# Facilitating Adaptive Emotional Analysis: Distinguishing Distanced-Analysis of Depressive Experiences From Immersed-Analysis and Distraction

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*Two studies examined the psychological processes that facilitate adaptive emotional analysis. In Study 1, participants recalled a depression experience and then analyzed their feelings from either a self-immersed (immersed-analysis) or self-distanced (distanced-analysis) perspective. Participants in the distanced-analysis group focused less on recounting their experience and more on reconstruing it, which in turn led to lower levels of depressed affect. Furthermore, comparisons to a distraction group indicated that distanced-analysis was as effective as distraction in reducing depressed affect relative to the immersed-analysis group. Study 2 replicated these findings and showed that both 1 day and 7 days after the experimental manipulations, participants in the distanced-analysis group remained buffered against depressed affect and reported experiencing fewer recurring thoughts about their depression experience over time compared to both the immersed-analysis and distraction groups.*

***Keywords:*** *psychological distance; rumination; emotion regulation; depression; emotional processing; autobiographical memory*

> He who knows himself is enlightened.
>
> —Lao Tzu
>
> The ultimate value of life depends on awareness and contemplation.
>
> —Aristotle

Philosophers, psychologists, and laymen alike have long assumed that it is valuable to understand one's feelings. Analyzing why one is feeling a certain way may provide people with important insights that meaningfully influence how they behave, think, and feel in the future (e.g., Carver & Scheir, 1998; Duval & Wicklund, 1972; Martin & Tesser, 1996). Understanding the reasons underlying one's feelings is particularly relevant for coping with negative experiences. Substantial evidence suggests that it is helpful to process and analyze negative feelings to reduce the frequency and intensity of emotional disturbances (e.g., Greenberg, 2002; Pennebaker & Graybeal, 2001; Rachman, 1980; Stanton, Kirk, Cameron, & Danoff-Burg, 2000). For example, a key objective of cognitive therapy is to help clients understand the maladaptive thoughts that give rise to their feelings (e.g., Beck, 1972). Similarly, strategies and interventions that direct individuals to construct narratives

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about upsetting events have been shown to lead to a variety of physical and mental health benefits (for reviews, see Pennebaker & Graybeal, 2001; Smyth, 1998), presumably by leading people to assign meaning, coherence, and structure to their emotions (Chung & Pennebaker, 2007).

These findings coexist, however, with an alternative literature indicating that people's efforts to constructively analyze negative feelings are easily undermined in one of two directions. Because the act of facing negative experiences is intrinsically aversive—when the memory of a negative emotional episode is accessed, the physiological and experiential components of the corresponding emotions also are activated (Bower, 1981; Lang, 1983; Leventhal, 1984)—they often trigger escape and avoidance defense mechanisms (e.g., Foa & Kozak, 1986; Greenberg, 2002). Although these avoidance mechanisms may reduce distress in the short term, by definition, they prevent people from processing and analyzing them. Alternatively, efforts to understand negative emotional states also have been shown to entangle individuals in rumination that, ironically, further increases negative affect. Rumination involves focusing repeatedly and passively on what one is feeling and why one is feeling a certain way (Nolen-Hoeksema, 1991). It has been shown to enhance anger and aggression (e.g., Bushman, 2002; Rusting & Nolen-Hoeksema, 1998), lead to higher levels of depressive symptoms over time (e.g., Nolen-Hoeksema & Morrow, 1991; Nolen-Hoeksema, Morrow, & Fredrickson, 1993), impair problem-solving ability (Lyubomirsky & Nolen-Hoeksema, 1995; Lyubomirsky, Tucker, Caldwell, & Berg, 1999), and both precipitate and maintain depressive disorders (Nolen-Hoeksema, 2000). Indeed, in their meta-analysis of the literature on self-focused attention and negative affect, Mor and Winquist (2002) found that rumination was more strongly related to negative affect than any other type of self-focus.

Given these contradictory findings, a key challenge is to determine how people can confront negative experiences to adaptively analyze them without engaging in either avoidance or rumination. The present research was conducted to address this issue.

