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Organization of the Self-Concept and the Suppression of Self-Relevant Thoughts

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The rebound effect associated with thought suppression has been found following attempts at suppressing both novel stimuli and stereotypical thoughts. However, research examining the suppression of self-relevant thoughts has been less successful in demonstrating the rebound effect. A potential factor that has not yet been fully explored in research on thought suppression is how different types of distracter thoughts may influence the ability to suppress unwanted thoughts. One type of distracter that people may use while attempting to suppress unwanted self-relevant thoughts is information related to other aspects of their lives. To the extent that these other aspects are more likely to be associated in memory with the unwanted thoughts, rebound should be more likely to occur. Thus, we expected and found that people lower in self-complexity (i.e., those with fewer self-aspects that are more interrelated with one another) revealed greater rebound following thought suppression that involved self-relevant distracting thoughts than did people greater in self-complexity. Implications of these findings for thought suppression, self-complexity, depression, and the experience of affect are discussed. © 2001 Elsevier Science

Throughout our daily lives, we are often faced with the desire to avoid certain thoughts. For instance, we may want to avoid thoughts about relationship problems, professional failures, or social embarrassments. Ironically, research has shown that attempts to suppress unwanted thoughts are often met with undesired consequences. For example, Wegner, Schneider, Carter, and White (1987) found that participants who attempted to suppress thoughts of a white bear subsequently thought about a white bear more often than those who had not attempted to suppress such thoughts. This consequence of thought suppression is known as the rebound effect, referring to the tendency for people to think about a previously suppressed thought more after initial constraints to suppress it are removed than when such constraints were never in place.

Wegner's (1994) model of mental control suggests that the rebound effect is the result of two processes that operate when one attempts to suppress a thought. The controlled operating process searches for thoughts that will distract the mind from the unwanted thought, whereas the automatic monitoring process scans consciousness for evidence of the unwanted thought. Because the monitoring process is continually scanning consciousness for evidence of the unwanted thought, it ironically increases the accessibility of that very thought. Thus, each time the operating process fails to find a suitable distracter, the unwanted thought is

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able to intrude on consciousness. When such failures occur, the monitoring process reinstates the operating process, and the search for suitable distracters begins again.

Consistent with this model, research (e.g., Wegner & Erber, 1992; Wegner, Erber, & Zanakos, 1993) has demonstrated that participants under cognitive load show greater rebound effects. This suggests that a reduction in cognitive resources weakens the ability of the operating process to find suitable distracters during thought suppression, leading to greater rebound. However, other research has shown that rebound can occur even when cognitive resources are plentiful. For example, in Wegner et al.'s (1987) initial research on thought suppression, participants were simply asked to not think about a white bear during the suppression period. Even though participants' cognitive resources were not consumed by a competing task, they still experienced rebound in thoughts of a white bear. As an extension of Wegner's model, Macrae, Bodenhausen, Milne, and Jetten (1994) argued that the rebound effect could also occur because of residual activation of the to-be-suppressed thought following suppression. Consistent with their extension, they found that participants who were asked to suppress stereotypical thoughts revealed greater accessibility for stereotype-related concepts in a lexical decision task immediately following suppression. Thus, rebound can occur because of the continual low-level priming of an unwanted thought that results from suppression goals (e.g., Macrae et al., 1994) or because of factors that sabotage the operating process (e.g., Wegner & Erber, 1992).

To the extent that the operating process is bolstered or undermined, rebound of highly accessible unwanted thoughts will be reduced or exacerbated, respectively. Although Wegner and Erber (1992) examined how cognitive load undermines the operating process overall, the strategy of distraction used by people during suppression should affect their ability to suppress unwanted thoughts as well. For example, in examining a factor that may aid one in attempts at thought suppression, Wegner et al. (1987, Experiment 2) gave participants a specific distracter (i.e., a red Volkswagen) on which to focus while engaging in thought suppression. They found that having participants use a specific distracter during suppression attenuated subsequent rebound. Interestingly, however, Wenzlaff, Wegner, and Klein (1991) suggested that such focused distraction is not the typical strategy that individuals employ while attempting to suppress unwanted thoughts. Instead, the more typical approach to suppression seems to be unfocused distraction, which is characterized by the selection of various objects in the immediate environment or accessible memories as distracters. Thus, individuals tend to sample a variety of distracters, rejecting each and selecting a new distracter each time the unwanted thought comes to consciousness.

