

Mnemic neglect and self-threat: Trait modifiability moderates self-protection

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Abstract

The mnemic neglect effect is the phenomenon of disproportionately poor recall for threatening (rather than non-threatening) feedback that refers to the self (rather than another person). Does trait modifiability moderate mnemic neglect? We hypothesized that mnemic neglect will be present for feedback on unmodifiable traits, but absent for feedback on modifiable traits. In the latter case, the feedback would be lower in threat potential because its consequences are fleeting and steps to prevent its reoccurrence are possible. Participants received mixed (threatening and non-threatening) feedback that referred either to the self or another person. The feedback pertained to (central and peripheral) self-conceptions that were either unmodifiable or modifiable. In support of the hypothesis, mnemic neglect emerged for feedback on unmodifiable, but not modifiable, traits. The findings illustrate the selective and strategic nature of self-protection. Copyright © 2004 John Wiley & Sons, Ltd.

‘God grant me the courage to change the things I can change, the serenity to accept the things I cannot change, and the wisdom to know the difference.’—Serenity Prayer

People receive feedback from friends and colleagues on a daily basis. Although close others might typically bestow glowing feedback, it is inevitable that people also receive critical feedback—information that contradicts their generally positive self-views. What sort of information do individuals want to know about themselves? How do they process negative information about themselves? How do they guard and preserve a positive self-view in the face of negative feedback? These are the questions that guided the present research.

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THE MNEMIC NEGLECT MODEL

We recently proposed the mnemonic neglect model (Green & Sedikides, 2004; Sedikides & Green, 2000,¹ 2004; Sedikides, Green, & Pinter, 2004) purporting to account for the ways in which individuals protect themselves from threatening information and, more specifically, for the cognitive processes they harness in order to achieve this aim. The model assumes that the self-concept is a generally positive, elaborate, and motivationally-loaded construct (Baumeister, 1998; Gaertner, Sedikides, Vevea, & Iuzzini, 2002; Sedikides, Gaertner, & Toguchi, 2003). This rich self-concept serves as a lens through which new information about the self is evaluated. That is, new feedback is spontaneously connected to prior self-knowledge.

The mnemonic neglect model proposes a two-stage processing sequence for new self-relevant feedback. In Stage 1, new information is compared to stored semantic self-knowledge and the likelihood of performing the behaviour is evaluated. If the new information is threatening to the self, the likelihood of performing the behaviour is viewed as low, and processing is restricted largely to Stage 1. However, if the new information is relatively non-threatening to the self, processing continues to Stage 2 and is more elaborate. In Stage 2, the information is linked to related and specific self-knowledge (i.e. episodic information).

Positive feedback generally is lower in threat potential, whereas negative feedback generally is higher in threat potential. Therefore, positive feedback will be processed more extensively (i.e. to Stage 2) relative to negative feedback. However, the threat potential of such information depends on whether the information pertains to central versus peripheral self-conceptions. Central self-conceptions are very positive and descriptive, held with high certainty, and considered important. Peripheral self-conceptions, in contrast, are only moderately positive and self-descriptive, held with relatively less certainty, and consigned relatively less importance (Sedikides, 1993, 1995). Negative feedback on central self-conceptions is highly inconsistent with self-knowledge and highly threatening to the self. Consequently, processing of such information will be minimal relative to the processing of positive feedback on central self-conceptions. Negative feedback on peripheral self-conceptions is moderately inconsistent with self-knowledge and only mildly threatening to the self. Consequently, processing will be relatively shallow. The recall disparity between positive and negative peripheral feedback will be far smaller (if at all) than the recall disparity between positive and negative central feedback.

We appropriated methodology from the person memory literature by adapting the paradigm used to process information about another person and turning it onto the self. This paradigm allows for a direct comparison between the processing and recall of self-referent and other-referent information. Participants are presented with behavioural feedback about one person. Half are instructed to imagine that the information describes them (i.e. that someone who knows them well would describe them as likely to perform the behaviours). The remaining half of participants is told that the information describes Chris (i.e. that someone who knows Chris well would describe Chris as likely to perform the behaviours). Furthermore, half of the 32 behaviours exemplify central trait dimensions (i.e. untrustworthy-trustworthy, unkind-kind), whereas the remaining behaviours exemplify peripheral trait dimensions (i.e. complaining-uncomplaining, immodest-modest). In addition, half of the behaviours are negative, whereas half are positive. Following a distractor task, participants are asked to recall as many behaviours as possible.