### Processes Distinguishing Adaptive and Maladaptive Emotional Analysis

Interest in documenting when and why people's attempts to analyze negative feelings succeed or fail has surged throughout the past decade (e.g., Trapnell & Campbell, 1999; Treynor, Gonzalez, & Nolen-Hoeksema, 2003; Watkins, 2004). Recently, Kross, Ayduk, and Mischel (2005) proposed that a critical mechanism determining whether people's attempts to understand negative feelings will be adaptive or maladaptive is the type of self-perspective that they adopt while analyzing their feelings.

Research on mood and memory indicates that when people focus on negative experiences, they typically do so from a self-immersed perspective in which self-relevant events and emotions are experienced in the first person (Nigro & Neisser, 1983). However, experiences can also be focused on from a self-distanced perspective in which the individual becomes an observer of the self (e.g., James, 1890; Libby & Eibach, 2002; McIsaac & Eich, 2004; Pronin & Ross, 2006; Robinson & Swanson, 1993). In prior research, Kross et al. (2005) predicted and found that when participants were instructed to analyze feelings surrounding a recent anger experience from a self-immersed perspective (immersed-analysis from hereon), episodic information concerning the specific chain of events (e.g., "He told me to back off"; "I remember watching her cheat on me . . . ") and emotions experienced (e.g., "I was so angry . . . ") became more accessible, leading people to primarily recount their experience. In contrast, participants who analyzed their feelings from a self-distanced perspective (distanced-analysis from hereon) focused relatively less on what happened to them (i.e., recounting) and relatively more on reconstruing the event (e.g., "I understand why the fight happened. It might have been irrational but I understand his motivation now"). Moreover, this shift in the content of peoples' thoughts about their experience (less recounting, more reconstruing) mediated the effect of the perspective manipulations on negative affect, enabling participants in the distanced-analysis group to focus on their feelings without becoming emotionally overwhelmed (also see Strack, Schwarz, & Gschneidinger, 1985; Trope & Liberman, 2003).[1] Recent work has extended these findings to the physiological level of analysis, indicating that distanced-analysis (relative to immersed-analysis) leads to reductions in blood pressure reactivity when individuals are instructed to analyze anger-related feelings (Ayduk & Kross, 2008).

### Overview of Present Research

Building on these findings, the present research had four goals. The first goal was to examine whether the beneficial effects associated with analyzing anger-related feelings from a self-distanced perspective (Kross et al., 2005) generalize to depression experiences. Prior research indicates that depression experiences are potent elicitors of ruminative processing (e.g., Nolen-Hoeksema, 1991; Teasdale, 1988). Therefore, examining

whether distanced-analysis enables individuals to analyze such experiences adaptively, without leading to increased levels of depressed affect, has both important applied and theoretical implications.

Our second goal was to examine whether distanced-analysis attenuates the amount of first-person pronouns participants use when describing the stream of thoughts they experience as they analyze depression-related feelings. Prior research indicates that depressed individuals use first-person pronouns such as "I" more when writing about their feelings than do individuals who are less vulnerable to depression (Bucci & Freedman, 1981; Rude, Gortner, & Pennebaker, 2004; Stirman & Pennebaker, 2001). This finding is consistent with research suggesting that increased self-focus is a key feature of depression (e.g., Ingram, Lumry, Cruet, & Sieber, 1987; Pyszczynski & Greenberg, 1987; Smith & Greenberg, 1981). Thus, we hypothesized that to the extent that distanced-analysis facilitates adaptive changes in the way people focus on depression experiences, it should lead people to use first-person pronouns less when describing their depression experiences compared to immersed-analysis.

The third goal of this research was to examine the incremental utility of distanced-analysis relative to distraction. Distraction is an extremely effective means of reducing depressed affect in the short term because it leads people to avoid thinking about their experience (e.g., Nolen-Hoeksema 1991; Park, Goodyer, & Teasdale, 2004). In the present research, we reasoned that distanced-analysis would be as effective in reducing depressed affect as distraction. This hypothesis is motivated by research demonstrating that instructing children to psychologically distance themselves from appetitive stimuli through cognitive reconstrual strategies is as effective as distraction in facilitating adaptive impulse control (Metcalfe & Mischel, 1999; Mischel, Shoda, & Rodriguez, 1989).