This suggests that if people find it relatively easy to select suitable distracters, then thought suppression should be more effective. For example, Kelly and Kahn (1994) had participants suppress either one of their own personally intrusive thoughts or thoughts of a white bear. The rebound effect was found for those suppressing thoughts of a white bear but not for those suppressing their own personally intrusive thoughts. Kelly and Kahn suggested that failure to observe rebound with personally intrusive thoughts might be based on participants having more experience suppressing such thoughts. Because participants in their study chose their own "frequently occurring intrusive thoughts" to suppress, they may have relied on a set of already existing distracters that have proven to be effective in prior suppression attempts for those thoughts, minimizing rebound effects. Other researchers, however, have observed rebound effects for self-relevant thoughts (e.g., Howell & Conway, 1992; Wegner & Gold, 1995), suggesting that rebound for self-relevant thoughts does occur but that certain factors might moderate the outcome.

A possible approach to suppressing unwanted self-relevant thoughts is to distract oneself with thoughts related to other aspects of one's life. In the current study, we explored whether cognitive associations among different aspects of one's life moderate the relation between thought suppression and rebound when one is attempting to suppress a self-relevant thought by focusing on other self-aspects.

One meaningful way in which the organization of the self-concept varies among individuals is in its complexity (Linville, 1985). Differences in self-complexity are based on both the number of self-aspects and the degree of redundancy among the traits describing those self-aspects. Greater self-complexity is revealed by a greater number of self-aspects that are described by traits that are less redundant with, and thus are more independent of, one another. Lower self-complexity, on the other hand, is revealed by fewer self-aspects that are described by more redundant traits and thus are more interrelated with one another. Because this conceptualization of self-concept organization is concerned with the relative amount of association among the traits describing aspects of one's self, it seems especially relevant for examining the ability to suppress unwanted self-relevant thoughts that may vary in their relative association with other self-relevant information that may be used as distracters.

Research has suggested that self-complexity is related to differences in affective responses to life events. In particular, the affective–extremity hypothesis associated with self-complexity suggests that greater self-complexity is related to more moderate affect in response to life events. For instance, Linville (1985) found that following either positive or negative feedback about an important aspect of one's life (i.e., feedback on a bogus intelligence test), individuals greater in self-complexity reported more moderate affect than did individuals lower in self-complexity, who reported more extreme positive and negative affect, respectively.

Linville (1985) posited that these differences in affective reactions are due to affective spillover. Because greater self-complexity involves a larger number of independent self-aspects, there is less affective spillover among different self-aspects when emotional events impinge on one's life. Thus, a relatively small proportion of the self is implicated during emotional episodes for those greater in self-complexity.

Other research has found that self-complexity plays an important role in how individuals respond to negative self-relevant thoughts. In particular, Dixon and Baumeister (1991) found that following negative self-relevant feedback, individuals lower in self-complexity attempted to reduce self-awareness faster than did individuals greater in self-complexity. Presumably, this occurred because the negative feedback affected a greater proportion of the self-concept for those lower in self-complexity than for those greater in self-complexity, making it especially appealing to focus attention away from the self.

Although there may be instances when it is possible to respond to a negative event by reducing self-awareness, there may be times when such a response is not possible or desirable. In these instances, individuals may respond by focusing attention on other aspects of their lives. Individuals greater in self-complexity, by definition, have more potential self-relevant distracters (i.e., self-aspects) that are relatively unrelated to one another than do individuals lower in self-complexity. Thus, suppressing negative information related to a particular self-aspect while focusing on self-relevant distracters (i.e., other self-aspects) should be relatively more effective for individuals greater in self-complexity than for those lower in self-complexity. Non-self-relevant distracters, on the other hand, should be equally available to individuals regardless of their level of self-complexity, resulting in no difference in rebound as a function of self-complexity when the distracter used is unrelated to the self. Therefore, in the current study, it was predicted that those lower in self-complexity would exhibit greater rebound following suppression of negative self-relevant information, but only when using self-relevant distracters.

