Two Sides to Self-protection: Self-improvement Strivings and Feedback from Close Relationships Eliminate Mnemic Neglect

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People selectively forget feedback that threatens central self-conceptions, a phenomenon labeled mnemic neglect. Such forgetting serves to protect the self-system, but its rigid application may be associated with liabilities such as failing to learn about one’s weaknesses. Two experiments tested the extent to which mnemic neglect is rigid or flexible. In Experiment 1, where self-improvement strivings were primed, mnemic neglect was absent: threatening and non-threatening feedback was recalled equally. In Experiment 2, participants received feedback either from a stranger or a close relationship. Participants recalled poorly threatening stranger feedback but recalled well threatening close-relationship feedback. Self-protection is flexible and strategic. Individuals recall well self-threatening feedback when they are concerned with self-improvement and when the feedback has ramifications for long-term relationships.

Keywords: Close relationship; Mnemic; Self-enhancement; Self-improvement; Self-protection.

People display notable variability in responding to events that have implications for the self. A given individual might react to negative feedback with defensive anger on one occasion, but with thoughtful acceptance on another occasion. Although defensive tendencies are prevalent (Campbell & Sedikides, 1999; Sedikides & Gregg, 2003; Sedikides & Strube, 1997), possibly “totalitarian” in their vigilance (Gaertner, Sedikides, Vevea, & Iuzzini, 2002; Greenwald, 1980; Taylor, 1991), and arguably the

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default response in unfriendly social environments (Dijksterhuis & Aarts, 2003; Pratto & John, 1991; Wentura, Rothermund, & Bak, 2000), they are also applied strategically.

Illustrative of this strategic application, research sparked by self-affirmation theory has shown that self-defensive tendencies are “turned off” in circumstances that offer self-enhancement opportunities: Bolstering the integrity of the self in one domain reduces defensive processing in another domain (Sherman & Cohen, 2006). Similarly, Tesser (2000) emphasized the plasticity of self-defense and proposed the substitution principle, in which ostensibly different mechanisms for the regulation of self-esteem, such as social comparison or dissonance reduction, are substituted for each other. In a related vein, prior success (Trope & Pomerantz, 1998), a positive experience (Trope & Neter, 1994, Experiment 1), a positive mood (Trope & Neter, 1994, Experiment 2), the visualization of a positive close relationship (Kumashiro & Sedikides, 2005), perceived control over the expression of one’s performance ability (Trope, Gervey, & Bolger, 2003, Experiment 1), and perceived changeability of one’s ability (Trope et al., 2003, Experiment 2) or one’s self-conceptions (Dauenheimer, Stahlberg, Spreeman, & Sedikides, 2002; Dunning, 1995) render people more open to preferences for feedback about their weaknesses.

This strategic flexibility suggests that individuals are sensitive to tradeoffs and may attempt to balance defense against self-threat with opportunities to learn from feedback, mistakes, or other persons. The present research builds on these empirical traditions by examining two areas in which self-defensive tendencies may be flexibly applied: self-improvement strivings and feedback from close relationships. Our research examines this potential tradeoff in the context of a theoretical model of memorial self-protection, the mnemic neglect model.

The Mnemic Neglect Model

Overview of the model. The mnemic neglect model (Sedikides, Green, & Pinter, 2004a; see also Sedikides & Green, 2006; Sedikides, Green, & Gregg, 2007a) purports to explain the cognitive processes by which individuals protect themselves from menacing self-relevant feedback. The self-concept is a generally positive and motivationally charged structure (Baumeister, 1998; Sedikides, Gaertner, & Toguchi, 2003; Sedikides & Gregg, 2008) that defends itself from the implications of highly threatening information. The mnemic neglect model has incorporated techniques from the person memory literature (Hastie, 1980; Srull, 1981; Srull & Wyer, 1989) to investigate how individuals process and remember feedback about the self.

The mnemic neglect model focuses on three dimensions of (behavioral) feedback. Feedback may be positive or negative, may reflect traits that are central or peripheral to one’s self-definition, and may refer to the self or to another person. Feedback that is negative, reflects central traits, and refers to the self is defined as self-threatening. On the other hand, feedback that is positive, reflects central traits, and refers to the self is defined as self-affirming. Two other categories of feedback can be identified: other-relevant (reflecting central traits that are either negative or positive and refer to other) and tangential (reflecting peripheral traits that are either positive or negative and refer to either the self or other). The typical experimental finding is that participants recall poorly self-threatening feedback. It is this recall disparity between self-threatening and self-affirming feedback (in the backdrop of other-relevant feedback, tangential feedback, or both) that we have termed mnemic neglect.

