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SELF-PROTECTIVE MEMORY: SEPARATION/INTEGRATION AS A MECHANISM FOR MNEMIC NEGLECT

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Negative self-referent information about central traits is recalled relatively poorly. Such *mnemic neglect*—a form of self-protective memory—entails the selective processing of threatening information. Here, we hypothesize a specific mechanism whereby it occurs: nonthreatening information gets *integrated* with stored self-knowledge, whereas threatening information gets *separated* from it. In two experiments participants read behavioral information in tandem with a processing instruction designed to either separate it from, or integrate it with, stored self-knowledge. As hypothesized, information recall (but not recognition) was reduced following separation as opposed to integration instructions. Moreover, although concurrent mnemic neglect effects emerged in Experiment 2, the recall of central negative information was less boosted by integration instructions than the recall of central positive information was impaired by separation instructions, consistent with greater striving to self-protect than to self-enhance. Overall, the results implicate the separation of self-threatening information from stored self-knowledge as a mechanism underlying mnemic neglect.

Although memory failure has obvious drawbacks, it has subtle advantages too. For example, memories for negative feelings fade faster than memories for positive feelings (Ritchie et al., 2006; Walker, Skowronski, & Thompson, 2003). This is a salutary case of amnesia facilitating analgesia. Furthermore, selective forgetting

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may also serve to protect the self from threatening information (Sedikides, Green, & Pinter, 2004). The objective here is to examine one mechanism whereby self-protective memory might operate.

THE MNEMIC NEGLECT MODEL

The *mnemic neglect model* (Sedikides & Green, 2006, 2009; Sedikides et al., 2004) starts from the premise that the self-concept is affectively charged and motivationally driven (Sedikides & Gregg, 2008; Sedikides & Spencer, 2007; Sedikides & Strube, 1997). The model posits that people strategically protect the self from threatening information. Such information is *negative* (i.e., entails criticism, not flattery), *self-referent* (i.e., is about oneself, not someone else), and concerns *central* traits (i.e., involves important aspects of self, not trivial ones). Self-protection is achieved via the *selective forgetting* of such information. By forgetting it, the positivity of self can be better maintained.

Empirical tests of the mnemic neglect model involve comparing how self-referent and other-referent information are remembered. Participants receive mixed information (i.e., both positive and negative, about both central and peripheral traits), directed either at themselves or at another person ("Chris"). This information consists of behaviors that they, or the other person, are supposedly liable to perform. On a surprise recall task that follows, a three-way interaction typically emerges showing that, when information is self-referent but not other-referent, negative information gets recalled more poorly than positive information, but only for central traits, not peripheral ones. This pattern signals that *mnemic neglect* has occurred (Sedikides & Green, 2009; Sedikides et al., 2004).

Earlier research (Sedikides & Green, 2000, Experiments 1-2) obtained this pattern using both hypothetical scenarios ("Imagine that individuals who know you well would describe you as performing the following behaviors") and realistic cover stories ("Based on the personality test you took, you are likely to perform the following behaviors"). Later research highlighted further conditions for the emergence of the pattern. In particular, mnemic neglect emerges only for negative behaviors exemplifying traits that participants regard as fixed rather than fluid (Green, Pinter, & Sedikides, 2005), and only for negative behaviors that are strongly rather than weakly diagnostic of traits (Green & Sedikides, 2004). Why so? Fixed negative traits are more threatening than fluid negative traits, as they leave no room for subsequent self-improvement (Sedikides & Hepper, 2009); and behaviors strongly diagnostic of negative traits are more threatening than those only weakly diagnostic, as they leave no room for interpretative ambiguity (Dunning, Meyerowitz, & Holzberg, 1989). Both sets of findings highlight the dynamically motivated nature of mnemic neglect.

But how does threatening information get processed? Two experiments have already addressed the question. The first (Sedikides & Green, 2000, Experiment 3) explored the consequences of shallow information processing (Craik, 2002; Klein & Kihlstrom, 1986). Some participants had *ample time* (eight seconds), others only *limited time* (two seconds), to consider the mixed behavioral information. Mnemic neglect emerged only under ample time, where recall for threatening information was selectively impaired as usual. In contrast, recall under limited time was impaired for all types of information, and was equivalent to recall for threatening information under ample time. These results are consistent with participants under-elaborating threatening information, regardless of the time at their disposal.