The findings lent support to the model (Sedikides & Green, 2000, Experiment 2). Recall for self-referent information was poor compared to recall for Chris-referent information, but only for central

¹The mnemonic neglect model was formerly termed the inconsistency-negativity neglect model by Sedikides and Green (2000).

negative behaviours. Self-referent and Chris-referent recall for positive information (both central and peripheral) and for negative peripheral information did not differ significantly. We labelled this effect *mnemic neglect* (Sedikides & Gregg, 2003).

The aforementioned experiment found mnemonic neglect in a minimally threatening setting. That is, the behavioural information was hypothetical, as participants imagined that the behaviours were self-referent. Notably, the mnemonic neglect effect was replicated in a more psychologically compelling setting (Sedikides & Green, 2000, Experiment 1). The behaviours were presented as feedback from a highly reliable and valid personality test. Participants spent several minutes completing a computer-administered personality test, waited for the results to be tabulated, and heard that the feedback would be furnished in the form of behaviours that they were likely to perform. Then, participants read the same 32 behaviours that were used in the previous experiment. (Participants in the Chris condition were told that the behaviours described another person who recently had completed the personality test.) The mnemonic neglect pattern closely mimicked the results from the previous experiment: Recall for central negative self-referent information was significantly lower than recall for either central negative Chris-referent information or central positive self-referent information. Another experiment (Sedikides & Green, 2000, Experiment 3) directly tested the proposition of the mnemonic neglect model that central negative self-referent information is recalled poorly because it is processed in a shallow fashion. Behaviours were presented sequentially on a computer screen, allowing the manipulation of reading time. Half of participants had ample time to read and process the behaviours (i.e. 8 s per behaviour), whereas the remaining half of participants had only limited time to read and process the behaviours (i.e. 2 s per behaviour). We hypothesized that the mnemonic neglect effect would be replicated under ample time conditions but eliminated under limited time conditions. The hypothesis was confirmed. Put another way, comparing limited time to ample time conditions, recall under ample time conditions increased for all classes of behaviours except for central negative self-referent information.

An additional experiment (Sedikides & Green, 2004, Experiment 2) unravelled the variables of feedback valence and feedback inconsistency. Is recall for central negative self-referent feedback a result of its negativity or its inconsistency with the (positive) self-concept? Pilot testing identified participants who described themselves as relatively untrustworthy or unkind as well as participants who described themselves as highly trustworthy or kind. In a separate session 1–2 weeks later, participants read and then recalled the untrustworthy-trustworthy and unkind-kind behaviours. Results supported the notion that valence, not consistency, was responsible for mnemonic neglect: Central negative self-referent (i.e. untrustworthy and unkind) behaviours were recalled poorly both by participants with positive as well as negative self-conceptions.

The behaviours used in the previously described experiments were all high in diagnosticity. In another experiment, we investigated the role of information diagnosticity, or the degree to which the behavioural feedback was indicative of the underlying trait dimension, in the mnemonic neglect effect (Green & Sedikides, 2004). We hypothesized that low diagnosticity behaviours would be relatively non-threatening, because they are ambiguous on the underlying trait. For example, the behaviour ‘taking a pen from the bank after signing a check’ is a negative behaviour exemplifying a central trait (i.e. untrustworthy), but its threat potential is low. We pretested new behaviours regarding diagnosticity and valence for the four trait dimensions in order to identify low diagnosticity behaviours. Then, we conducted an experiment in which participants read and recalled either high or low diagnosticity behaviours. The results were consistent with the hypothesis: The mnemonic neglect effect was replicated for high diagnosticity behaviours, but was not found for low diagnosticity behaviours. Clearly, self-protection is strategic and selective, as it is sensitive to several boundary conditions, such as feedback valence, feedback centrality, feedback referent, and feedback diagnosticity.

