in social rejection has been done outside of the domain of social ostracism per se (cf.,

Fenigstein, 1979). Thus, our investigation into the ways in which self-esteem may moderate the causes or consequences of social ostracism was primarily exploratory. Nonetheless, we were able to generate some tentative predictions based on previous theory and research.

Perceived Frequency of Social Ostracism

Our first prediction dealt with the relation between trait self-esteem and perceived ostracism. Psychological theories of self-esteem have consistently afforded an important role to perceived inclusion or acceptance (e.g., Abrams, & Hogg, 1990; Cooley, 1902; Rogers, 1959; Tajfel & Turner, 1986). Recent studies have demonstrated that, compared to those high in self-esteem, people low in self-esteem perceive lower levels of inclusion by others (Harter, 1993; Leary et al., 1995) and are more vulnerable to downward changes in self-appraisals following interpersonal rejection (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997). Consistent with this literature, we expected that people with low (compared to high) self-esteem would be especially likely to report feeling ostracized by others.

Role of Self-Esteem in Reactions to Social Ostracism

Self-esteem may also predict targets' behavioral reactions to ostracism. Specifically, we expected that targets high in self-esteem would be relatively reluctant to accommodate their ostracizing partners and instead would be more likely than low self-esteem targets to sever their relationships with their ostracizing partners. This prediction derives largely from interdependence theory (Kelley & Thibaut, 1978; Rusbult, 1993). Interdependence theory argues that people will exhibit constructive rather than destructive responses to interpersonal conflict when they are satisfied with, and invested in, their relationships (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Indeed, several studies have shown that highly committed individuals exhibit more loyalty and attempts at problem solving than less committed individuals (Rusbult, 1983; Rusbult et al., 1991). Applied to ostracism, targets who are motivated to maintain their relationships should make greater efforts than those who are less invested in their relationships to conform to the intentions or wishes of the ostracizer. Highly committed targets should take actions to ameliorate the harm they have caused and affirm the relationship.

High self-esteem individuals may be less committed to specific interpersonal relationships than low self-esteem individuals. People high in self-esteem have stronger perceptions of inclusion than those low in self-esteem (Leary et al., 1995) and thus may perceive greater opportunities for satisfying belongingness and esteem needs outside of the relationship. Relationship termination thus should hold fewer implications for high compared to low self-esteem individuals because the former believe that their abilities for forming new and meaningful social attachments are high. Instead of engaging in active problem solving, high self-esteem people may simply choose to replace problematic relationships with less problematic ones.

Consistent with their relatively positive views of themselves, high self-esteem individuals may also be less likely than their low self-esteem counterparts to assume blame or responsibility for problems in the relationship. This, in turn, may reduce their motivation to compromise or give in to their partners' demands. High self-esteem people may then opt to leave their ostracizing partners and seek others whose positive feedback confirms their favorable self-views.

Rusbult and colleagues (Rusbult, 1993; Rusbult, Morrow, & Johnson, 1987) speculated that people high (compared to low) in self-esteem would perceive greater options for securing alternative romantic relationships should their current relationships end. All other things being equal, then, people high in self-esteem would be less committed to their current relationship partners and less willing to respond constructively to their partners' anger. In three studies, Rusbult et al. (1987) found that self-esteem correlated negatively with one's willingness to accommodate angry partners and correlated positively with the tendency to exit the relationship during period of marital distress. People with high self-esteem may opt to leave bad relationships (or those in distress) and replace them with new, more satisfying relationships.

Role of Self-Esteem in the Use of Social Ostracism

We also examined whether high and low self-esteem people differed in their use of social ostracism. Our prediction pertained to the use of one type of (motive for) ostracism: defensive ostracism (Williams, 1997; Williams & Sommer, 1997). Defensive ostracism is the use of the silent treatment to preemptively dissociate from others who are considered to be faultfinding, rejecting, or critical. We expected that defensive ostracism would be more common among people with low as opposed to high self-esteem.

This prediction rested largely on recent work by Murray, Holmes, MacDonald, and Ellsworth (1998). In a series of studies, these researchers delivered various types of ego threats to some participants (e.g., guilt inducement over a previous transgression, or failure feedback on skill-based test). They then assessed participants' perceptions of their partners, their perceptions of their partners' liking for them (i.e., reflected appraisals), and their self-reported need for the relationship. The results indicated that low but not high self-esteem individuals derogated their partners, questioned their partners' positive regard, and distanced themselves from their relationships when threatened. When low self-esteem people were led to feel bad about themselves, they responded by withdrawing from their partners in a defensive, self-protective manner. By extension, we surmised that low self-esteem people who feel bad about themselves may defend against what they perceive as imminent rejection by severing communication with their partners. Anger or criticism from the partner may provide such an ego threat.