The second experiment tested whether memories for threatening information are actually permanently lost or merely unsuccessfully retrieved. Research shows that some apparently lost memories can be recalled with effort (Erdelyi, 1996) or recognized on sight (Wyer, Bodenhausen, & Srull, 1984). Accordingly, Green, Sedikides, and Gregg (2008) added a *recognition test* to the standard paradigm, presenting the original set of information behaviors alongside a set of matched lures. Mnemic neglect duly emerged for recall, but not for recognition. That is, although threatening information was recalled more poorly than nonthreatening information, it was nonetheless recognized equally well. This indicates that threatening memories, despite being less accessible, nonetheless remain available (see also Newman, Nibert, & Winer, 2009).

IDENTIFYING A MECHANISM FOR MNEMIC NEGLECT

What conclusions can be drawn from the Sedikides and Green (2000, Experiment 3) and Green, Sedikides, and Gregg (2008) experiments? The first provides grounds for believing that threatening information is processed less deeply than nonthreatening information, given that self-threat and time constraint both lead to equivalent forgetting of threatening information. The second provides grounds for believing that the processing of threatening information remains deep enough to enable encoding, given that threatening and nonthreatening information can both be recognized with equivalent accuracy. So what might account for threatening information being less accessible to recall but equally available to recognition?

One possibility is this: people may process nonthreatening and threatening information, not just to different degrees, but also *in different ways*. That is, the difference in processing may be quantitative as well as qualitative. Whereas people may make assimilation-based judgments about nonthreatening information ("This behavior describes me"), they may make contrast-based judgments about threatening information ("This behavior does *not* describe me"). This process would then lead nonthreatening information to be *integrated* with stored self-knowledge, but threatening information to be *separated* from it, resulting in the respective formation of more or fewer routes to retrieval.

More concretely, on receipt of behavioral information, people may evaluate the plausibility of enacting relevant behaviors ("Am I the type of person who would do X?") by drawing relevant comparisons with their past experience (Daprati, Nico, Franck, & Sirigu, 2003; Lord, Ross, & Lepper, 1979). Given that most people have chronically favorable self-views (Schmitt & Allik, 2005), they are liable to deem threatening information implausible, and so encode it separately from stored self-knowledge. This is despite the fact that threatening information may still surprise or disturb them (e.g., "You would make a rude gesture at an old lady"), ensuring that it gets encoded by other means (Bjork, 1989) and becomes equivalently recognizable later (Green et al., 2008). Yet when it comes to *recalling* mixed information about oneself, it is the richness of the retrieval routes linked to the self-concept that matters. Given that existing retrieval routes largely lead to nonthreatening memories (because the self-concept is normatively positive), and given that novel retrieval routes to threatening memories do not get established (because threatening information does not get integrated with stored self-knowledge), recall for threatening memories ends up being selectively impaired. Furthermore, threatening information is also liable to get elaborated less overall (Sedikides & Green, 2000, Experiment 3). But the focus here is on the *qualitative* nature of the processing.

OVERVIEW

As in previous research, participants initially received behavioral information about themselves, which later they attempted to recall.[1] This time, however, the paradigm featured a crucial addition. Participants were now explicitly instructed to process the information in one of two ways: either (a) by assimilating to their self-concept, to prompt integration with stored self-knowledge; or (b) by contrasting it away from their self-concept, to prompt separation from stored self-knowledge.

This manipulation facilitated three inferential strategies. First, we could test whether, across one or more types of information, the effects of differential processing instructions on memory *mimicked* the effects of unguided information processing on memory, as shown in previous mnemic neglect research (Experiments 1 and 2). If so—that is, if integration helped recall and separation hindered it—then that would provide analogical evidence for our proposed separation/integration mechanism (cf. Green & Sedikides, 2000, Experiment 3). Second, we could test whether, across one or more types of information, the effect of differential processing instructions was additionally *moderated* by information valence (Experiment 2). If it was—that is, if the valence of the information made a difference to whether integration helped and separation hindered recall—then that could provide direct evidence of an overlap between the processing prompted by our manipulation and the processing prompted by mnemic neglect. In particular, the mnemic neglect model implies that it should be harder to integrate threatening information than to separate nonthreatening information. We elaborate this idea in Experiment 2. Third, by including a recognition test, we could show discriminant operation of mnemic neglect (Experiments 1 and 2). As in previous research (Green et al., 2008; see also D'Argembeau, Comblain, & Van der Lindern, 2005), we expected no effects for information recognition: we hypothesized that the separation/integration mechanism would operate solely on information recall.