In one of the first demonstrations of mnemic neglect (Sedikides & Green, 2000, Experiment 1), participants completed an ostensible computer-administered personality
inventory (the Michigan Omnibus Personality Inventory or MOPI) and then read MOPI feedback in the form of “behaviors that you are likely to perform.” Other participants took the MOPI, but read the same behavioral feedback describing another person bearing the androgynous name Chris. Some behaviors were positive and some were negative; in addition, some behaviors exemplified central traits (i.e., trustworthy, kind) and some exemplified peripheral traits (i.e., modest, uncomplaining). After a distractor task, a surprise recall test was administered. Participants recalled fewer self-threatening behaviors than self-affirming behaviors.

The thrust of the mnemonic neglect model is that individuals process self-threatening feedback (e.g., “An employer would not rely on you to have an important project completed by the deadline”) in a superficial manner (Brown & Craik, 2000; Craik, 2002). This shallow processing results in less elaboration, fewer retrieval routes, and poorer recall. In contrast, individuals process self-affirming feedback (e.g., “You would follow through on a promise made to friends”) in a thorough manner. This deep processing results in greater elaboration, more retrieval routes, and better recall. Relatedly, shallow processing likely involves separation or disconnection of feedback from stored self-knowledge, whereas deep processing likely involves integration or connection of feedback with stored self-knowledge (Pinter, Green, & Sedikides, 2008).

Generality and motivational character of mnemonic neglect. Mnemonic neglect is a fairly robust phenomenon. It has been observed under conditions of high and low mundane realism. That it, it has been observed not only when the feedback is seemingly “real” (i.e., personality-test based) but also when the feedback is hypothetical (i.e., “Imagine that other people describe you as performing the following behaviors”). Furthermore, the phenomenon has been replicated with multiple sets of behaviors (Green, Sedikides, & Gregg, 2008; Sedikides & Green, 2000).

Mnemonic neglect is a motivational phenomenon. In some of our research (Sedikides & Green, 2004), we tested whether feedback inconsistency (i.e., behaviors that are inconsistent with the self-view) or feedback negativity (i.e., behaviors that are negative regardless of whether they are consistent or inconsistent with the self-view) drove mnemonic neglect. In a pretest, we identified individuals who considered themselves to be relatively untrustworthy or unkind (the central traits employed in that research). Even these individuals—for whom untrustworthy and unkind behaviors would be relatively consistent with their self-conceptions—manifested mnemonic neglect (Sedikides & Green, 2004). That is, even individuals who regarded themselves as untrustworthy and unkind neglected the recall of untrustworthy or unkind behaviors. Mnemonic neglect, then, is in the service of protecting the self-concept. Indeed, in the tradition of self-affirmation theory (Steele, 1988) or the principle of substitutability (Tesser, 2000), when the self is boosted (through creativity feedback), mnemonic neglect is not observed (Green et al., 2008, Experiment 2; see also Raghunathan & Trope, 2002).

Strategic application of mnemonic neglect. Though mnemonic neglect has been replicated under various conditions, evidence indicates that its application is strategic. To begin with, under conditions in which the self is not threatened, mnemonic neglect is not observed. In numerous studies, participants did not neglect negative peripheral behaviors (e.g., exemplifying such traits as unpredictable or complaining) describing the self relative either to positive peripheral behaviors (e.g., exemplifying such traits as predictable or uncomplaining) or to negative peripheral behaviors describing Chris. That is, participants recalled these three categories of behaviors equally well.
However, participants may perceive even negative central self-referent behaviors as non-threatening under certain conditions. We (Green & Sedikides, 2004) carried out an experiment in which we manipulated behavior diagnosticity (i.e., the extent to which a behavior is indicative of an underlying trait). Our reasoning was as follows. High diagnosticity behaviors have clear implications for the self, and, as such, they would be relatively threatening and poorly recalled; however, low diagnosticity behaviors have ambiguous implications for the self, and, as such, they would be relatively non-threatening and better recalled. For example, failing to keep a friend’s secret speaks unequivocally to one’s untrustworthiness, whereas taking a pen from a bank speaks equivocally to one’s untrustworthiness. In line with our hypothesis, mnemonic neglect was observed for high diagnosticity, but not low diagnosticity, behaviors.

We also hypothesized that behaviors exemplifying unmodifiable traits would be relatively threatening and thus neglected. This is because one cannot escape the implications of the feedback: There is nothing one can do to alter the trait. Thus, self-protection (i.e., mnemonic neglect) is the optimal response. In contrast, behaviors exemplifying modifiable traits would be relatively non-threatening. This is because the implications of the feedback are impermanent: It is possible to alter the traits. As such, giving the feedback serious consideration, rather than self-protecting, is the optimal response. In an experiment that manipulated trait modifiability (Green, Pinter, & Sedikides, 2005), half of the participants learned that the underlying traits were unchanging and inflexible across the lifespan prior to receiving the behavioral feedback (unmodifiable condition), whereas the remaining half learned that the underlying traits were changing and flexible across the lifespan (modifiable condition). As hypothesized, participants in the unmodifiable condition manifested mnemonic neglect, whereas participants in the modifiable condition did not do so.