In addition to our primary hypothesis regarding rebound effects, we anticipated observing two other outcomes. First, similar to Macrae et al. (1994), we expected to find relatively greater accessibility for to-be-suppressed concepts among those asked to suppress such thoughts. That is, those given the goal to suppress self-relevant thoughts should reveal enhanced accessibility for those concepts because of monitoring process priming. Finally, we expected to replicate Linville's (1985) findings that those lower in self-complexity would show greater affective responses to self-relevant feedback than would those greater in self-complexity (i.e., the affective–extremity hypothesis).

METHOD

Participants and Overview

At Michigan State University, 98 introductory psychology students participated in the study for extra credit. The study consisted of two experimental sessions. During the first session, participants completed the self-complexity measure. During the second session, which took place 4 to 11 weeks after the initial session, participants arrived in the laboratory and were first asked to provide consent for allowing their voices to be audiotaped during the study. All participants agreed to the audiotaping. Next, they completed an initial mood measure and a self-esteem measure. Afterward, they completed and received negative feedback on an analytical task that purportedly assessed academic success in college. Immediately following this, they completed mood and self-esteem measures for a second time to examine the extent to which the negative feedback affected their mood and self-esteem. This methodology was patterned after Linville (1985).

Participants then read instructions on how to report their stream of consciousness (following methods used by Wegner & Gold, 1995). They performed this task in three separate 5-min periods. During the first period, all participants were asked to verbally express their ongoing thoughts without filtering them in any way. The instructions explicitly stated that they were to express any and all thoughts even if the thoughts involved the feedback from the analytical task and how the feedback may be related to their academic lives. During the second (suppression) period, two-thirds of the participants were asked to suppress the negative feedback from the analytical task and their academic life in general. One-half of these suppression participants did so while focusing on other aspects of themselves (self-relevant distracter participants), whereas the other one-half of the suppression participants did so while focusing on a white bear (non-self-relevant distracter participants). The remaining one-third of the participants expressed their ongoing thoughts, including thoughts about the feedback and how the feedback may be related to their academic life (expressers). During the third (rebound) period, all participants were asked again to express their thoughts, including thoughts about the feedback from the analytical task and how this feedback may be related to their academic life.

Immediately following the third period, all participants completed a word completion task to measure the accessibility of student-related thoughts. They were then debriefed and thanked for their participation.

Self-Complexity Measure

During the first experimental session, participants performed a trait sort task similar to that used by Showers

(1992).[1] They completed this task via a computer program in which they were presented with 40 different traits (20 positive and 20 negative). They sorted the traits into groups that described important aspects of themselves. They did so by selecting and moving traits from a column on the left side of the computer screen to a column on the right side of the computer screen. After having moved the traits for a particular group to the right-hand column, they typed a label describing that group. For example, a participant may have placed "intelligent," "diligent," and "focused" into one group and labeled it as "student." Each group was recorded separately, and each trait could be used in more than one group or not at all. Participants could stop forming groups at any point by pressing a specified button to indicate that they had formed all of the groups they deemed as meaningful. This task and the resultant range of self-complexity scores were comparable to the method used by Linville (1985, 1987).

The statistical measure *H*, developed by Scott (1969) and used by Linville (1985, 1987), was calculated to obtain a self-complexity score for each participant. Scott's *H* takes into account the number of self-aspects generated and the interrelatedness of the traits among those self-aspects. The following formula was used to calculate Scott's *H:*

$$H = \log_2 n - (\Sigma_i n_i \log_2 n_i)/n,$$

where n is the total number of traits available to the participant (40 in this study) and n_i is the number of traits that occur within each particular group combination (i) across the self-aspects described by the participant. Scott's *H* can be understood as an index of the minimal number of independent binary combinations of traits needed to reproduce a participant's whole trait sort (for additional discussion, see Linville, 1987; Woolfolk, Novalany, Gara, Allen, & Polino, 1995).

Mood Measure

During the second experimental session, participants were run individually in the laboratory and completed all subsequent measures via computer. They first completed the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). Participants responded to 10 positive mood adjectives and 10 negative mood adjectives based on how they felt "right at that very moment" using 5-point scales ranging from 1 (*very slightly*) to 5 (*extremely*). A principal components factor analysis with varimax rotation revealed a two-factor solution, one consisting of all 10 of the positive mood items and one consisting of 8 of the 10 negative mood items. This two-factor structure is consistent with previous research (Watson et al., 1988). The scores of the 10 positive mood items were summed to produce a measure of positive mood, and the scores of the 8 negative mood items (i.e., distressed, upset, scared, hostile, ashamed, nervous, jittery, and afraid) were summed to produce a measure of negative mood.