EXPERIMENT 1

METHOD

Participants. Fifty female introductory psychology students at Pennsylvania State University, Altoona participated for extra credit.

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1. Given the well-replicated absence of mnemic neglect effects for other-referent information, we focused solely on self-referent information in both experiments.

Materials. Prior to Experiment 1, we jointly pilot-tested two types of stimuli: old behaviors used in prior research on mnemic neglect (Green et al., 2005; Sedikides & Green, 2000), and new behaviors exemplifying six trait dimensions (friendly, kind, modest, predictable, trustworthy, and uncomplaining). A group of 50 participants, separate from those of Experiment 1, rated (1 = *neutral*, 5 = *extremely positive*) the valence of 51 behaviors (6-10 behaviors per trait). Participants read the behaviors without a subject (i.e., "X" replaced "I" or "Chris," the subject terms typically used in mnemic neglect studies; e.g., Sedikides & Green, 2000), so that the focus was directly on the action itself. Based on the pretest results, we selected 32 intermediately positive behaviors (Appendix). The mean rating for the final set of 32 behaviors was very near to the scale midpoint, $M = 2.99$, and varied only modestly, range = 2.00-4.11. We used these behaviors in Experiment 1, for reasons of simplicity.

Procedure. Participants were seated in separate cubicles and completed all tasks on a computer. They were informed that 32 sentences would appear one at a time on the computer screen, along with directions in capital letters below each sentence. Their task was to "apply the given direction to the sentence." The 32 pilot-tested behaviors appeared one at a time in random order for 7 sec each. Sixteen of the behaviors appeared above the sentence "*Why <u>does</u> this sentence describe you?*" and 16 above the sentence "*Why <u>doesn't</u> this sentence describe you?*" Thus, participants were instructed to make integration or separation judgments about each behavior.

The rest of the procedure followed previous research (Green & Sedikides, 2004). Participants engaged in a distractor task for 2.5 minutes (listing U.S. state names) and were asked, in a surprise recall task, to recall the gist of as many behaviors as possible. They typed in one recalled behavior per screen. When they could no longer recall any additional behaviors (after approximately 5 min), participants completed a forced-choice recognition task. On each of 32 pages, one of the previously presented behaviors was paired with one behavior from a set of similar, positively valenced lure behaviors. Participants were instructed to "decide which of two sentences on each page is the one that you were shown earlier in the study" and to indicate their response using the "d" and "k" keys to select, respectively, the top and bottom sentences. The vertical ordering of the actual and lure behaviors on the screen was randomized.

Two judges unaware of condition coded the recalled behaviors according to a "gist" criterion. Intrusions were under 3% of recalled behaviors (as in past research: Sedikides & Green, 2000, 2004) and were removed prior to analyses. Coders agreed on the classification of 96% of recalled behaviors ($r = .97$, $p < .001$), and a third coder helped resolve discrepancies.

RESULTS AND DISCUSSION

Recall and Recognition. We first conducted a repeated-measures ANOVA including processing instructions (integration vs. separation) and memory type (recall vs. recognition counts). This analysis revealed a significant two-way interaction, $F(1, 49) = 16.25$, $p < .001$, $\eta_p^2 = .25$. Participants recalled a lower proportion of behaviors after separation instructions than after integration instructions, $F(1, 49) = 20.09$, $p < .001$, $\eta_p^2 = .29$ (Table 1). However, participants did *not* recognize a

TABLE 1. Recall and Recognition as a Function of Processing Instructions (Experiment 1)

	Recall	Recognition
Integration	0.21 (0.10)	0.86 (0.14)
Separation	0.13 (0.09)	0.88 (0.13)

Note. Means (and standard deviations) are expressed in terms of proportions of behaviors recalled and recognized.

higher proportion of behaviors after separation instructions than after integration instructions, $F(1, 49) = 2.35$, $p > .05$, $\eta_p^2 = .05$.