In a related vein, low self-esteem people may feel that they cannot express themselves effectively during a conflict and that arguing will only make them look worse. People with low self-esteem have relatively low feelings of efficacy (Burger, 1995) and are socially anxious (Leary & Kowalski, 1995), which may affect their perceived abilities to win an argument. If attempts to justify their anger or behaviors to their partners fail, people low in self-esteem may begin to feel worse about themselves and assume that their partners' similarly view them negatively. To protect their esteem and avoid criticism, they may resort to silence.

Overview of Study

Respondents in Study 2 were drawn from a continuing education seminar. The procedure was the same as in Study 1, with three exceptions. First, the order in which respondents completed the narratives was counterbalanced. Second, all respondents were asked to complete a trait self-esteem scale prior to completing the narratives. Third, all participants were asked to report how frequently the silent treatment was used on them and how often they used the treatment on others. These last two items were assessed to examine the relation between self-esteem and experiences with social ostracism in everyday life. Coding categories were identical to those used in Study 1.

Method

Participants and design. Participants were 130 individuals enrolled in a continuing education seminar. Most were medical professionals (e.g., dental hygienists, nurses). Approximately 91% ($n = 117$) were women, 5% ($n = 7$) were men, and 4% ($n = 5$) did not report their gender. Questionnaire packets were administered during lunch break. The packet included all items used in Study 1 plus a self-esteem scale. Respondents were reminded that participation was optional. Of the 260 possible narratives, 45 were either absent or too short to code. Final analyses were based on 111 source stories and 104 target stories ($N = 215$ stories).

Procedure. The procedure was the same as in Study 1, with a few minor modifications. The order of stories was counterbalanced. Further, prior to writing the stories, all respondents completed a modified version of the 20-item Heatherton and Polivy (1991) State Self-Esteem Scale. Items were changed slightly to reflect chronic rather than temporary feelings about the self.[4] Respondents were asked to indicate on 5-point scales (1 = *not at all*; 5 = *extremely*) the degree to which they agreed with several statements regarding their appearance (e.g., "I feel unattractive"), performance (e.g., "I feel confident in my abilities"), and social skills (e.g., "I am worried about what other people think of me"). The distinctions among these subscales was not relevant to our hypotheses, and thus we calculated only global self-esteem by summing responses to all 20 items (range = 42 to 95, $M = 72.42$, $SD = 11.06$). After completing the target and source narratives, respondents answered the following two questions (respectively):

> Some of us have had the silent treatment used on us a lot, some occasionally, some rarely, and some never. How would you rate yourself on the frequency with which the silent treatment has been used on you?
> Some of us use the silent treatment a lot, some occasionally, some rarely, and some never. How would you rate yourself on the frequency with which you use the silent treatment on others?

For both items, respondents marked their answers on 100-point scales (0 = *never*; 100 = *a lot*). Respondents were thanked for their participation.

Coding categories. The coding categories were identical to those used in Study 1.

Results

Narrative length. A word count was conducted for approximately 28% of the narratives ($n = 61$). Target and source narratives were nearly equal in length (*target* $M = 99.67$ words, $SD = 46.24$; *source* $M = 97.45$ words, $SD = 44.74$).

Interrater agreement. All narratives were coded by the first and third authors. Approximately 30% of the narratives ($n = 66$) were coded by both authors to test for interrater agreement. Interrater agreement was moderate to high for all coding dimensions. Kappas were as follows: reasons (.63–1.00, $M = .80$); causal clarity (1.00); needs threatened (.48–.92, $M = .72$); emotions (.44–1.00, $M = .80$); out-

[4] As part of the continuing education seminar, participants were invited to tally their self-esteem scores for each of the three self-esteem dimensions. We used a modified version of the Heatherton and Polivy scale because respondents could calculate their own self-esteem scores easily and quickly. In neutral situations, the State Self-Esteem Scale (SSES) correlates highly with validated measures of trait self-esteem, including the Janis Field Scale (rs = .76–.80) and the Rosenberg scale ($r = .72$; Heatherton & Polivy, 1991). Unlike trait measures of self-esteem, however, the SSES is sensitive to temporary fluctuations in self-esteem following naturally occurring or experimentally induced ego threat. Because respondents in Study 2 completed the modified SSES during their lunch break, under nonthreatening conditions, we are confident that the scores reflect relatively stable feelings of self-worth.

comes/resolutions (.57–1.00, M =.80); type of relationship (.97). Half the codings provided by each rater were selected randomly for use in the final analyses. Correlations among coded variables ranged from –.25 to .43 (M = .01).

Order effects. Several chi-square analyses were conducted to determine whether the order in which participants completed the narratives affected the content of the stories. Order constituted the independent variable and every coding category listed previously was entered as a dependent measure. The number of significant effects (n = 1) did not exceed that expected by chance (n = 1). We concluded that the order in which participants completed the narratives had no effect on the information they chose to report.