The Present Research

Overview. The present research attempts to further explore the boundaries of the phenomenon of mnemonic neglect. Two experiments examined potential tradeoffs between self-protection and self-improvement, and between self-protection and belongingness. Experiment 1 tested whether individuals can balance the motive to self-protect with the motive to self-improve. Experiment 2 tested whether individuals can balance the motive to self-protect with the motive to belong in a close relationship.

Self-improvement. Self-protection maintains the integrity of the self-system (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004; Steele, 1988; Tesser, 2000). Also, self-protection positively predicts adjustment (e.g., subjective well-being, optimism, active coping) and negatively predicts maladjustment (e.g., depression, anxiety, neuroticism; Marshall & Brown, 2007; Sedikides, Gregg, & Hart, 2007b). Entrenched self-protection, however, can have psychological costs (Colvin & Griffio, 2007; Sedikides, 1999; Sedikides & Luke, 2007) such as the failure to learn from one’s own mistakes or the failure to self-improve.

There is evidence that self-protection is controllable. For example, it is curtailed when individuals generate in writing reasons why they might possess negative central traits (e.g., untrustworthy, unkind); in such cases, participants rate themselves more unfavorably compared to those who simply wonder whether they possess these traits (Sedikides, Horton, & Gregg, 2007c). Self-protection is also curtailed when
individuals believe that they are accountable to others for their self-appraisals; in such cases, participants assign their recently composed essays lower grades than their unaccountable counterparts (Sedikides, Herbst, Hardin, & Dardis, 2002). Is self-protection also controllable in the presence of self-improvement strivings? Can self-protection give way to the potent self-evaluation motive of self-improvement (Butler, 1993; Kurman, 2006; Sedikides & Strube, 1997; Taylor, Neter, & Wayment, 1995; Trope et al., 2003)?

The self-improvement motive orients individuals to the future. Individuals are open to, if not enduring of, more accurate but potentially threatening feedback in the present in order to better their characteristics, skills, or abilities in the future. This arguably is a trade-off between present self-deflation in exchange for future self-enhancement (Sedikides & Strube, 1997). Some evidence attests to the interplay between self-protection and self-improvement. For example, potentially threatening but useful upward social comparisons are more likely when self-improvement strivings are active (Buunk, Cohen-Schotanus, & Henk van Nek, 2007; Lockwood & Kunda, 2000). Thus, short-term threats may be accepted, if there is a reasonable possibility of long-term improvement by learning from threatening feedback. If so, then activation of self-improvement (e.g., via priming methodologies) may open up individuals to processing and remembering otherwise threatening feedback.

We hypothesized that mnemonic neglect will be present when the social environment transmits partially unfavorable feedback (implying the operation of the self-protection motive and replicating past research), but that it will be absent when the self-improvement motive is cognitively activated. When seen through the assimilative prism of self-improvement strivings (Sedikides & Skowronski, 1991), seemingly self-threatening feedback will be processed like, and recalled as well as, self-affirming feedback. This is likely because the information will be gauged for its long-term potential rather than its immediate threat. More technically, mnemonic neglect will be eliminated in this case. We tested this hypothesis in Experiment 1.

Close relationships. As mentioned above, although self-protection safeguards the integrity of the self-system, entrenched self-protection can have psychological costs. One such cost is the failure to secure belongingness in a close relationship. Indeed, forming and maintaining close relationships (e.g., close friendships, romantic liaisons) constitutes a defining task of adulthood (Erikson, 1963; Hays, 1988; Wright, 1999).

A vital goal in close relationships is the maximization of outcomes for both partners (Argyle & Henderson, 1985; Rusbult & Arriaga, 1997), with partners showing concern for each other (Clark & Mills, 1979; Davis & Todd, 1985), and accommodation of the partner’s interests (Rubin, 1985; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Some evidence attests to the interplay between the motives of self-protection and belongingness in a close relationship. In particular, self-enhancing tendencies often are diminished or even reversed in the context of relational closeness. For example, Sedikides, Campbell, Reeder, and Elliot (1998; see also McCall, Reno, Jalbert, & West, 2000) showed that the self-serving bias was absent in a close relationship context. That is, relationally close individuals (i.e., friends) who engaged in a dyadic task did not take more credit than their partner after success or blame the partner more after failure.

It follows from the above discussion that mnemonic neglect may be muted in the context of positive and supportive relationships. Such relationships provide a
trusting and nurturing context in which threats are buffered. Kumashiro and Sedikides (2005) had participants take a difficult test of intellectual ability and receive false negative feedback. Those who visualized a close positive relationship were more interested in receiving additional liability-focused feedback than those who visualized negative or neutral relationships. Priming attachment security increases cognitive openness (Mikulincer & Arad, 1999) and intentions to explore the environment (Green & Campbell, 2000). According to self-expansion theory (Aron, Aron, & Smollan, 1992), the threat level may be muted because of self–other overlap. Individuals may see close others as valuable sources of feedback: Incarcerated male juvenile offenders reported wanting to receive more self-improving feedback from their girlfriends than they actually received (Neiss, Sedikides, Shahinfar, & Kupersmidt, 2006).