THE PRESENT RESEARCH

In the present research, we acknowledge that the vast array of self-conceptions can be classified along several dimensions, one of which is unmodifiability-modifiability. That is, some self-conceptions are perceived as relatively unmodifiable (i.e. rigid, unchangeable, or inflexible), whereas others are perceived as relatively modifiable (i.e. malleable, changeable, or flexible). Social feedback can pertain to either unmodifiable or modifiable self-conceptions. Therefore, does trait modifiability moderate the mnemonic neglect effect? This is the specific question that we addressed in the current investigation.

In particular, we hypothesized that participants will self-protect when faced with feedback on unmodifiable traits, but not when faced with feedback on modifiable traits. Stated somewhat differently, the mnemonic neglect effect will emerge when the feedback pertains to unmodifiable traits, but it will be absent when the feedback pertains to modifiable traits. Our rationale for this hypothesis is based on three related lines of inquiry.

Dunning (1995) gave participants either success or failure (false) feedback regarding the trait of 'integrative orientation' and then measured further interest in feedback about their integrative orientation ability. Importantly, he also manipulated the modifiability of that trait. Participants who learned that integrative orientation was unmodifiable showed a reduced preference for feedback following a failure than success experience—a self-protective pattern. In contrast, participants who learned that integrative orientation was modifiable expressed an equal preference for feedback regardless of a prior failure or success experience—a non-self-protective pattern. In a similar vein, Trope, Gervey, and Bolger (2003) found that perceived trait modifiability increased participants' desire to receive feedback that diagnosed their weaknesses. Finally, Dauenheimer, Stahlberg, Spreeman, and Sedikides (2002) reported that affective responses to bogus feedback on the trait assertiveness depended on participants' perceptions of that trait's modifiability. Those who regarded assertiveness as an unmodifiable trait felt worse after negative feedback compared to those who regarded assertiveness as a modifiable trait.

Why would feedback on unmodifiable traits instigate self-protective mechanisms (leading to mnemonic neglect), whereas feedback on modifiable traits would not? If a trait cannot be changed, then negative feedback is both threatening to the self and carries limited usefulness. Under these circumstances, mnemonic neglect seems adaptive, as it shelters and protects the self-system. However, if the trait can be changed, then the threat potential of the negative feedback is low. First, negative feedback does not sting so sharply when it refers to rather temporary characteristics, because it can be explained away in terms of situational factors. In addition, feedback on modifiable traits may be functional because the information can facilitate improvement strivings (Sedikides, 1999; Sedikides & Strube, 1997). For example, after reading highly positive student evaluation comments, teachers often remember the one critical remark in an ocean of praise. It is possible that this occurs because teaching ability is seen as a modifiable characteristic, and, consequently, as relatively non-threatening. It is also possible that the functionality and self-improvement potential of such information outweighs its threat (Trope et al., 2003).

In the current investigation, we manipulated directly the modifiability of the central and peripheral traits that we used in our past research (Green & Sedikides, 2004; Sedikides & Green, 2000, 2004). In particular, we used the same negative and positive highly diagnostic behaviours that exemplify central and peripheral trait dimensions. However, we manipulated the modifiability of such traits via carefully orchestrated instructions prior to participants reading the behaviours. Specifically, half of the participants were instructed that extensive research has established the inflexibility and unchangeability of these traits, whereas the other half were told that extensive research has established the flexibility and changeability of the traits. We hypothesized that participants would self-protect (i.e.

manifest mnemonic neglect) when reading behaviours that exemplified unmodifiable traits, but not when reading behaviours that exemplified modifiable traits.

METHOD

Participants

Participants were 96 undergraduate students at the University of North Carolina at Chapel Hill, volunteering for an introductory psychology course option. They were tested in groups of two to six persons, separated from each other by carrels.