Causal clarity. The bottom half of each row in Table 1 presents the results for causal clarity. As in Study 1, causally unclear ostracism was associated with greater threats to self-esteem than causally clear ostracism, $^2(1, N = 67) = 4.92, p < .05$, $^2 = .07$. Unexpectedly, causally clear ostracism predicted stronger threats to control than causally unclear ostracism, $^2(1, N = 67) = 3.88, p < .05$, $^2 = .06$. There were no significant effects for the remaining variables, ^{2} 1.72, ps > .10, ^{2} .03.

Oblivious ostracism. The effects of oblivious ostracism on feelings of belongingness and other basic needs were pronounced in this sample as well as in Study 1, although low statistical power prevented most of these comparisons from reaching significance. To adjust for low expected frequencies, a Fisher's exact test was calculated. The results are presented in the bottom half of each row in Table 2. Significance was achieved only for threats to self-esteem, with oblivious ostracism causing greater threats to self-esteem than other motives for ostracism, $^2(1, N = 43) = 5.22, p = .05$, $^2 = .12$. All other comparisons were nonsignificant, ^{2} 2.34, ps > .10, ^{2} .05.

Perspective differences. Before examining whether self-reported outcomes differed by perspective, we took the same precautions in our data analyses as we did in Study 1. Correlations between the two perspectives on the outcome variables yielded six nonsignificant correlations ranging from –.05 to .21 (ps > .10, two-tailed). Perspectives were mostly independent, if not slightly correlated in the positive direction.

The findings are displayed in Table 3. Replicating the findings from Study 1, sources were more likely than targets to report that ostracism was effective, $^2(1, N = 215) = 25.25, p < .05$, $^2 = .12$, and that the source gained control, $^2(1, N = 215) = 8.59, p < .05$, $^2 = .04$. Targets, conversely, were significantly more likely than sources to note that targets withdrew, $^2(1, N = 215) = 4.52, p < .05$, $^2 = .02$, reciprocated the ostracism, $^2(1, N = 215) = 4.14, p < .05$, $^2 = .02$, and resented the manipulation, $^2(1, N = 215) = 16.56, p < .05$, $^2 = .08$. Sources and targets did not differ significantly as to whether the problem was talked out or resolved, $^2(1, N = 215) = 2.46, p > .10$, $^2 = .01$.[5]

Emotional outcomes. Table 4 lists the emotions reported by sources and targets. A Fisher's exact test was applied to all analyses for which the minimum expected value was less than five. As predicted, sources and targets were equally likely to report feeling angry, $^2(1, N = 215) = .04, p > .10$, ^{2} .01. Unlike Study 1, sources and targets did not differ in feelings of frustration, $^2(1, N = 215) = .34$, $^2 = .00$, or guilt, $^2(1, N = 215) = 1.10$, ^{2} .01, $p > .10$. However, targets were more likely than sources to say that they felt a loss of pride, $^2(1, N = 215) = 6.22$, $^2 = .03$, hurt, $^2(1, N = 215) = 8.20$, $^2 = .04$, rejected, $^2(1, N = 215) = 7.72$, $^2 = .04$, and scared/afraid/worried, $^2(1, N = 215) = 13.57$, $^2 = .06$. All other comparisons were nonsignificant, ^{2} 2.2, ps > .10, ^{2} .01. Finally, targets reported a greater overall number of negative emotions than did sources, $t(84) = –3.42$, $p < .05$, two-tailed (r = .35). These findings suggest that the perspective differences in emotional outcomes obtained in Study 1 cannot be explained by a fatigue or an order effect.

Reasons for ostracism. The percentage of narrative classified into each reason category is listed in the right half of Table 5. As in Study 1, targets most often thought they were being punished. Targets generated very low frequencies of other motive categories. Sources were equally likely to report using ostracism for punitive reasons and as a last resort, or when confrontation proved effective. Finally, somewhat less frequently, sources ostracized their partners to gain control over their own anger (timeout) and to avoid a confrontation.

Self-esteem. We predicted that low self-esteem individuals would report being ostracized more frequently than

[5]As in Study 1, we examined whether sources and targets were describing roughly the same types of relationships. Sources and targets were equally likely to describe incidents with coworkers—source = 11%; target = 14%, ^{2} (1, N = 215) = 0.64, p > .10, ^{2} .01—and spousal/romantic partners—source = 41%; target = 31%, $^2(1, N = 215) = 2.23, p > .10$, $^2 = .01$. Sources were significantly more likely than targets to describe other (and noncodable) relationships—source = 32%; target = 17%, $^2(1, N = 215) = 6.53, p < .05$, $^2 = .03$. Conversely, targets were significantly more likely than sources to describe friend relationships—source = 5%; target = 15%, $^2(1, N = 215) = 5.82, p < .05$, $^2 = .03$—and marginally more likely to describe relationships with relatives—source = 14%; target = 22%, $^2(1, N = 215) = 2.73, p = .09$, $^2 = .01$. We unconfounded the effects due to perspective and relationship using partial chi-squares derived from log-linear models. The results paralleled those derived from standard chi-square analyses.

would high self-esteem individuals. The predicted negative correlation between self-esteem and exposure to the silent treatment was confirmed, $r(118) = -.33$, $p < .05$, two-tailed.[6] Low self-esteem was also associated with an increased use of silence on others, $r(121) = -.45$, $p < .05$.