The final goal of this research was to examine whether distanced-analysis alters people's memory of their depression experience in ways that reduce its aversiveness, a process referred to as "emotional processing" (Foa & Kozak, 1986; Rachman, 1980). Prior research suggests that to the extent that a person's memory of a negative experience has been altered in ways that reduce its aversiveness, the individual should display lower levels of emotional reactivity when that memory becomes reactivated in the future (Foa & Kozak, 1986; Rachman, 1980). To examine whether distanced-analysis facilitates such emotional processing, we examined its effects on two theoretically relevant outcome variables assessed either 1 day or 7 days after the experimental manipulations. We predicted that distanced-analysis would buffer individuals against future depressed affect when participants were asked to recall and think about their depression experience in the second session and lead them to experience fewer recurring thoughts about their depression experience over the time period between Sessions 1 and 2. In contrast, we expected neither immersed-analysis nor distraction to have such adaptive, long-term, protective effects.

These goals were pursued in two studies. Study 1 was a single session experiment, whereas Study 2 examined longitudinal effects by assessing outcomes of interest either 1 day or 7 days after the first experimental session.

## STUDY 1

### Method

#### *Sample*

Participants were 141 English-native-language-speaking Columbia University affiliates (66 men, 75 women; age $M$ = 23.88 years, $SD$ = 6.96 years) who completed the experiment to earn $10. 58% were Caucasian, 14% were Asian American, 16% were African American, 4% were Hispanic, and 8% were from other ethnicities. Participants were recruited to participate in a study on language and emotion and were walked through the study via prerecorded audio instructions (see Kross et al., 2005).

#### *Procedure and Materials*

*Memory recall task and experimental manipulations.* After a brief introduction, participants were cued to recall an experience in which they felt overwhelming feelings of sadness and depression using a guided imagery task adapted from prior research (Kross et al., 2005). They were then randomly assigned to one of three experimental conditions: immersed-analysis ($n$ = 48), distanced-analysis ($n$ = 48), or distraction ($n$ = 45). The immersed-analysis and distanced-analysis manipulations consisted of two phases. First, participants were instructed to adopt either a self-immersed perspective (e.g., "Go back to the time and place of the experience and relive the situation as if it were happening to you all over again . . . ) or self-distanced perspective (e.g., "Go back to the time and place of the experience . . . take a few steps back and move away from your experience . . . watch the experience unfold as if it were happening all over again to the distant you . . . ) and to press the space bar as soon as they had done so. The amount of time participants were given to adopt each perspective was left open because prior research indicates that participants take longer to adopt a self-distanced perspective (Ayduk & Kross, 2008). Subsequently, both groups were instructed to analyze their feelings for 30 seconds from the perspective they

were told to adopt. These instructions were identical to those used in previous research (Kross et al., 2005).

Participants in the distraction condition were presented with a series of 45 statements (e.g., "pencils are made with graphite"; "Scotland is north of England") and were asked to think about the information conveyed in each sentence when it appeared on screen. In pilot work, these items were rated (1 = *not emotional at all*, 7 = *very emotional*) by two independent coders and were judged to be affectively neutral ($M = 1.32$, $SD = 0.56$). This manipulation followed established procedures (e.g., Nolen-Hoeksema & Morrow, 1993) and took 8 min to complete. This task was selected because it is the one most often used in studies of rumination and therefore provides a common metric with prior research to compare distanced-analysis against.

*Depressed affect*. Following the experimental manipulations, participants completed the paper-and-pencil version of the valence subscale of the Self-Assessment Manikin, which asks participants to rate how they feel "RIGHT NOW" (SAM; Bradley & Lang, 1995). The SAM manikin figures range from a happy, smiling figure (1 = *very pleasant*) to an unhappy, frowning figure (9 = *very unpleasant*). Given the current study's focus on depression, participants also rated the degree to which they felt "sad" and "depressed" at that moment during the experiment (1 = *not at all*, *5* = *extremely*). These ratings were averaged to create a depression score ($\alpha = .84$, $M = 2.86$, $SD = 1.86$). The SAM valence and the depressed affect scores were collapsed to form a single index of depressed affect ($\alpha = .72$, $M = 3.95$, $SD = 1.52$) after depression scores were rescaled to a 9-point scale.