Thus, as hypothesized, recall for intermediately positive information was poorer after separation than after integration instructions, but recognition for it did not differ. Given the close replication of previous results for *both* unguided recall and recognition indices (Green et al., 2008), the present results strengthen the viability of a separation/integration account of mnemic neglect.

EXPERIMENT 2

Experiment 2 was a near replication of Experiment 1, but with a crucial extension. Whereas Experiment 1 featured only behaviors exemplifying intermediately positive traits, Experiment 2 featured the full set of behaviors used in mnemic neglect experiments (Sedikides & Green, 2000; Newman et al., 2009)—specifically, positive and negative behaviors exemplifying both central and peripheral traits.

Extending the stimuli in this way permitted three types of questions to be addressed. First, would the impact of the separation/integration instructions generalize across different behaviors? Second, would the standard mnemic neglect pattern, driven solely by stimulus valence, be concurrently observed? And third, would the impact of separation/integration instructions be moderated by stimulus valence? An affirmative answer to the first question would reinforce the findings of Experiment 1. In addition, an affirmative answer to the second question would further support the basic mnemic neglect model. Finally, an affirmative answer to the third question, depending on the pattern observed, would provide additional evidence for the hypothesized separation/integration mechanism. How so?

Note that the mnemic neglect model is a model of self-*protective* memory. It concerns the prevention of self-negativity, not the advancement of self-positivity. Moreover, the imperative to self-protect outstrips the imperative to self-enhance (Alicke & Sedikides, 2009; Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Thus, if separation/integration dynamics do indeed underlie mnemic neglect, then two outcomes would be expected.

First, separation instructions should be relatively successful at reducing recall for central positive information. Given that the self-concept is normatively positive, such reduced recall hardly presents an ego-threat. Hence, no compensatory attempt to integrate central positive information, in opposition to the separation instructions, would be predicted.

Second, integration instructions should be relatively *un*successful at increasing recall for central negative traits. Given that the self-concept is normatively positive, such enhanced recall presents a clear ego-threat. Hence, a compensatory attempt to separate central negative information, in opposition to the integration instructions, would be predicted. Accordingly, one should expect the separation/integration manipulation to have a stronger impact on recall for central positive information than on recall for central negative information. Essentially, participants should resist instructions to integrate threatening information more than they resist instructions to separate nonthreatening information. (Note that, already consistent with the latter half of this prediction, participants in Experiment 1 successfully separated the nonthreatening information they received, i.e., showed significant recall impairment in the absence of an ego-threat).

METHOD

Participants. Ninety-eight introductory psychology students at Pennsylvania State University, Altoona participated for extra credit.

Procedure and Stimuli. Experiment 2 differed from Experiment 1 only in the information stimuli used. This time, the information stimuli comprised a previously administered set of 32 behaviors, orthogonally balanced for the centrality and valence of the traits that they exemplified (Sedikides & Green, 2000). In particular, half the behaviors exemplified normatively central traits (i.e., kindness, trustworthiness, friendliness), and half exemplified normatively peripheral traits (i.e., modesty, uncomplainingness, predictability); and within each of these categories, half the behaviors carried a positive implication, and half a negative one of each trait. Sample behaviors included "I would keep a secret when asked to" (*central positive trait, representing trustworthiness*)," "I would be unfaithful when in an intimate relationship" [*central negative trait, representing (un)trustworthiness*], "I would take the focus off myself and redirect it to others" (*peripheral positive trait, representing modesty*), and "I would talk more about myself than about others" [*peripheral negative trait, representing (im)modesty*].

Two judges coded the recalled behaviors according to a "gist" criterion. Intrusions accounted for less than 3% of recalled behaviors and were removed prior to analyses. Coder agreement was 96% ($r = .97$, $p < .001$), and a third coder resolved discrepancies.