Several correlations were computed to examine the relation between sources' self-esteem and their reasons for ostracism. Low self-esteem was associated with increased use of defensive ostracism, $r(109) = -.19$, $p < .05$, whereas high self-esteem predicted the use of ostracism as a means of terminating the relationship, $r(109) = .19$, $p < .05$. Self-esteem was not associated significantly with other reasons for ostracism (*r*s ranged between –.09 and .12, *p*s > .10.)

Finally, we tested whether targets' self-esteem would predict their decisions to leave their ostracizing partners. Partial support was obtained for this prediction; high self-esteem targets were more likely than their low self-esteem counterparts to report that they terminated their relationships with their ostracizing partners, $r(102) = .20$, $p = .05$.

Discussion

Replications. One purpose of Study 2 was to replicate the findings of Study 1 in an older, professional (and primarily female) sample. The results for causal clarity were partly replicated; unclear ostracism was associated with stronger threats to self-esteem than clear ostracism. Contrary to predictions, clear ostracism predicted stronger threats to control than unclear ostracism. One explanation for this finding lies in the way that control loss was defined. In both studies, we operationalized control threat as a decreased ability to regulate one's own or others' behaviors or outcomes. The inability to change the situation may have been particularly salient to targets of clear ostracism; they knew why they were being ignored and simultaneously realized that there was little they could do to reverse the treatment. Conversely, targets of unclear ostracism may have remained preoccupied with why they were being ignored, giving little attention to whether they could undo the course of events.

We argued earlier that unclear ostracism robs targets of interpretive control or the ability to make sense of their environments. The present measure of control loss may have failed to tap into this construct. In general, interpretive control may be a psychological state that is difficult for targets to communicate. Prior experimental research using both self-report and behavioral measures of control motivation has revealed that causally unclear ostracism increases the need for control relative to causally clear ostracism (Williams & Williams, 1999). It is possible that standard measures of control motivation have been sensitive to (decreases in) interpretive control, whereas the present measures were not. Future research is needed to resolve the discrepancy between prior research and the present findings. At the very least, the present study suggests that evidence for control loss (and for interpretive control loss in particular) may be largely contingent on the methods employed.

Consistent with the results of the first study, Study 2 revealed that targets who felt that others were oblivious to their presence suffered greater threats to self-esteem than targets who perceived they were being intentionally ignored. Though the pattern of means suggested that oblivious ostracism was associated with stronger threats to belongingness and greater attempts at affiliation, these differences did not achieve significance. The primary reason for this was the low number of ostracism incidents coded as "oblivious" ($n = 5$). Qualitative differences in the nature of the samples used for Studies 1 and 2 may account for the relatively low proportion of incidents involving oblivious ostracism in Study 2. Study 1 consisted mainly of freshmen college students. These participants may have felt relatively anonymous in their new environments, hoping to stand out so as to establish meaningful connections with others. Conversely, the sample for Study 2 consisted of older adults, many of whom were married and tended to be more established in their social relationships. Older adults may be less likely than college students to perceive a broad, lack of attention that comes with being immersed in a new social environment.

Finally, perspective comparisons indicated that sources and targets of ostracism differed in their memories for, or interpretations of, experiences with the silent treatment. When writing from the source's perspective, respondents emphasized that silent treatment was an effective tool for achieving their goals and gaining control. They also tended to note that the problem was eventually resolved or talked out. Yet when writing from the target's perspective, narrators focused on their own withdrawal and resentment and claimed to have reciprocated the ostracism. These findings are consistent with previous research revealing strong perspective biases inherent in various forms of interpersonal transgressions (Baumeister et al., 1990; Baumeister, Stillwell, & Heatherton, 1994; Baumeister, Wotman, & Stillwell, 1993).