Self-Esteem Measure

The Rosenberg (1965) self-esteem scale was used. Participants responded to 10 items (e.g., "I take a positive attitude toward myself," "At times I think I am no good at all") using a 4-point scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Items were summed such that larger scores indicated greater self-esteem, and the scale revealed good reliability (Cronbach's alpha = .88). After participants responded to the last item on the self-esteem measure, a bogus error message appeared on the computer screen. When the participants called for the experimenter, the experimenter acted surprised and told the participants that the computers were old and somewhat unreliable.

Analytical Task

While the experimenter worked on solving the "computer problem," the participants were asked to move to another computer to solve 24 moderately difficult analogy items taken from past Graduate Record Examinations. To emphasize the importance of its feedback, they were told that this task is often used to predict success in college. After the participants completed the task, a message was presented on the computer screen with an indication that their score were in the bottom 10% of all students who had previously completed the task.

The participants were then told that their responses to the previous mood and self-esteem items were lost due to the prior "computer error." Because of this purported error, they were asked to complete the items for a second time based on *how they felt right at that very moment.* Thus, this second administration served as the post-feedback (Time 2) measures of mood and self-esteem. This methodology is similar to that used by Linville (1985) to obtain post-feedback measures.

Suppression Ability and Rebound Measures

Participants then read instructions adapted from Pope (1978) and used by Wegner et al. (1987) on how to report their stream of consciousness. These instructions asked par-

[1] Although our primary interest was in assessing how differential rebound would be observed for those who vary in self-complexity, we also explored whether compartmentalization of self-relevant information (Showers, 1992) might moderate rebound effects. Specifically, one might predict that negatively compartmentalized people would reveal greater rebound following suppression of negative self-relevant thoughts while focusing on self-relevant distracters than would either positively compartmentalized or evaluatively integrated people. Our exploratory analyses revealed no effects of compartmentalization. Thus, no additional discussion is provided.

ticipants to continuously verbalize their ongoing thoughts without filtering them in any way. Similar to the procedure used by Wegner and Gold (1995), participants verbally reported their thoughts during three 5-min periods in a private room while being tape-recorded. During the initial expression period, all participants expressed their ongoing thoughts, including those about the feedback provided on the analytical task and how this feedback may be related to their academic life.

During the suppression period, two-thirds of the participants were asked to suppress the negative feedback information provided by the score on the analytical task and their academic life in general. Thus, the student self-aspect served as the to-be-suppressed self-aspect. This self-aspect was selected because participants were college students, and therefore their student self-aspect should be important to them. Moreover, previous research (e.g., Linville, 1985; Niedenthal, Setterlund, & Wherry, 1992) found that feedback related to intelligence and scholastic performance has affective consequences that vary as a function of self-complexity for college student participants. One-half of the suppression participants suppressed their student self-aspect while focusing on other aspects of themselves (self-relevant distracters), whereas the other one-half suppressed their student self-aspect while focusing on a white bear (non-self-relevant distracters). The self-relevant distracter participants read the following instructions, which were based on those used by Wegner et al. (1987):

> For the second five-minute period, please verbalize your thoughts as you did before, with one exception. This time, try not to think about the feedback you were given on the analogy task or anything else related to your academic life, but mention it if you do. Instead, think about one or more of the other groups that you described in the first experiment listed in this envelope. [They were given a few moments to look at the labels of the groups they had described in the first session of the experiment.] Again, remember, *don't* think about the feedback or your academic life, but mention it if you do.

The non-self-relevant distracter participants read similar instructions but were told to think about a white bear instead. The remaining participants (expressers) were given the same instructions as in the initial expression period in which they were to verbally express all of their ongoing thoughts, including thoughts about the analytical task feedback or their academic life. Assignment to this between-subjects manipulation (self-relevant distracter, non-self-relevant distracter, or expresser) was randomly determined.[2] For the rebound period, all participants reported their thoughts, including thoughts about the feedback given on the analytical task and their academic life.