RESULTS AND DISCUSSION

We first conducted a preliminary repeated-measures ANOVA featuring four orthogonal factors: processing instructions (integration vs. separation), behavior type (central vs. peripheral), behavior valence (positive vs. negative), and memory type (recall vs. recognition counts). This analysis revealed a significant four-way interaction, $F(1, 97) = 5.06$, $p < .05$, $\eta_p^2 = .05$. We proceeded by examining the triple interactions separately for recall and recognition.

Recall. First, did the impact of the separation/integration instructions generalize across different behaviors? To answer this question, we tested a model that included processing instructions, behavior type, and behavior valence. Table 2 presents the relevant cell means and standard deviations. A significant main effect for processing instructions emerged, suggesting that recall was increased by integration instructions relative to separation instructions, $F(1, 97) = 44.79$, $p < .0005$,

TABLE 2. Recall as a Function of Processing Instructions, Behavior Type, and Behavior Valence (Experiment 2)

	Central Behaviors		Peripheral Behaviors	
	Positive	Negative	Positive	Negative
Integration	.37 (.31)	.21 (.20)	.09 (.14)	.03 (.09)
Separation	.14 (.18)	.12 (.16)	.06 (.11)	.05 (.12)

Note. Means and standard deviations are expressed in terms of proportions of behaviors recalled.

$\eta_p^2 = .32$. Thus, the results of Experiment 1 generalized across a range of behaviors. Nonetheless, this main effect was qualified by a significant two-way interaction between processing instructions and behavior type $F(1, 97) = 33.98$, $p < .0005$, $\eta_p^2 = .26$, such that processing instructions exerted an effect for central behaviors, $F(1, 97) = 52.99$, $p < .0005$, $\eta_p^2 = .35$, but not for peripheral behaviors, $F(1, 97) = .16$, $p > .05$, $\eta_p^2 = .002$. The latter finding may be a floor effect: overall levels of recall were much lower for peripheral behaviors than for central behaviors, $F(1, 97) = 177.25$, $p < .0001$, $\eta_p^2 = .65$, so there may have been less room for maneuver. Nonetheless, processing instructions exerted an effect for both central positive behaviors, $F(1, 97) = 42.11$, $p < .0001$, $\eta_p^2 = .30$, and for central negative behaviors, $F(1, 97) = 11.89$, $p < .001$, $\eta_p^2 = .11$, indicating that the effect of processing instructions generalized across behavior valence.

Second, was the standard mnemic neglect pattern, driven solely by stimulus content, concurrently observed? To answer this question, we located the relevant two-way interaction term (behavior type × behavior valence) from the ANOVA above. It proved significant, $F(1, 97) = 4.60$, $p < .05$, $\eta_p^2 = .05$. Recall for central negative behaviors was worse than recall for central positive behaviors, $F(1, 97) = 15.90$, $p < .0001$, $\eta_p^2 = .14$. Unexpectedly, the same difference held for peripheral behaviors too, $F(1, 97) = 8.46$, $p < .005$, $\eta_p^2 = .08$. Nonetheless, as the significant interaction shows, the former effect outweighed the latter. This result broadly validates the mnemic neglect model: Information about traits that mattered more produced a larger recall differential depending on whether it was positive or negative.

Third, was the impact of separation/integration instructions moderated by stimulus content? To answer this question, we began by locating the relevant three-way interaction term (behavior type × processing instructions × behavior valence) from the ANOVA above. This term tested whether central or peripheral behaviors differed in terms of eliciting the predicted two-way interaction between processing instructions and behavior valence. The term proved significant, $F(1, 97) = 3.82$, $p < .05$, $\eta_p^2 = .04$. Hence, we considered the two-way interactions for central or peripheral behaviors independently.

For central behaviors, the two-way interaction proved significant, $F(1, 97) = 10.61$, $p < .002$, $\eta_p^2 = .10$. The pattern of means indicated that, as predicted, the separation/integration instructions had a larger impact on the recall of central positive behaviors [independently significant at $F(1, 97) = 42.11$, $p < .0005$, $\eta_p^2 = .30$] than on the recall of central negative behaviors [independently significant at $F(1, 97) = 11.89$, $p < .001$, $\eta_p^2 = .11$]. Moreover, the further finding that recall for central positive and negative behaviors did not differ after separation instructions, $F(1, 97) = .57$, $p > .05$, $\eta_p^2 = .001$, but did differ after integration instructions, $F(1, 97) = 18.58$, $p < .0005$, $\eta_p^2 = .16$, is exactly in accord with the hypothesis that the recall of central negative information would be less boosted by integration instructions than the