Self-esteem. The second purpose of Study 2 was to examine the role of trait self-esteem in people's use of, and responses to, the silent treatment. Consistent with prior theory explicating a link between chronic rejection and trait self-esteem (Leary et al., 1995), low self-esteem participants reported feeling ostracized more frequently than did high self-esteem participants. Those with low self-esteem also reported *giving* the silent treatment more frequently. These findings shed light on the social worlds of people with low self-worth. Intuitive reasoning would lead one to hypothesize that low self-esteem people (who

[6]We had specific predictions regarding the relation between self-esteem and various factors related to social ostracism. However, we used two-tailed tests to provide a more conservative test of the hypotheses.

perceive higher levels of ostracism) would be less likely than high self-esteem people to engage willingly in behaviors that threaten the interpersonal bond. The finding that the former were more likely to give others the silent treatment suggests that the link between self-esteem and interpersonal rejection is more complicated than previously recognized.

Self-esteem also predicted the reasons that people use the silent treatment. People with low self-esteem were more likely to use ostracism as a defensive means of protecting the self from esteem threat, whereas those with high self-esteem were more likely to use the silent treatment in efforts to terminate the relationship. This latter finding indicates that, although people with low self-worth may silence others more in general, especially in a defensive way, they do not use silence as a deliberate means of severing the relationship. Instead, use of this tactic as a method for terminating a bond is characteristic mainly of people with high self-esteem.

Finally, people high in self-esteem were more likely than those with low self-esteem to terminate their relationships with sources. This supports Rusbult's research showing that high self-esteem individuals, who generally possess greater relationship alternatives, are more likely to exit the relationship when dissatisfied with their partners (Rusbult et al., 1987). These people may be less dependent on their relationships and less likely to accommodate their partners when things are going badly.

META-ANALYSIS

The pattern of findings in Studies 1 and 2 generally supported our hypotheses, yet some comparisons reached significance in only one study. Failure to replicate certain findings across both studies may be due to the absence of true differences between conditions, qualitative differences in the nature of the samples used, or lack of statistical power (Study 2). To assess the overall strength of effects across studies, we conducted three sets of meta-analyses. These analyses pertained to the three hypotheses addressed in both studies.

Causal Clarity

The impact of causal clarity on needs threatened was assessed by averaging the effect sizes and calculating the combined *z* score for each dependent variable. All *p* values are based on one-tailed tests. The results indicated that targets of causally unclear ostracism suffered significantly greater threats to belongingness ($r = .19$, $z = 2.31$, $p < .05$) and self-esteem ($r = .29$, $z = 3.76$, $p < .05$) than targets of causally clear ostracism. Causally clear ostracism was associated with greater threats to control than causally unclear ostracism ($r = –.16$, $z = –1.84$, $p < .05$). No significant differences emerged for threats to meaningful existence, affiliation with others, or self-affirmation (*r*s range from –.11 to .11, *z*s range from –1.29 to 1.26, *p*s > .10).

Oblivious Ostracism

Similar analyses were conducted for the perceived reasons for ostracism. Compared to ostracism that was perceived as deliberate or intentional, oblivious ostracism was marked by stronger threats to belongingness ($r = .32$, $z = 3.70$, $p < .05$), self-esteem ($r = .26$, $z = 2.64$, $p < .05$), and meaningful existence ($r = .17$, $z = 2.10$, $p < .05$), and was associated with increased affiliation ($r = .24$, $z = 2.54$, $p < .05$). There were no significant effects for threats to control ($r = –.14$, $z = –1.54$) or the tendency to engage in self-affirmation ($r = –.02$, $z = –.86$) *p*s > .10.

Perspective Differences and Emotional Outcomes

Meta-analyses were conducted to determine the strength of perspective biases and emotional outcomes. Compared to target narratives, source narratives were more likely to characterize the silent treatment as effective ($r = –.33$, $z = –7.64$, $p < .05$) and as a means of gaining control ($r = –.24$, $z = –5.40$, $p < .05$). Sources were also more likely than targets to claim that the problem was eventually resolved or talked out ($r = –.12$, $z = –2.58$, $p < .05$). Conversely, targets were more likely than sources to focus on target withdrawal ($r = .15$, $z = 3.38$, $p < .05$), resentment toward the source ($r = .22$, $z = 4.80$, $p < .05$), and reciprocation of the ostracism ($r = .16$, $z = 3.63$, $p < .05$).

Compared to sources, targets were significantly more likely to report feeling frustrated ($r = .11$, $z = 2.49$), hurt ($r = .15$, $z = 3.20$), guilty ($r = .11$, $z = 2.34$), a loss of pride ($r = .17$, $z = 3.70$), scared ($r = .14$, $z = 2.97$), lonely ($r = .14$, $z = 3.17$), rejected ($r = .15$, $z = 3.30$), uncomfortable ($r = .13$, $z = 2.93$), and stupid ($r = .09$, $z = 2.06$), *p*s < .05. Sources and targets did not differ in their experience of other emotions (*r*s range from –.04 to .07, *z*s range from –.33 to 1.55, *p*s > .10). Overall, targets reported a higher number of negative emotions than sources ($r = .26$, $z = 5.87$, $p < .05$).