Experimental Design

The design was a 2 (referent: self, Chris) \times 2 (trait modifiability: modifiable traits, unmodifiable traits) \times 2 (behaviour type order: central behaviours presented first, peripheral behaviours presented first) \times 2 (behaviour valence order: positive behaviour first, negative behaviour first) \times 2 (behaviour type: central behaviours, peripheral behaviours) \times 2 (behaviour valence: positive behaviours, negative behaviours) factorial, in which the first four factors were between-subjects and the last two within-subjects.

Procedure

Participants read 32 behaviours exemplifying four trait dimensions. The eight behaviours for each trait dimension were presented on separate pages in a booklet. The booklet instructions varied according to whether participants read about themselves or about an unknown other named Chris (the referent factor). Participants in the self conditions were instructed to 'consider the following description of YOURSELF. Think of the description as being based on actual knowledge of people who know YOU well. Think of the description as real.' Participants in the Chris conditions were instructed to 'consider a description of a person named CHRIS. Think of the description as being based on actual knowledge of people who know CHRIS well. Think of the description as real.'

The critical addition in the present research was the manipulation of trait modifiability. Orthogonal to the referent factor, the directions to participants described the four trait dimensions as either modifiable or unmodifiable. Participants in the *modifiability condition* read:

The behaviours you will read reflect four trait dimensions: trustworthy-untrustworthy, kind-unkind, modest-immodest, and complaining-uncomplaining. These four traits have been called the 'Big Four.' The Big Four have been empirically proved to be remarkably flexible, malleable, and variable across the lifespan (e.g. Gerard & Hypia, 1997; Houlier, 1998; Owen & Heskey, 1996, 1999). In other words, people are very changeable on these traits from early childhood to early adulthood to middle and old age. If someone is untrustworthy as a child, she or he may be trustworthy as a teenager or adult. Likewise, if someone is unkind, immodest, and complaining as a child, she or he may be kind, modest or uncomplaining as a teenager, college student, middle-aged adult, or elder. The same holds for the traits trustworthy, kind, modest, and complaining. All these traits are monuments of instability and change, as they fluctuate constantly.

Participants in the *unmodifiability condition* read a similar paragraph with critical changes:

...The Big Four have been empirically proved to be remarkably constant, fixed, and unchangeable across the lifespan (e.g. Gerard & Hypia, 1997; Houlier, 1998; Owen & Heskey, 1996, 1999). In other words, people are very stable on these traits from early childhood to early adulthood to middle and old age. If someone is untrustworthy as a child, she or he will be untrustworthy as a teenager and adult. Likewise, if someone is unkind, immodest, and complaining as a child, this is what she or he will be like as a teenager, college student, middle-aged adult, and elder. The same holds for the traits trustworthy, kind, modest, and complaining. All these traits are monuments of stability.

Untrustworthy-trustworthy and unkind-kind constituted the central trait dimensions, whereas complaining-uncomplaining and immodest-modest constituted the peripheral trait dimensions. This was the within-subjects factor behaviour type. Previous research validated these trait dimensions as nomothetically central or peripheral (Sedikides, 1993, 1995), and previous pilot studies established the 32 behaviours as exemplifying the relevant central or peripheral traits (Sedikides & Green, 2000). Four of the eight behaviours for each trait dimension were negative and four were positive. This constituted the behaviour valence factor.

Consistent with previous research (e.g. Sedikides & Green, 2000), we used two between-subjects order variables. We randomized the valence order of the behaviours for each trait dimension under the stipulation that no more than two same-valenced behaviours appear sequentially. One randomization pattern (i.e. negative, positive, negative, positive, negative, negative, positive, positive) was presented to half of participants, whereas the alternative mirror-image randomization pattern (i.e. positive, negative, positive, negative, positive, positive, negative, negative) was presented to the remaining half. The inclusion of this factor (behaviour valence order) was intended to control for recency and primacy effects. Another control factor (behaviour type order) involved presentation order of central versus peripheral behaviours. Half of the participants read the central behaviours first, whereas the other half read the peripheral behaviours first.