TABLE 3. Recognition as a Function of Processing Instructions, Behavior Type, and Behavior Valence (Experiment 2)

	Central Behaviors		Peripheral Behaviors	
	Positive	Negative	Positive	Negative
Integration	.86 (.17)	.86 (.20)	.83 (.21)	.81 (.20)
Separation	.85 (.19)	.83 (.19)	.85 (.18)	.87 (.20)

Note. Means and standard deviations are expressed in terms of proportions of behaviors recognized.

recall of central positive information would be impaired by separation instructions. This pattern is consistent with the idea that the imperative to self-protect impedes integrating threatening information with stored self-knowledge.

For peripheral behaviors, the two-way interaction also unexpectedly proved significant, $F(1, 97) = 5.12$, $p < .05$, $\eta_p^2 = .05$. Although a broadly similar pattern emerged, separation instructions did not have a larger impact than integration instructions on the recall of peripheral positive behaviors, $F(1, 97) = 2.62$, $p > .05$, $\eta_p^2 = .03$, or on the recall of peripheral negative behaviors, $F(1, 97) = 1.33$, $p > .05$, $\eta_p^2 = .01$. Nonetheless, as with central behaviors, recall for peripheral positive behaviors did not differ from peripheral negative behaviors after separation instructions, $F(1, 97) = .44$, $p > .05$, $\eta_p^2 = .01$, but did differ after integration instructions, $F(1, 97) = 13.66$, $p < .0005$, $\eta_p^2 = .12$. As before, clear-cut motivational effects for central behaviors appear to have been accompanied by weaker motivational effects for peripheral behaviors, in the same direction.

Recognition. Inspection of the results for recognition accuracy (Table 3) suggests minor or no effects. Statistical analysis bears this out. In particular, no main effect for processing instructions emerged, $F(1, 97) = 1.16$, $p > .05$, $\eta_p^2 = .01$.[2] That is, instructing participants to integrate information with, or separate it from, stored self-knowledge did not make a difference to how well they recognized it. Nor did a behavior type × behavior valence interaction, indicative of mnemic neglect, emerge, $F(1, 97) = .62$, $p > .05$, $\eta_p^2 = .01$. Finally, no complex three-way interaction, indicating that processing instructions moderated mnemic neglect interactions, emerged, $F(1, 97) = 1.35$, $p > .05$, $\eta_p^2 = .01$.

GENERAL DISCUSSION

How do people remember self-referent information? Previous research has found that people have poorer recall for threatening information—in particular, they show mnemic neglect for information that concerns central traits and carries negative implications (Sedikides & Green, 2009; Sedikides et al., 2004; see also Newman et al., 2009). Nonetheless, people show equivalent recognition for threatening and nonthreatening information (Green et al., 2008). What explains this disparity? We hypothesized that it might be due to a qualitative difference in how people process threatening and nonthreatening information. Specifically, people integrate

2. A processing instruction × behavior type interaction did emerge, $F(1, 97) = 4.45$, $p < .05$, $\eta_p^2 = .05$, such that peripheral behaviors were better recognized after integration instruction than after separation instructions, $F(1, 97) = 5.12$, $p < .05$, $\eta_p^2 = .05$, whereas central behaviors were not, $F(1, 97) = .01$, $p > .05$, $\eta_p^2 = .01$. No obvious interpretation presents itself.

nonthreatening information with stored self-knowledge but separate threatening information from it. As a result, for threatening information, relatively fewer self-related retrieval routes would get established, thereby impairing subsequent recall. Nonetheless, threatening information, perhaps in virtue of its arresting nature, would still get encoded by alternative means, and so end up equivalently recognizable.

In Experiments 1 and 2, we gave participants instructions designed to make them integrate some, but separate other, items of behavioral information. Specifically, we had them think about why some items did describe them, but other items did not. In both experiments, integration instructions led to higher levels of information recall than separation instructions did. Nonetheless, the manipulation had no impact on levels of recognition. Thus, the disparate effects of the manipulation consistently fit the profile of a mechanism that can explain mnemic neglect effects.