GENERAL DISCUSSION

Two studies illuminated the causes and consequences of social ostracism in interpersonal relationships. Two dimensions emerged as important predictors of the extent to which targets of ostracism were deprived of basic needs: causal clarity, and whether targets felt that sources were oblivious to their presence. We consider each of these in turn.

Causally unclear ostracism, defined by targets' inabilities to attribute their treatment to a specific cause, predicted greater losses in belongingness and self-esteem. Targets' inabilities to answer the question *why* may have left them distressed and unable to cope with their situations (Taylor, 1983; Taylor, Lichtman, Wood, 1984). Another possibility is that targets of causally unclear ostracism ruminated about their possible shortcomings or transgressions in efforts to un-

derstand the reasons for their treatment, leading them to feel worse about themselves and their relationships. Finally, the inability to point to a specific precipitating event may have caused targets to develop grave concerns as to whether the relationship would return to normal.

Causally clear ostracism, however, was associated with greater threats to control than causally unclear ostracism. This finding was contrary to our expectations; other studies using experimental manipulations of causal clarity have revealed that causally unclear ostracism increases control motivation relative to causally clear ostracism (Williams & Williams, 1999). We can only speculate that inconsistencies between this study findings and past research findings lie in the nature of the dependent measure used. Specifically, the present operationalization of control threat as a reduced ability to control one's own or others' behaviors or outcomes was probably insensitive to changes in interpretive control, defined as one's ability to make sense of one's environment. We suspect that the increased control motivation following causally unclear ostracism found in past research may reflect in large part the loss of interpretive control. Future research is needed to determine how and when unclear ostracism poses a stronger threat to perceived control than clear ostracism.

The findings for causal clarity suggest that sources may choose to withhold an explanation for the silent treatment when the primary reason is to punish the target. By withholding an explanation, sources will maximize the loss of belongingness and esteem experienced by targets. From the source's perspective, then, punishment is probably best accomplished by keeping the reasons for one's silence secret. However, refusing to offer an explanation may also reduce the likelihood that one will receive reparation. That is, targets will likely find it difficult to appease or compensate the source when they have no knowledge of what they have done to bring about the treatment.

The second dimension that influenced target outcomes was the extent to which targets felt that others were oblivious to their presence. Compared to intentional forms of ostracism, oblivious ostracism was marked by greater threats to belongingness, esteem, and meaningful existence. Targets of oblivious ostracism were also significantly more likely to seek affiliation with others. These findings lend credence to William James' (1890) assertion that failure to be noticed by others exerts a more detrimental impact on one's sense of self than negative attention. Most instances of ostracism described by targets in both samples were viewed as punitive, and yet targets were consistently more threatened by instances in which others were not trying to ignore them but rather were oblivious to their presence.

The hypothesis that people prefer negative attention over indifference has received support from studies in developmental psychology. In one experiment (Gallimore, Tharp, & Kemp, 1969), elementary school-aged children were deprived of social contact or engaged by the experimenter in a friendly, 10-min conversation. All students then played a game in which correct responses resulted in a flashing light whereas incorrect responses elicited mild negative attention from the experimenter ("no, you're wrong"). Children were also pretested for dispositional needs for social approval. Results indicated that children high in need for approval who were also deprived of social contact generated a significantly higher proportion of incorrect responses than children who were low in need for social approval or those who conversed with the experimenter prior to the game. The authors concluded that negative attention reinforced undesirable or incorrect behavior when needs for social approval were high. Paralleling this finding, other studies have revealed significant correlations between perceived parental rejection and negative attention-seeking behavior (Peretti, Clark, & Johnson, 1984; Saxena, 1992). These lines of research help to explain why the negative attention characterizing intentional ostracism may be less threatening than the indifference suggested by oblivious ostracism. People would rather receive negative attention than no attention at all.

Perspective Differences

Several perspective differences emerged that shed light on the experiences of sources and targets. Sources portrayed the silence as an effective means of achieving their goals. This may have entailed manipulating the target, punishing the target, or gaining control over their own emotions and behaviors. In comparison, targets rarely discussed the utility of the silent treatment. Sources also noted that ostracism gave them control and that the conflict was eventually resolved, in contrast to targets who made little mention of these outcomes. Instead, targets focused more on their own withdrawal and emphasized their reciprocation of the ostracism, possibly in efforts to portray themselves as gaining control over their partners. Perspective differences were paralleled by differences in emotional outcomes. As one may expect, the silent treatment proved to be a more aversive experience for targets than for sources.