In summary, close relationships provide a buffer or reservoir of good feelings, leading to greater openness and less reactivity. Thus, we hypothesized that self-threatening feedback from a close other would be processed deeply (Devine, Sedikides, & Fuhrman, 1989; Neuberg & Fiske, 1987) and recalled relatively well rather than neglected. This is likely because such feedback will be gauged for its long-term utility (e.g., potential to change the self along relational lines) rather than its immediate threat.

Mnemonic neglect would be eliminated in the context of close relationships. We tested this hypothesis in Experiment 2.

**Experiment 1: Priming Self-improvement Strivings**

Experiment 1 examined the relative interplay between the self-protection and the self-improvement motives. Participants were either primed with self-improvement strivings or not. We reasoned that, in the control (no prime) condition, feedback processing would be guided by the default motive of self-protection. Participants would process the self-threatening feedback in a shallow manner—a processing style that would result in less elaboration, fewer retrieval routes, and lower recall. However, in the experimental (prime) condition, feedback processing would be guided by the motive of self-improvement. Participants would process the feedback in a deep manner, as they would if the feedback were self-affirming. This processing style would result in increased elaboration, more retrieval routes, and higher recall. Thus, we hypothesized that the mnemonic neglect effect would be present in the control condition, but would be absent in the experimental condition. In the latter condition, self-threatening feedback would be recalled as well as self-affirming feedback.

**Method**

*Participants and design.* Ninety-three Virginia Commonwealth University (VCU) undergraduate students participated in partial fulfillment of a course option. Data from 87 participants (57 female, 30 male) were used in the analyses (see results and discussion). The average participant age was 19.4 ($SD = 2.3$); reported ethnicity was 43 Caucasian, 20 African American, 11 Asian American, nine Hispanic, and 10 other. The design was a 2 (Prime: self-improvement, control) $\times$ 2 (Referent: Self, Chris) $\times$ 2 (Behavior Type: central, peripheral) $\times$ 2 (Behavior Valence: positive, negative) factorial; the first two factors were between subjects, whereas the last two factors were within subjects.
Procedure. Participants were seated in front of computers ready to begin the experiment when a second experimenter entered the room, apologized for interrupting, and asked for permission to administer a “brief pilot study involving making short sentences out of a group of words.” (This was in actuality the self-improvement priming task.) The first experimenter granted permission for the interval after participants “would finish the personality test,” adding that participants “can take a short break so that everyone is ready for the next task.” Participants then started the “main experiment” on the computers. First, they completed the MOPI, which was described to them as “the most reliable and widely used personality inventory” (Sedikides & Green, 2000). The MOPI consisted of 45 vague statements (e.g., “It’s amazing how light life sometimes seems,” “When I need advice, I often go to people whom I consider wise”). Participants rated on 7-point scales the extent to which each statement described them. Subsequently, the computer screen asked them to wait quietly for the next phase of the experiment, while the results of their personality test were being tabulated.

At this point, the self-improvement priming task was administered. It involved a sentence completion procedure that Brown and Zagefka (2006) introduced and validated. A sheet titled “language fluency task” contained 20 sets of four to six words. Participants removed one word to write a correct sentence using all the remaining words. Four of the word sets were fillers, and the remaining 16 sets contained words associated with self-improvement (e.g., optimizes, improved, aspirations, gain, achieving, raises). The control prime replaced 15 of the 16 improvement words with filler words (e.g., regarded, heels, see, nothing, tours, announced). An example was provided at the top of the sheet. Also, to reinforce the cover story, participants rated the difficulty of the task at the end, from 1 (not at all difficult) to 7 (very difficult).

After the priming task, participants were instructed that they would continue with the main experiment. They were told that the MOPI “gives highly accurate diagnoses of whether a person possesses a wide range of personality traits, and importantly, provides feedback in terms of behaviors that participants are likely to perform.” Participants in the self condition expected to receive feedback about their personality. However, participants in the Chris condition learned that their answers would be used to validate the MOPI for VCU undergraduates, and that they would instead receive feedback about another person who had previously taken the MOPI and had given permission for the feedback to be shared anonymously. The rationale given to them was that the researchers were interested in how people form impressions of others.