Independently of processing instructions, Experiment 2 also provided evidence of a standard mnemic neglect effect driven by stimulus content: participants recalled negative information more poorly than positive information, particularly when it concerned central traits. But, if mnemic neglect effects were due to an integration/separation mechanism, then one would have expected the processing effects driven by stimulus content to interact with the processing effects driven by the experimental instructions. In particular, because self-protection is more powerful than self-enhancement (Alicke & Sedikides, 2009; Baumeister et al., 2001), one would have expected integration instructions to struggle to increase recall for central negative information, because that information would itself have prompted countervailing separation processing. This result is precisely what we observed: the recall of central negative information was less boosted by integration instructions than the recall of central positive information was impaired by separation instructions. Moreover, no evidence for mnemic neglect, or for further asymmetric processing, emerged for recognition. Thus, we found nuanced but strong evidence that an integration/separation mechanism underlies mnemic neglect.

The mechanism we have postulated—the separation of threatening information from stored self-knowledge—bears comparison to the similar, but not identical, mechanism of inhibitory repression, pioneered by psychoanalytic theory (Erdelyi, 2006; Newman, Duff, & Baumeister, 1997). The latter mechanism denotes the "cognitive avoidance (nonthinking) of some target material [that] leads to loss of accessible memory." As such, inhibitory repression must be repeatedly deployed to keep unacceptable material from entering conscious awareness and causing anxiety. However, perpetual vigilance may not be necessary to produce mnemic neglect. It may be sufficient to be initially motivated, at the time threatening information is encoded, to separate threatening information from stored self-knowledge. As a consequence, fewer self-relevant retrieval routes would form. Any failure to recall threatening information thereafter could be a purely cognitive consequence of retrieval routes being in short supply.

The thrust of the current research is also in keeping with work on autobiographical memory (Oakes, 2006), particularly on the impact of episode valence (Ritchie et al., 2006; Skowronski, Betz, Thompson, & Shannon, 1991), or self-relevant motives generally (Woike, Gershkovich, Piorkowski, & Polo, 1999), in shaping recall for life events. Comparing recall and recognition after administering explicit processing instructions, as we have done, may also help clarify the conditions under which autobiographical memory is accurate or gets corrupted, via forgetting, distortion, or confabulation. More generally still, our research fits in with a multipronged approach that is investigating how, why, and with what consequences people strive to maintain a positive self-view (Alicke & Sedikides, 2011; Sedikides, 1993; Sedikides & Gregg, 2008).

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APPENDIX. BEHAVIORS USED IN EXPERIMENT 1

SEPARATION BEHAVIORS

1. X would change the subject if someone praised X.
2. X would give others the credit for a group success.
3. X would give a homeless man some spare change.
4. X would simply smile if someone was rude to X.
5. X wouldn't really comment negatively about politicians that X disliked.
6. X would minimize bad experiences when telling about them.
7. Others can forecast X's reaction to a new situation.
8. X has a daily routine.
9. X does not make last minute decisions.
10. X completes all the readings for a class by the deadline.
11. X stops at red lights.
12. X always carries X's license when driving.
13. X would compliment a friend who was dressed nicely.
14. X would oil a squeaky door in the dorm hallway.
15. X would return a greeting to a stranger.
16. X goes to football games.

INTEGRATION BEHAVIORS

1. X would not mention meeting a famous celebrity.
2. X would take the focus off X and redirect it to others.
3. X wouldn't publicize it to many people if X got an award or honor.
4. X would overlook the bad points about a roommate.
5. X wouldn't say anything if food was overcooked at a restaurant.
6. X wouldn't get mad if a friend promised to call but forgot.
7. X usually does what's expected of X.
8. X always shops at the same stores.
9. X almost always orders the same dish at his favorite restaurant.
10. X would promptly pick up a friend at the agreed-upon time.
11. X would be asked to plan a surprise party for a friend.
12. X would remember to communicate a phone message.
13. X would not ignore an animal running loose on the street.
14. X is not easily irritated.
15. X would not cut out articles from library journals.
16. X would speak in front of a group.