These findings must be interpreted with caution, because the instructions differed somewhat for sources and targets. Sources were asked why they chose silence over other methods, and this may help to explain sources' emphasis on the control afforded by ostracism. Targets, conversely, were specifically queried about their feelings; this may account in part for the elevated levels of target resentment and other negative emotions reported in target narratives. However, both source and target instructions similarly inquired as to ultimate consequences of the silent treatment, thus failing to explain why targets reported more target reciprocation and withdrawal, whereas sources contended that the conflict was eventually resolved. Further, both sources and targets reported comparable levels of anger and frustration (Study 2), which is inconsistent with the notion that sources were discouraged from discussing their emotional experiences.

Though more research is needed, we believe that our findings provide preliminary support for the cognitive and motivational biases presumed to underlie sources' and targets' experiences with the silent treatment.

Reasons for Ostracism

For exploratory purposes, we coded the real (source's perspective) or perceived (target's perspective) reasons for the silent treatment. Sources were specifically queried for their reasons for choosing silence over other responses to conflict, and thus one would expect a higher frequency of reason categories in source compared to target narratives. Yet, if targets' perceived reasons for the ostracism roughly matched sources' actual motives, then source and target narratives should evidence approximately equal proportions of each reason category. However, in both Studies 1 and 2, targets generated a lower frequency of nonpunitive reasons. This suggests that targets may have overestimated the frequency with which sources meant to hurt them. Perceptual or motivational biases may lead targets to underestimate the role of nonpunitive motives in sources' behaviors (e.g., "the argument was too aversive for him" or "she needed to cool off"). Instead, targets may focus on their own negative outcomes and assume that the source means to inflict hurt or suffering (Baumeister et al., 1990). Research shows that empathy does reduce such biases (Chen, Froehle, & Morran, 1997), but targets may have had difficulty empathizing with sources who said nothing.

Self-Esteem

Several interesting findings for self-esteem emerged in Study 2. Low self-esteem individuals were more likely than their high self-esteem counterparts to silence others in a defensive, image-protecting manner. In fact, the former had more experience with ostracism in general, both as sources and targets. Higher use of the silent treatment among low compared to high self-esteem individuals is a counterintuitive finding in light of the recent research linking low self-esteem with low perceptions of belongingness (Leary et al., 1995, 1998). Yet, our results suggested that low self-esteem people did not use the silent treatment for the purposes of terminating their relationships. Instead, high self-esteem people were more likely to use ostracism to terminate the relationship and also to terminate relationships in response to being ostracized.

The relationship between self-esteem and defensive ostracism may be interpreted in different ways. First, defensive ostracism may reflect a means of preemptively rejecting the partner or pushing the partner away. This suggestion was echoed recently in an article by Murray et al. (1998), who found that low (but not high) self-esteem individuals who were made to focus on their own faults or shortcomings subsequently devalued their partners and expressed reduced needs for their relationships. Murray et al. (in press) speculated that lows were rejecting their partners before their partners had the opportunity to reject them. Low self-esteem may thus have a self-fulfilling aspect to it: Perceptions of impending rejection or criticism from others leads to the rejection of others, which in turn disrupts belongingness and lowers self-esteem (Leary et al., 1995). To date, there is no direct evidence that defensive rejection causes relationships to end. However, research has revealed that partners of low (but not high) self-esteem individuals rate their partners and their relationships more negatively over time (Murray, Holmes, & Griffin, 1996). Further, the romantic relationships of people low in self-esteem end more quickly than the relationships of those high in self-esteem (Hendrick, Hendrick, & Adler, 1988).

Second, defensive ostracism among low self-esteem individuals may reflect attempts at impression management. Defensive ostracizers sometimes noted that they were incapable of winning arguments or that attempts to argue ultimately made them look worse. People with low self-esteem, who are anxious (Leary & Kowalski, 1995) and lack a sense of efficacy in social situations (Deci & Ryan, 1987), may be particularly motivated to derail an argument that (in their minds) is bound to result in an unfavorable evaluation by the target. Clearly, the assumption that silencing the partner will decrease the likelihood of being evaluated negatively by the partner is dubious.

At this point, it is difficult to determine why exactly low self-esteem emerged as strong predictor of the tendency to use ostracism on others in everyday life. Elevated use of defensive ostracism is one possibility; however, the correlation between low self-esteem and defensive ostracism, although significant, was not strong ($r = -.19$). The results of Study 1 and Study 2 cannot rule out the possibility that there may be alternative reasons for heightened use of ostracism among these people.

It is possible that the low percentage of source narratives classified as reflecting defensive ostracism restricted the magnitude of the statistical relation between this reason category and self-esteem, thereby underestimating the use of defensive ostracism among people with low self-esteem. One disadvantage of using the narrative method to study ostracism is that sources' motivations for ostracism are not always apparent. Defensive ostracism in particular was difficult to assess because it required that sources allude to feelings of inferiority, blameworthiness, or "looking bad." We suspect that sources may have been reluctant or unable to express these emotions openly. As an analog, researchers who study the related construct of shame have had difficulties finding direct evidence for the strong, negative self-appraisals that are presumed to underlie the shame experience, apparently because these appraisals are too painful to discuss or admit openly (Tangney, 1995). The affective and cognitive correlates of defensive ostracism similarly may have been missing

from many of the narratives. The resultant low frequency of defensive ostracism motives may have thus underestimated both its relation with self-esteem and also the degree to which defensive ostracism occurs in everyday life.