Participants read the instructions and behaviour booklet at their own pace, then listed as many of the United States as they could in a 2.5 min distractor task. Subsequently, participants engaged in a surprise recall task by writing down the behaviours in a booklet of blank slips of paper, one behaviour per sheet. They were instructed to write down the behaviours in any order they came to mind, to not return to previous pages, and to be as accurate as possible without troubling themselves about exact wording. At the end of each experimental session, participants were debriefed, thanked, and excused.

RESULTS

Intrusions

Two independent judges coded the free recall data according to a general meaning or 'gist' criterion, as in our previous research (Green & Sedikides, 2004; Sedikides & Green, 2000, 2004). The coders agreed on over 96% of the recalled items and resolved discrepancies through discussion. Intrusions (e.g. recalling a behaviour that was not presented, writing the same behaviour twice, or changing the valence of a recalled behaviour) comprised 8% of the recalled items and were removed prior to data analysis. This percentage is comparable to low intrusion rates reported in our past relevant research. Also in line with this past research, we enforced an inclusion rule of no more than three intrusions per

Table 1. Mean proportion of behaviours recalled as a function of referent, behaviour type, behaviour valence, and trait modifiability

| | Central behaviours | | Peripheral behaviours | |
|----------------------------|--------------------|----------|-----------------------|----------|
| | Negative | Positive | Negative | Positive |
| Unmodifiable traits | | | | |
| Self-referent | 0.18 | 0.47 | 0.12 | 0.21 |
| Chris-referent | 0.32 | 0.44 | 0.16 | 0.22 |
| Modifiable traits | | | | |
| Self-referent | 0.26 | 0.40 | 0.14 | 0.20 |
| Chris-referent | 0.32 | 0.49 | 0.17 | 0.17 |

participant; this rule led to the exclusion of data from three participants. Thus, the data from 93 participants were entered in the analyses.

We subjected these data to a 2 (referent) \times 2 (trait modifiability) \times 2 (behaviour type order) \times 2 (behaviour valence order) \times 2 (behaviour type) \times 2 (behaviour valence) analysis of variance (ANOVA). Table 1 contains the proportions of behaviours recalled.

Moderation of the Mnemic Neglect Model

We hypothesized that the mnemonic neglect effect would be present in the case of unmodifiable traits, but absent in the case of modifiable traits. Our hypotheses would be borne out through a significant interaction involving referent, behaviour type, behaviour valence, and trait modifiability. This quadruple interaction was indeed significant, $F(1, 77) = 4.53, p < 0.04$.

We proceeded with breaking down the interaction separately for peripheral and central behaviours. In the case of *peripheral behaviours*, the triple interaction among referent, behaviour valence, and trait modifiability was not significant, $F(1, 77) = 0.20, p < 0.66$. Importantly, however, in the case of *central behaviours*, the triple interaction was significant, $F(1, 77) = 5.27, p < 0.03$.

We proceeded with further decomposing this latter interaction. Specifically, we examined the Referent \times Behaviour Valence interaction separately for each modifiability condition. With regard to the *unmodifiable* behaviours, the Referent \times Behaviour Valence interaction was significant, $F(1, 42) = 6.65, p < 0.02$ (upper left quadrant of Table 1). For the recall of central negative behaviours, participants in the self ($M = 0.18$) condition recalled significantly fewer behaviours than participants in the Chris ($M = 0.32$) condition, $t(48) = -3.32, p < 0.002$. That is, the very same central negative (i.e. threatening) behaviours were remembered at nearly half the rate if they referred to the self rather than Chris. However, for the recall of central positive behaviours, participants in the self ($M = 0.47$) and Chris ($M = 0.44$) conditions did not differ significantly, $t(48) = 1.03, p < 0.31$. The above patterns replicate the mnemonic neglect effect.

In contrast, the Referent \times Behaviour Valence interaction was not significant with regard to the *modifiable* behaviours, $F(1, 35) = 0.28, p < 0.60$ (lower left quadrant of Table 1). As expected, the analogous *t*-tests did not reach significance. For the recall of central negative behaviours, participants in the self ($M = 0.26$) and Chris ($M = 0.32$) conditions did not differ significantly, $t(41) = -1.38, p < 0.18$. For the recall of central positive behaviours, participants in the Chris ($M = 0.49$) condition recalled marginally more than participants in the self ($M = 0.40$) condition, $t(41) = -1.87, p < 0.07$. In summary, trait modifiability moderates the phenomenon of mnemonic neglect.