All participants then read 32 randomly presented behaviors that varied according to both valence and trait centrality (Green et al., 2008; Sedikides & Green, 2000) at their own pace, pressing the space bar to advance to the next behavior. The rest of the procedure was the same as in previous mnemonic neglect experiments (Sedikides & Green, 2000). Participants completed a distractor task, writing down for 2.5 minutes as many of the United States as they could. Next, they were instructed to recall as many of the MOPI feedback behaviors as possible. They were told to be as accurate as possible without worrying about remembering the behaviors verbatim. They typed in behaviors one per screen until they could no longer recall any more. A funnel-debriefing procedure concluded the experimental session. No participant guessed the purpose of the experiment or doubted the credibility of the MOPI.
Results and Discussion

Recalled behaviors were coded according to a “gist” criterion (Srull, 1981; Srull & Brand, 1983), consistent with all prior mnemonic neglect research. Two independent coders who were unaware of hypotheses agreed with 94.1% of behaviors (Cohen’s kappa = .93), and resolved the few discrepancies via discussion. Intrusions (e.g., writing down a behavior that was not presented, writing down the same behavior twice) constituted 8.4% of all recalled items. This level of intrusions is comparable to that of our prior research (Green et al., 2008; Sedikides & Green, 2000, 2004). The intrusions were evenly distributed across experimental conditions and were removed from data analyses. We adopted the criterion of no more than three intrusions per participants. Data from six participants were dropped; two misunderstood the recall instructions, and four recalled more than three intrusions.

We conducted a 2 (Prime) × 2 (Referent) × 2 (Behavior Type) × 2 (Behavior Valence) analysis of variance (ANOVA). Note that prior inclusion of sex in the model produced non-significant results. Table 1 displays the means expressed as proportions of behaviors recalled.

The critical four-way interaction was significant, $F(1, 83) = 4.94, p < .03$. We broke down this interaction by examining the triple interaction among Prime, Behavior Type, and Behavior Valence separately for the Chris and Self conditions. In the Chris condition, the interaction was not significant, $F(1, 40) = 0.30, p < .59$. Importantly, however, the interaction was significant in the Self condition, $F(1, 43) = 7.76, p < .008$. We proceeded to break down this interaction by examining the Prime × Valence interaction separately for central and peripheral behaviors.

The Prime × Valence interaction was significant in the case of central behaviors, $F(1, 43) = 4.27, p < .05$. Replicating past research, participants in the control condition recalled significantly more positive central behaviors ($M = 0.37$) than negative central behaviors ($M = 0.27$), $t(22) = 2.34, p < .03$. Interestingly, however, participants in the self-improvement prime condition did not recall more positive central behaviors ($M = 0.38$) than negative central behaviors ($M = 0.39$), $t(21) = 0.35, p < .73$. In support of our hypothesis, mnemonic neglect was present in the control condition but was absent in the self-improvement prime condition. The hypothesis was further supported through two additional pairwise comparisons. Recall of

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<td><strong>Self</strong></td>
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<tr>
<td>Improvement</td>
<td>0.38 (0.16)</td>
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<td>Control</td>
<td>0.37 (0.19)</td>
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<td><strong>Chris</strong></td>
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<tr>
<td>Improvement</td>
<td>0.40 (0.16)</td>
<td>0.36 (0.19)</td>
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<tr>
<td>Control</td>
<td>0.44 (0.17)</td>
<td>0.35 (0.19)</td>
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*Note: Values reflect the mean proportion of correctly recalled behaviors from each set of eight.*
positive central behaviors did not differ significantly across the self-improvement ($M = 0.38$) versus control prime ($M = 0.37$) conditions, $t(43) = 0.11$, $p < .92$. However, negative central behaviors were recalled significantly higher by those primed with self-improvement ($M = 0.39$) relative to those given the control prime ($M = 0.27$), $t(43) = 2.33$, $p < .03$.

The Prime x Valence interaction was also significant in the case of peripheral behaviors, $F(1, 43) = 4.46$, $p < .04$. However, no simple effects reached significance. Participants in the self-improvement prime condition recalled marginally more positive peripheral behaviors ($M = 0.17$) than negative peripheral behaviors ($M = 0.09$), $t(21) = 1.84$, $p < .08$. However, participants in the control condition did not recall significantly more positive peripheral behaviors ($M = 0.13$) than negative peripheral behaviors ($M = 0.16$), $t(22) = 1.00$, $p < .33$. Examining these means in another way, recall of positive peripheral behaviors did not differ significantly by prime condition, $t(43) = 0.91$, $p < .37$, and negative peripheral behaviors were recalled marginally more in the control condition relative to the improvement prime condition, $t(43) = 1.79$, $p < .08$. It is important to note that interactions involving peripheral behaviors have been extremely rare in past mnemonic neglect experiments.

Finally, in line with past research, two main effects emerged. The behavior type main effect was significant: Participants recalled central behaviors ($M = 0.37$) better than peripheral behaviors ($M = 0.18$), $F(1, 83) = 134.42$, $p < .001$. Also, the behavior valence main effect was significant: Participants recalled positive behaviors ($M = 0.30$) better than negative ($M = 0.25$) behaviors, $F(1, 83) = 10.74$, $p < .002$. In summary, the activation of the self-improvement motive via a sentence completion task eliminated mnemonic neglect: participants recalled approximately equal proportions of self-affirming and self-threatening behaviors.