[2] The experimental design did not provide for a demonstration of the basic rebound effect as shown in past research. That is, although there was a true control group (i.e., expressers), the experimental groups were instructed to use distracters while suppressing thoughts about the feedback and their academic lives. Thus, we were interested in how the *relative degree of rebound* varied as a function of self-complexity and focus of distraction (self-relevant vs non-self-relevant) during suppression.

TABLE 1
Mean Number of Mentions for Each Period by Condition

Condition	*n*	Period: Initial expression	Period: Suppression	Period: Rebound
Self-relevant distracters	33	2.52	0.76_a	1.76
Non-self-relevant distracters	31	2.97	0.84_a	1.77
Expressers	34	2.72	1.81_b	1.57

Note. Means in a column that do not share the same subscript vary at the $p < .05$ level.

Accessibility Measure

After the rebound period, participants were given a word completion task to measure the accessibility of student-related thoughts. This task consisted of 27 items that could be completed with a letter that would create either student-related words (e.g., smart, dull) or non-student-related words (e.g., start, full). They were asked to complete the words as quickly as possible. The total number of items completed as student-related words served as the index of accessibility of student-related concepts.

RESULTS

The audiotapes were analyzed independently by two judges (unaware of the experimental hypotheses) for mentions of student-related thoughts. Mentions were counted if they occurred in one of two ways. First, if a student-related thought (i.e., the unwanted thought) occurred between two non-student-related thoughts, then it was considered a mention. Second, if a 5-s or longer pause occurred between two student-related thoughts, then two mentions were counted. Interjudge agreement for the number of mentions was quite good, $r = .63$, $p < .001$. The mean of the two judges' scores served as the measure of mentions. Table 1 presents the mean number of mentions for each period within each condition.

Thought Suppression and Rebound

The primary hypothesis predicted that those lower in self-complexity would exhibit greater rebound following suppression of negative self-relevant information, but only when using self-relevant distracters. A multiple regression analysis with *H*, two contrast-coded vectors (one comparing the two suppresser groups to the expresser group and the other comparing the self-relevant distracter participants to the non-self-relevant distracter participants), and their interactions with *H* was conducted on the number of mentions

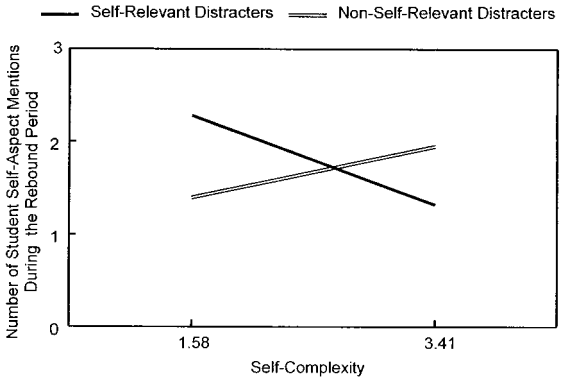

FIG. 1. Interaction between self-complexity and distracter type for the number of student self-aspect mentions during the rebound period.

during the rebound period (i.e., the third 5-min period). The analysis revealed a significant effect of the second contrast vector (which compared self-relevant distracter participants to non-self-relevant distracter participants), $\beta = .72$, $t(96) = 2.32$, $p < .05$. More important, this effect was qualified by the predicted interaction between *H* and the second contrast vector, $\beta = -.76$, $t(96) = -2.44$, $p < .05$. Nonstandardized regression weights using a range of $\pm$ 1 *SD* for self-complexity (i.e., Scott's *H*) were used to graph this interaction effect.

Figure 1 shows that the relation between self-complexity and the number of mentions of the to-be-suppressed thoughts varied as a function of whether distracters were related to one's self or not, as predicted. Analyses of the slopes for each of the regression lines in Fig. 1 were also conducted. The slope for self-relevant distracter participants was significant, $\beta = -.40$, $t(31) = -2.35$, $p < .05$, revealing that participants using self-relevant distracters showed significantly greater rebound as their self-complexity decreased. The slope of the regression line for non-self-relevant distracter participants, as expected, was not significant, $\beta = .29$, $t(29) = 1.61$, n.s. No other effects were significant. Thus, the regression analysis provided strong support for the hypothesis that self-relevant distraction would lead to greater rebound for those lower in self-complexity.