Areas for Future Research

Targets of social ostracism clearly suffer some damage to mental well-being. What has not been explored, however, is whether sources of ostracism incur any intrapsychic costs. Preliminary evidence suggests that there may be important, self-regulatory costs associated with ignoring others. In one study (Ciarocco, Sommer, & Baumeister, in press), participants were asked to ignore or speak freely with another person. Liking for the target was also manipulated by leading half the participants to believe that the target had previously evaluated them negatively or positively on an impression formation task. All participants then worked on a difficult (unsolvable) anagram task. Results revealed that participants who ignored another person persisted for a significantly shorter period of time on the anagram task than those who spoke freely. Further, this difference held regardless of whether participants were first led to like or dislike the target. For sources of ostracism, then, short-term gains in control may be offset by a reduction in their larger capacities for self-control. This and other lines of research that focus on the psychological consequences for the source will greatly broaden psychologists understanding of this phenomenon.

One of us is also presently conducting structured interviews with long-term sources and targets of ostracism, many of whom have been involved with the silent treatment continuously for several years (Williams & Zadro, 1999). In fact, one woman was not spoken to or looked at by her husband for the last 40 years of his life. It is evident from these interviews that targets of long-term silent treatment undergo severe psychological distress, ranging from helplessness and alienation to depression and suicide attempts. Almost all targets also report physical distress as a result of long-term exposure to the silent treatment, and many volunteer that they would rather be beaten or verbally abused than given the silent treatment. When asked to explain, targets say that beatings at least signify that the source recognizes their existence. Further, targets argue that a person could go to friends or the authorities with bruises from beatings, but there is nothing they can show others to prove that they have been victimized by silence.

The negative intrapsychic consequences of social ostracism for targets suggest that this tactic should rarely, if ever, be used in response to conflict. The only possible exception to this may entail instances in which two angry partners make an explicit, verbal agreement to avoid speaking to each other until each has had the opportunity to calm down and think about the problematic issue in greater depth. Most likely, such situations would include the use of physical ostracism wherein partners remain physically distant for a designated period of time. Tice and Baumeister (1993) noted that social isolation is a frequently reported means of anger control, and research suggests that temporary, physical avoidance may provide an effective method for reducing anger-related arousal (Repetti, 1992). In these instances, social ostracism would reflect not a unilateral tactic but a bilateral approach to problem solving.

In a related vein, we suspect that formal declaration by the source of ostracism as to the necessity of a brief period of noncommunication may reduce threats to belongingness and self-esteem experienced by targets. Sources may think they are being better partners by withholding any verbal complaints or criticisms and instead silencing their partners until they are ready to approach the situation more constructively. But the findings for causal clarity suggest that remaining silent in the absence of an explanation appears to be most hurtful in the long run. Verbal precursors to the silent treatment also may reduce negative attributions by the partner or feelings of being punished.

Another issue concerns the accuracy of targets' attributions for the silent treatment. The within-subjects nature of our design prohibited us from comparing source and target accounts of the same incidents. Future studies that use between-subjects designs could assess the degree to which targets are generally accurate or inaccurate in their perceptions of why the silent treatment is taking place. Further, such research would allow researchers to examine whether the accuracy of targets' perceptions influences the resentment they harbor toward sources and the probability of resolving the conflict.

Finally, we chose the autobiographical narrative method because personal stories are rich with contextual and temporal information that tends to get lost in other forms of scientific inquiry. Yet, this method also necessitates researchers' dependence on the information that narrators choose to report. As such, there were many questions that we could not address in the present research. Lab experiments and structured questionnaires may prove more fruitful for detecting relations among variables that do not emerge spontaneously during self-report. In addition, controlled experiments that directly manipulate factors such as causal clarity and the perceived reasons for ostracism are needed to provide converging evidence for the present findings.

Despite the limitations imposed by our choice of research design, the present investigation provided valuable insight into the causes and consequences of social ostracism in everyday life. We uncovered several dimensions and correlates of social ostracism that build on prior theory and may provide the foundation for future hypotheses. It is clear that causal clarity and targets' perceived reasons for ostracism must be considered when attempting to predict the overall negative impact of social ostracism on targets. On the flip side, more attention needs to be given to the various motives

and traits (such as self-esteem) that underlie people's use of the silent treatment. We hope that the present findings will encourage future exploration into this powerful and pervasive phenomenon.

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