**Experiment 2: Feedback from Close Relationships**

Experiment 2 examined the relative interplay between the self-protection and the belongingness motives. Participants ostensibly received feedback either from a stranger or a close relationship. We reasoned that, in the stranger-feedback condition, feedback processing would be guided by the (default) self-protection motive. Participants would process the self-threatening feedback in a shallow manner. This processing style would result in less elaboration, fewer retrieval routes, and inferior recall. However, in the close-relationship-feedback condition, feedback processing would be guided by belongingness strivings, as the individual would want to align self-changes with the relationship and failure to process carefully the feedback would have negative implications for the relationship. Participants, then, would process the feedback in a deep manner—a processing style that would result in increased elaboration, more retrieval routes, and superior recall. Thus, we hypothesized that mnemonic neglect would be present in the stranger-feedback condition, but absent in the close-relationship-feedback condition.

**Method**

Participants and design. Seventy-six VCU undergraduate students brought a “close other” ($N = 152$) who was 18 or older to complete this experiment in partial fulfillment of a course option. Data from 146 participants (63 males, 83 females) were used in the analyses (see results and discussion). The average participant age
was 19.0 years ($SD = 2.2$), and the sample was diverse (59 Caucasian, 45 African American, 20 Asian American, seven Hispanic and 15 other). Six participants (4%) were not undergraduate students. One-hundred twenty-one participants reported that the relationship was a friendship, 24 reported that the relationship was a romantic one (21 of these reported that they were dating steadily, engaged, or married; three reported casually dating), and one failed to answer. Median length of friendship was nine months ($SD = 45.0$ months); median length of romantic relationship was 14 months ($SD = 26.6$ months).

The design was a $2 \times 2 \times 2$ (Relationship Type: close, stranger) $\times$ (Behavior Type: central, peripheral) $\times$ (Behavior Valence: positive, negative) factorial; the first factor was between subjects, whereas the last two factors were within subjects. Note that, for reasons of parsimony, we did not manipulate referent in this experiment. That is, we did not include a Chris condition, and, as such, all participants processed the feedback self-referentially.

**Procedure.** Two participant pairs attended each session. After a brief introduction to the members of the other pair, participants were randomly assigned to work with their close relationship or with a member from the other pair (i.e., a stranger). Next, participants proceeded to one of four experiment rooms, where they completed a consent form. They were informed that they would be working on a social perception task with their experiment partner. One of them (the “sender”) would complete a computer-based personality test. The results of this test would be reviewed by her or his partner (the “receiver”), who would, in turn, provide feedback to that participant based on the personality test. The role of sender and receiver appeared to be randomly allocated, when each participant chose a slip of paper on which the word “receiver” was written.

After being assigned to the receiver condition, all participants completed a computer-based personality test (i.e., the MOPI), which was described to them as highly valid and widely used. Participants informed the experimenter when they were finished, and their answers to the MOPI were ostensibly transmitted to their partner in another room on a different floor of the building. Receivers were told that their sender was sifting through their response to MOPI to learn about their personality, and had been instructed to select both positive and negative behaviors (from a larger pool of behaviors) that described that participant’s personality. During this “transmission” time, participants answered a few demographics questions (i.e., sex, relationship status, age).

Subsequently, participants were informed that the “sender” had finished creating feedback, which was ready for their review. All participants received the 32 behaviors used in Experiment 1, presented in random order. Participants read the behaviors at their own pace, pressing the space bar to proceed to the next behavior. Immediately after reviewing behavioral feedback by the “sender,” participants engaged in the distractor task (i.e., listing the United States) for 2.5 minutes, followed by the surprise recall test. A funnel-debriefing ended the experimental session. No participants guessed the purpose of the experiment or doubted the credibility of the MOPI.

**Results and Discussion**

As in Experiment 1, recalled behaviors were coded according to a “gist” criterion. Two independent coders who were unaware of hypotheses agreed with 95.2% of
items (Cohen’s kappa = .94), and resolved the few discrepancies with discussion. Intrusions constituted 9.2% of all recalled items, were evenly distributed across the experimental conditions, and were removed prior to data analyses. As in Experiment 1, we adopted the criterion of no more than three intrusions per participants. Six participants recalled more than three intrusions and, thus, their data were discarded.

We conducted a 2 (Relationship Type)×2 (Behavior Type)×2 (Behavior Valence) repeated-measures ANOVA, with the last two variables being within subjects. (Prior inclusion of sex in the model produced non-significant results.) Table 2 contains the proportions of each class of behaviors recalled for the strangers and friends conditions.

Our hypothesis, namely that the mnemonic neglect effect would be present in the case of feedback from strangers but would be absent in the case of feedback from close relationships, is tested by the three-way interaction among Relationship Type, Behavior Type, and Behavior Valence. This interaction was significant, \( F(1, 144) = 6.47, p < .01 \). We proceeded to break down the interaction separately for peripheral and central behaviors.