Supplementary Analyses

Comparing recall of central behaviours across the unmodifiable and modifiable conditions also illustrates the powerful effect of trait modifiability factor on recall of self-referent information. Participants who processed the behaviours self-referentially recalled significantly fewer central negative behaviours when they were in the unmodifiable ($M = 0.18$) than the modifiable ($M = 0.26$) condition, $t(42) = 1.99$, $p < 0.05$. In addition, participants who processed the behaviours self-referentially recalled marginally more central positive behaviours when they were in the unmodifiable ($M = 0.47$) than the modifiable ($M = 0.40$) condition, $t(42) = -1.75$, $p < 0.09$. In short, participants who believed that the behaviours exemplified unmodifiable rather than modifiable traits recalled fewer central negative behaviours and tended to recall more central positive behaviours, a clear self-protective pattern. In contrast, for participants in the Chris condition, the modifiability factor did not significantly influence the recall of central negative behaviours, $t(47) = -0.29$, $p < 0.77$, or central positive behaviours, $t(47) = 1.23$, $p < 0.23$.

We wish to emphasize that participants processed the same behaviours in the unmodifiable and modifiable conditions. The only difference was the prior description of the traits that the behaviours exemplified. If the traits are perceived as modifiable, the mnemonic neglect effect is eliminated. It is important to highlight that this is the first time in over ten experiments that the mnemonic neglect effect has not been obtained for high diagnosticity behaviours.

A few other effects from the principal ANOVA reached significance. These effects replicate previous findings (Green & Sedikides, 2004; Sedikides & Green, 2000, 2004). More central ($M = 0.36$) than peripheral ($M = 0.17$) behaviours were recalled, Behaviour Type main effect $F(1, 77) = 122.99$, $p < 0.001$. More positive ($M = 0.32$) than negative ($M = 0.21$) behaviours were recalled, Behaviour Valence main effect $F(1, 77) = 61.15$, $p < 0.001$. The disparity between the recall of positive self ($M = 0.32$) and negative self ($M = 0.17$) behaviours was more pronounced [$t(43) = 6.78$, $p < 0.001$] than the disparity between the recall of positive Chris ($M = 0.33$) and negative Chris ($M = 0.24$) behaviours [$t(48) = 4.30$, $p < 0.001$], Referent \times Valence interaction $F(1, 77) = 4.07$, $p < 0.05$. Finally, the disparity between recall of central positive ($M = 0.45$) and central negative ($M = 0.27$) behaviours was greater [$t(121) = 8.14$, $p < 0.001$] than the disparity between recall of peripheral positive ($M = 0.20$) and peripheral negative ($M = 0.15$) behaviours [$t(121) = 3.24$, $p < 0.002$], Behaviour Type \times Behaviour Valence interaction $F(1, 77) = 19.90$, $p < 0.001$.

DISCUSSION

The mnemonic neglect effect, which we have investigated in previous experiments (Green & Sedikides, 2004; Sedikides & Green, 2000, 2004), refers to relatively poor recall of negative feedback pertaining to central elements of the self-concept. However, anecdotal evidence suggests that people seem to remember negative feedback under some circumstances. As we have mentioned, one disapproving statement about an instructor's teaching might remain in her or his thoughts more than the many positive comments received.

SUMMARY OF FINDINGS

In the present experiment, we proposed and tested the notion that negative feedback about modifiable traits might not carry the same self-threat as does feedback about unmodifiable traits. Half of

participants were told that the trait dimensions were relatively unmodifiable throughout the lifespan, whereas the remaining participants were told that these four traits were relatively modifiable throughout the lifespan. Then, all participants read and recalled negative and positive behaviours exemplifying each trait. Note that the trait-unmodifiability condition was essentially a conceptual replication of our past research (Green & Sedikides, 2004; Sedikides & Green, 2000, 2004). In that research, we highlighted the ostensible durability and long-term consequences of these traits for one's personal and professional life. The trait-modifiability condition, in contrast, disabused participants in the current experiment of the notion that these traits were stable and inflexible.