Number of Self-Aspects Mentioned during Suppression

The primary hypothesis was based partly on the assumption that those greater in self-complexity using self-relevant distraction would use more self-aspects as distracters during suppression than would those lower in self-complexity. To examine this assumption, the audiotapes were coded for the number of different non-student self-aspects mentioned during the suppression period. Two independent judges were provided with the self-aspect labels that each participant generated during the self-complexity trait sort task, and they counted the number of different non-student self-aspects mentioned by each participant during the suppression period. Interjudge agreement on the total number of non-student self-aspects mentioned was very good, $r = .89$, $p < .001$. Thus, the mean of the two judges' counts served as the measure of other self-aspects mentioned during suppression.

A multiple regression analysis with *H*, two contrast-coded vectors (one comparing the two suppresser groups to the expresser group and the other comparing the self-relevant distracter participants to the non-self-relevant distracter participants), and their interactions with *H* was conducted on the number of other self-aspects mentioned during suppression. A significant main effect for self-complexity was revealed, $\beta = .41$, $t(96) = 3.80$, $p < .001$, indicating that those greater in self-complexity mentioned more non-student self-aspects as distracters during the suppression period than did those lower in self-complexity. This effect was qualified by a marginal interaction with the second contrast vector, $\beta = .26$, $t(96) = 1.97$, $p < .06$. Nonstandardized regression weights using a range of $\pm$ 1 *SD* for self-complexity were used to illustrate this pattern. Figure 2 shows that those using self-relevant distracters tended to mention more non-student self-aspects during suppression as their self-complexity increased than did those using non-self-relevant distracters. In other words, this result indicates that while suppressing student-related thoughts, those instructed to distract themselves with other self-relevant thoughts did indeed tend to mention more non-student self-aspects as their self-complexity increased. This provides further evidence that people tend to sample from a wide variety of distracters during thought suppression (Wenzlaff et al., 1991) and that the use of self-relevant distracters was greater for those who were greater in self-complexity.

Accessibility of Student-Related Thoughts

Macrae et al. (1994) demonstrated that unwanted thoughts continue to be quite accessible following attempts

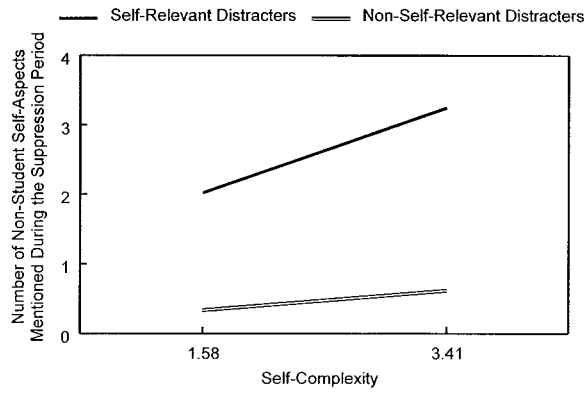

FIG. 2. Interaction between self-complexity and distracter type for the number of non-student self-aspects mentioned during the suppression period.

at thought suppression. To examine whether those who were asked to suppress unwanted self-relevant thoughts in the current study showed increased accessibility for these thoughts, a multiple regression analysis was conducted regressing *H*, two contrast vectors (suppressers vs expressers and self-relevant distracters vs non-self-relevant distracters), and their interactions with *H* on the accessibility scores. A marginal main effect for the first vector (suppressers vs expressers) was found, $\beta = .51$, $t(96) = 1.77$, $p < .08$, demonstrating that suppressers tended to reveal more student-related completions ($M = 10.26$) than did expressers ($M = 9.81$). These results are consistent with the findings of Macrae et al. (1994), who suggested that a residual level of activation following suppression partly underlies the rebound effect.

Self-Complexity Spillover

In an investigation of the affective–extremity hypothesis, Linville (1985) found that those lower in self-complexity reported greater change in mood and self-evaluation following self-relevant feedback than did those greater in self-complexity. The current study allowed for a replication of this finding. A negative correlation was found between *H* and self-esteem change scores, $r(96) = -.24$, $p < .05$, revealing that those lower in self-complexity reported a greater drop in self-esteem following the negative feedback. This finding is consistent with the affective–extremity hypothesis posited by Linville (1985). Analyses also revealed a marginal negative relation between *H* and positive mood change scores, $r(96) = -.18$, $p < .07$, suggesting that those lower in self-complexity tended to report a greater drop in their positive mood following the negative feedback, which is also consistent with the affective–extremity hypothesis. However, no relation between *H* and negative mood change scores was found, $r(96) = -.05$, n.s.[3]

DISCUSSION

The primary purpose of the current study was to investigate the role that self-concept organization plays when one is attempting to distract oneself from unwanted self-relevant thoughts by focusing on other aspects of one's life. Although previous research (e.g., Linville, 1985, 1987) has shown that self-concept organization is related to self-relevant affect, its implications for thought suppression have not been explored. The current research attempted to shed light on this relation.