In the case of peripheral behaviors, the Relationship Type×Valence interaction was not significant, \( F(1, 144) = 0.01, p < .95 \). However, in the case of central behaviors, the Relationship Type×Valence interaction was significant, \( F(1, 144) = 11.38, p < .001 \). We proceeded to break down further the latter interaction separately for stranger-feedback and close-relationship-feedback.

In the stranger-feedback condition, the familiar mnemonic neglect was obtained: recall of self-threatening (negative central) behaviors was significantly lower than recall of self-affirming (positive central) behaviors, \( t(76) = 3.33, p < .001 \). However, in the close-relationship-feedback condition, recall of self-threatening and self-affirming behaviors did not differ significantly, \( t(68) = 1.43, p < .16 \). Analyzed another way, participants recalled significantly more self-threatening behaviors when the source of the feedback was a close relationship than a stranger, \( t(144) = 2.20, p < .03 \). In contrast, participants recalled more self-affirming behaviors when the source of the feedback was a stranger than a close relationship, \( t(144) = 2.22, p < .03 \). In all, the results supported our hypothesis. The mnemonic neglect effect was eliminated when feedback was provided by close relationships, and, indeed, there is some indication that the effect was reversed.

Consistent with Experiment 1 and our past research, the behavior type main effect was significant. Participants recalled more central (\( M = 0.33 \)) than peripheral (\( M = 0.14 \)) behaviors, \( F(1, 144) = 256.92, p < .001 \). Also consistent with past

| TABLE 2 | Experiment 2: Mean Recall Accuracy (with Standard Deviations) as a Function of Relationship Type, Behavior Type, and Behavior Valence |
|---|---|---|---|
| | Central behaviors | Peripheral behaviors |
| | Positive | Negative | Positive | Negative |
| Close friend | 0.31 (0.17) | 0.35 (0.16) | 0.17 (0.13) | 0.14 (0.15) |
| Stranger | 0.37 (0.17) | 0.29 (0.17) | 0.14 (0.15) | 0.11 (0.11) |

*Note: Values reflect the mean proportion of correctly recalled behaviors from each set of eight.*
research, the behavior valence main effect was significant: Participants recalled more positive ($M = 0.25$) than negative ($M = 0.22$) behaviors, $F(1, 144) = 6.24, p < .01$. The Relationship Type $\times$ Behavior Valence interaction was significant, $F(1, 144) = 7.97, p < .005$. Participants recalled fewer negative ($M = 0.20$) than positive ($M = 0.26$) behaviors when the source of the feedback was a stranger, $t(77) = 3.51, p < .001$, but they recalled an approximately equal number of negative ($M = 0.25$) and positive ($M = 0.24$) behaviors, when the source of feedback was a close relationship, $t(68) = 0.26, p < .80$.

Most of the individuals brought a friend ($N = 121$), but some brought romantic partners ($N = 24$, one not reported). When added to the above model, none of the effects involving relationship type (friend vs. romantic partner) were significant. The results generalize across relationship type.

**General Discussion**

There are two sides to self-protection. On the one hand, self-protection is beneficial. It preserves the integrity of the self-system, and it safeguards against negative and debilitating emotions. On the other hand, self-protection can be costly. It may not allow for development or change of the self-system, and it may obstruct future pragmatic (e.g., achievement or relational) gains.

**Self-protective Memory: The Mnemonic Neglect Model**

We focused, in particular, on self-protective memory. From the “beneficial” perspective of self-protection, one would expect for individuals to recall poorly self-threatening information (e.g., feedback implying that they are untrustworthy and unkind), but to recall well self-affirming information (e.g., feedback implying that they are trustworthy and kind). However, from the “costly” perspective of self-protection, one would expect for individuals to recall self-threatening information as well as (or even better than) self-affirming information, provided that the former has pragmatic implications such as self-improvement or relational-belongingness potential.

We couched these issues in the context of the mnemonic neglect model. The model predicts a recall disparity between self-threatening and self-affirming feedback (mnemonic neglect effect). Self-threatening feedback will receive shallow processing, resulting in reduced elaboration, fewer retrieval routes, and poorer recall. Self-affirming feedback will receive deep processing, resulting in increased elaboration, more retrieval routes, and better recall. The model has received strong empirical backing in several investigations (Green et al., 2005, 2008; Green & Sedikides, 2004; Pinter et al., 2008; Sedikides & Green, 2000, 2004).

**Summary of Hypotheses and Empirical Findings**

The present research, however, qualifies the mnemonic neglect model. We hypothesized that the mnemonic neglect effect would be eliminated in cases in which the potential for the pragmatic costs of self-protection is high. One such case is when the feedback, as threatening as it may be, is perceived as relevant to improvement. In Experiment 1, we primed self-improvement strivings, with the control (no prime) condition being identical to the default condition of the mnemonic neglect experiments. In the control condition, we replicated the mnemonic neglect effect: participants recalled poorly
self-threatening feedback, implying the operation of the self-protection motive. However, in the primed self-improvement strivings condition, the mnemonic neglect effect was abolished: participants recalled equally self-threatening and self-affirming feedback.