The results were revealing. Mnemic neglect was apparent in the case of unmodifiable traits: Participants recalled significantly fewer central negative behaviours about the self than the very same behaviours about Chris. However, mnemonic neglect was absent in the case of modifiable traits: Recall of central negative self-relevant and Chris-relevant behaviours did not differ significantly. Trait modifiability moderates the phenomenon of mnemonic neglect.

It is possible that people are more likely to remember negative self-referent information as long as its functionality outweighs its threat. If people can change the trait questioned by feedback, then the threat potential of feedback is lower, given its rather fleeting implications. In addition, the negative feedback may be perceived as useful, not solely deflating. The characteristic of teaching ability presumably is not immutable: A teacher can make use of constructive criticism to improve his or her pedagogy. Therefore, feedback may facilitate self-improvement strivings.

IMPLICATIONS

Future investigations would do well to examine possible mechanisms underlying the results of the present experiment. Is modifiable (compared to unmodifiable) trait information seen as having reduced threat value? Participants could rate each behaviour's threat value after previously being exposed to the modifiable or unmodifiable trait information. Also, is modifiable (compared to unmodifiable) information seen as more useful for future improvement? A comparison of the trait recollections of individuals high versus low in self-improvement motivation might begin to explore this possibility. Finally, is trait centrality affected by trait modifiability? The question could be addressed by participants rating both modifiable and unmodifiable traits for centrality (or relevance) to the self.

In a related vein, the benefits of negative feedback might outweigh its threat potential under other circumstances. Is the source of feedback a critical determinant of its usefulness? For example, negative feedback from a romantic partner (however scarce) might be deemed more helpful than feedback from a stranger because of the many anticipated future interactions, assuming a longstanding and committed relationship. Alternatively, if the feedback's utility is in doubt, the feedback may be redefined or misinterpreted by downplaying its diagnosticity (Greve & Wentura, 2003; Wentura & Greve, 2004). Furthermore, if the feedback is consistently negative and its harsh reality unavoidable (Stapel & Schwinghammer, 2004), the centrality of the trait in question may be adjusted downwards.

Similarly, positive affect stemming from desirable feedback might serve to bolster or affirm the self such that subsequent negative feedback about central traits is recalled quite well (Aronson, Cohen, & Nail, 1999; Trope & Neter, 1994; Trope & Pomerantz, 1998). That is, the positive affect from the prior desirable feedback might serve as a reservoir from which to draw during the subsequent exposure to threatening feedback about central self-conceptions. What is the cognitive locus of the mnemonic neglect effect? Is mnemonic neglect a result of encoding failure or retrieval failure? Comparing recall patterns with patterns of attention or recognition will address this question. Finally, what sort of persons are likely to manifest mnemonic neglect even in the case of modifiable traits? Candidates for such relatively

high susceptibility to self-threat include state rather than action oriented individuals (Koole, 2004), repressors rather than sensitizers (Ashley & Holtgraves, 2003), and prevention rather than promotion focused (Förster, Higgins, & Werth, 2004).

CONCLUDING REMARKS

The present research illustrates the calculated and discriminating nature of self-protection. Individuals do not protect the self in an arbitrary, across-the-board fashion. To be specific, individuals do not self-protect when the threat is relatively ambiguous (i.e. low diagnostic behaviours; Green & Sedikides, 2004), or when the threat focuses on peripheral self-conceptions. Even when their central self-conceptions are under unambiguous threat, individuals will not engage in self-protection if the threat refers to modifiable attributes. In contrast, individuals self-protect when their unmodifiable central self-conceptions are under threat.

This article began by quoting a serenity prayer that exhorts courage in dealing with negative attributes that are modifiable but serenity regarding negative attributes that are unmodifiable. The present research suggests that people might indeed be more willing to pay heed to feedback regarding modifiable attributes, or at least to remember it better. However, when it comes to negative feedback regarding unmodifiable attributes, it appears that neglect, rather than serenity, is people's method of choice.

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