Furthermore, this investigation attempted to understand why some prior work examining the suppression of self-relevant thoughts has not demonstrated the rebound effect. Kelly and Kahn (1994) suggested that the reason for not obtaining rebound effects for self-relevant thoughts in their study might be because individuals have more experience suppressing self-relevant thoughts than they do suppressing non-self-relevant thoughts. Because participants in their study chose their own personally intrusive thoughts to suppress, they may have relied on a set of distracters proven to be relatively effective in prior attempts to suppress the thoughts. Interestingly, however, other research (e.g., Howell & Conway, 1992; Wegner & Gold, 1995) has revealed the rebound effect following suppression of self-relevant thoughts. The current research attempted to identify a moderating variable, self-complexity, that might reveal when self-relevant rebound is more likely to occur.

Because we were interested in how the strength of association among one's self-aspects might moderate the relation between suppressing unwanted self-relevant thoughts and subsequent rebound of these thoughts, self-complexity seemed to be the most relevant conceptualization of self-concept organization. We predicted and found that participants lower in self-complexity focusing on self-relevant distracters during suppression revealed greater rebound of to-be-suppressed thoughts than did those greater in self-complexity. Thus, the current work demonstrated that self-concept organization moderates the relation between suppression of unwanted self-relevant thoughts and their subsequent rebound. When people had a greater number of self-aspects that were independent of one another to use as distracters during suppression, they were more successful in avoiding unwanted self-relevant thoughts. Indeed, supplemental analyses in the current study indicated that when using self-relevant distraction, those greater in self-complexity used more self-aspects during suppression than did those lower in self-complexity. Hence, those greater in self-complexity were more likely to show the lack of rebound effects observed by Kelly and Kahn (1994).

Thus, the current study shows a role for self-concept organization in successful mental regulation. Moreover, it provides some evidence (i.e., use of alternative self-aspects as distracting thoughts) for how those who are more effective at thought suppression successfully avoid the recurrence of unwanted self-relevant thoughts. This study also provided modest evidence of greater accessibility of unwanted thoughts for those with thought suppression goals. It is likely that the current methodology made observing strong accessibility effects more difficult than did the methodology used by Macrae et al. (1994). Those authors assessed accessibility immediately following suppression,

[3] Readers familiar with self-complexity theory might wonder about the relation between self-complexity and self-esteem in the current study. Findings in the literature (e.g., Campbell, Chew, & Scratchley, 1991; Woolfolk et al., 1995) have been inconsistent (i.e., some showing positive relations and some showing negative relations). The current study revealed a negative relation between *H* and self-esteem measured prior to experimental feedback (Time 1), $r(96) = -.23$, $p < .05$. Similar to Woolfolk et al. (1995), this suggests that those greater in self-complexity had lower self-esteem.

whereas the accessibility measure in the current study was not collected until after the rebound period (i.e., following a delay of at least 5 min after suppression). Because the accessibility of suppressed thoughts will decay with the passage of time (Higgins, Bargh, & Lombardi, 1985), delays in assessing accessibility will reduce the likelihood of observing strong evidence of its existence. Thus, the results of the current study regarding accessibility might have been stronger if the measure immediately followed suppression.

In sum, the current study demonstrated that self-concept organization has important implications for mental control and attendant affect. Because poor mental regulation can lead to ruminative thinking and depression (Wegner & Zanakos, 1994; Wenzlaff, Wegner, & Roper, 1988), and because lower self-complexity has been linked to greater depression (Linville, 1987) and now to greater rebound effects, a marriage of these research lines improves our understanding of how people efficaciously regulate their thoughts and feelings, and it highlights the importance of self-concept representation in self-regulatory processes.

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