We also hypothesized that the mnemonic neglect effect would be eliminated in another case where the pragmatic costs of self-protection would potentially be high. This involved the case where the source of feedback was a close relationship (e.g., friend, romantic partner) rather than a stranger. Coming from the close other, the feedback will be perceived as relevant to the maintenance of the relationship. Here, the motive to ensure relational belongingness would counter the motive to protect the self. Relational belongingness would confer long-term advantages, as opposed to the short-term advantages of warding off immediate threat (Kumashiro & Sedikides, 2005; McCall et al., 2000; Rusbult et al., 1991; Sedikides et al., 1998). The motive to belong, then, would lead to processing the self-threatening feedback deeply and recalling it as well as self-affirming feedback. Thus, in Experiment 2, participants received feedback from either a close relationship or a stranger. The mnemonic neglect effect emerged when the source of feedback was a stranger. However, the effect was eliminated (if not reversed) when the source of feedback was a close relationship.

**Implications**

One implication of our findings is a call for more empirical attention on the topic of how the self-improvement motive guides perception and behavior. Although research on self-protection (and self-enhancement) has a long and cherished history (Baumeister, 1998; Sedikides, Gaertner, & Vevea, 2005; Sedikides & Gregg, 2008; Taylor & Brown, 1988), research on self-improvement is only now coming of age (Kurman, 2006; Trope et al., 2003). Inducing directly a self-improvement orientation (as the current research did; see also Brown & Zagefka, 2006) or assessing self-improvement strivings indirectly (i.e., through the manipulation or measurement of trait modifiability; Dauenheimer et al., 2002; Green et al., 2005; Trope et al., 2003, Experiment 2) would likely lead to several breakthroughs and would likely qualify theoretical models of self-protection and self-enhancement (Sedikides & Strube, 1997; Taylor et al., 1995). For example, do self-improvement strivings induce equal or even higher levels of state self-esteem than self-enhancement strivings? Is self-improving feedback perceived as satisfying (if not more so) than self-enhancing feedback?

Another implication of our findings concerns the exact mechanisms through which feedback from close others eliminates (or even reverses) mnemonic neglect. We argued that participants weighed the short-run self-threat potential against the long-run utility of using the feedback to benefit the receiver or the relationship itself. In particular, feedback from a close other may have higher utility, because one may feel comfortable, in the safety of the relationship, to use it constructively. Alternatively, the feedback may have higher utility, because knowing how a close other views one may help the relationship function more smoothly. A third possibility is that negative feedback from a close other is recalled better so that one can prepare counterarguments to present at a later time! These explanations are necessarily speculative, given that we did not assess perceived utility of the information. Future research, however, would do well to test directly these explanations and to zero in on the mediator of the obtained findings (i.e., elimination of mnemonic neglect).
Potential candidates are relationship variables (e.g., commitment, trust) and partner variables (e.g., favorable impression).

Our findings also have implications for naturalistic memory. Diary studies of memory indicate that unpleasant events are remembered worse than pleasant events, especially when the events are relevant to the self rather than another person (Skowronski, Betz, Thompson, & Shannon, 1991; Thompson, Skowronski, Larsen, & Betz, 1996; Walker, Skowronski, & Thompson, 2003). This is a real-world analogue of mnemonic neglect. It would be interesting, then, to explore whether this naturalistic “mnemonic neglect” effect is reduced or eliminated when the unpleasant and self-relevant events have improvement potential and when the events involve feedback from a close relationship. Preliminary results are generally compatible with this notion: The negative emotions from recalling autobiographical events that are psychologically open or unresolved (which may loosely correspond to feedback from a close other) fade more slowly than negative emotions associated with psychologically resolved events (Ritchie et al., 2006).

Finally, another task for future research would be to look into individual differences as a class of moderators of mnemonic neglect. One promising candidate is narcissism (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004b). For example, several tradeoffs of narcissists’ interpersonal self-regulation have been documented (Campbell & Green, 2007). Narcissists, whose inflated self-views require greater vigilance and defensive protection, may be more attuned to short-term benefits or overweigh the costs of negative feedback, causing them to derogate the source of this feedback (Bushman & Baumeister, 1998), even if the source is relationally close (Campbell, Reeder, Sedikides, & Elliot, 2000).

Coda

People selectively forget self-threatening information. Self-protective memory is beneficial, as it contributes toward the integrity and stability of the self-system. However, self-protective memory can be costly, as it may obstruct change that will have long-term advantages for the individual. In two experiments, we demonstrated the strategic flexibility of memorial self-protection. When the self-threatening feedback emanates from a personality inventory or a stranger, people recall it poorly. However, when the self-threatening feedback is processed under a (primed) self-improvement orientation or when it emanates from a close relationship, people recall it as well as self-affirming feedback. Clearly, memory is attuned to future pragmatic (e.g., improvement or relational) gains.

References