*Stream of thought essays*. Next, participants described in writing the thoughts that flowed through their mind as they thought about their depression experience during the memory recall and manipulation phases of the experiment. Two types of coding were performed on participants' essays.

Two independent judges blind to condition rated participants' essays on the extent to which they contained recounting and reconstruing statements (0 = *not at all*, 2 = *very much*). Interjudge reliabilities were good (all *r*s > .79). Therefore, final ratings were averaged across the two judges. Although participants in the distraction group also completed this writing task, their essays focused predominantly on the distraction task itself (e.g., how they approached that task, what they thought its purpose was) rather than the experience they recalled. Therefore, the essays for distraction participants were not coded.

Following coding guidelines established in prior research (Kross et al., 2005), recounting statements were defined as episodic, *what* statements describing the specific chain of events, behaviors, and emotions experienced ($M = 1.10$, $SD = 0.49$; e.g., "I went to the top of the stairwell and cried for a long time"). Reconstruing statements were operationalized as (a) statements describing a realization about or change in the way the participant understood the causes underlying the event or their feelings ($M = 0.27$, $SD = 0.53$; e.g., "I thought about how foolish it seems in retrospect") and (b) statements in which participants indicated that they were assessing their past experience from a broad perspective, taking into account past and current experiences to make sense of their feelings and experience ($M = 0.34$, $SD = 0.62$; e.g., "I thought about how glad I am that that part of my past is over"). Ratings on the extent to which these two types of statements characterized each essay, $r(91) = .33$, $p \leq .001$, were collapsed to form a single reconstruing index ($M = 0.30$, $SD = 0.47$).

Participants' stream of thought essays were also analyzed for pronoun use with the Linguistic Inquiry and Word Count (LIWC; Pennebaker, Francis, & Booth, 2001). This program analyzes texts on a probabilistic basis by comparing files on a word-by-word basis to a dictionary of 2,290 words and word stems that are organized into several different language categories. The text analysis produces the analyzed text as the percentage of total words found along these language categories. In the present research, we used this program to code for the percentage of first-person singular pronouns (I, me, my; $M = 11.00\%$, $SD = 4.65\%$).

*Postexperiment questionnaire*. A postexperiment questionnaire administered at the end of the study asked participants to indicate their level of engagement in the experiment. Prior research indicates that strength of task engagement influences affective experiences, with higher levels of engagement leading to more intense affective experiences (Higgins, 2006; also see Crocker & Wolfe, 2001). In this study, we reasoned that there would be natural variability in participants' level of engagement in the experiment. We therefore asked participants to rate how engaged they were in the experiment on a 7-point scale (1 = *not at all engaged*, 7 = *very engaged*; $M = 4.98$, $SD = 1.18$) to control for the effects of this variable. Engagement ratings did not differ as a function of condition ($F < 1$).

## Results

### *Exclusions and Missing Data*

Two participants were excluded because they did not follow protocol. In addition, essays from 3 participants could not be coded because they did not describe

a specific emotional experience. Finally, 1 participant submitted a partially incomplete dependent measure packet, resulting in a total of four missing values for the entire data set for this subject.

### Overview of Analyses

Preliminary analyses indicated that engagement moderated the effect of condition on first-person pronoun use but not depressed affect or thought content. Therefore, the interaction between condition and engagement was included in the analysis of first-person pronoun use but not depressed affect or thought content.[2]

### Depressed Affect

General Linear Models (GLM) analysis was used to test group differences (immersed-analysis vs. distanced-analysis vs. distraction) in depressed affect, controlling for engagement. The effect of condition was significant, $F(2, 134) = 4.76$, $p \leq .01$, $\eta^2 = .07$, with immersed-analysis participants displaying significantly higher levels of depressed affect compared to distanced-analysis, $F(1, 134) = 5.09$, $p < .05$, $\eta^2 = .04$, and distraction, $F(1, 134) = 8.64$, $p < .005$, $\eta^2 = .06$, participants. The latter two groups did not differ significantly from each other ($F < 1$, see Figure 1). Engagement was not a significant predictor of this variable ($F < 1$).

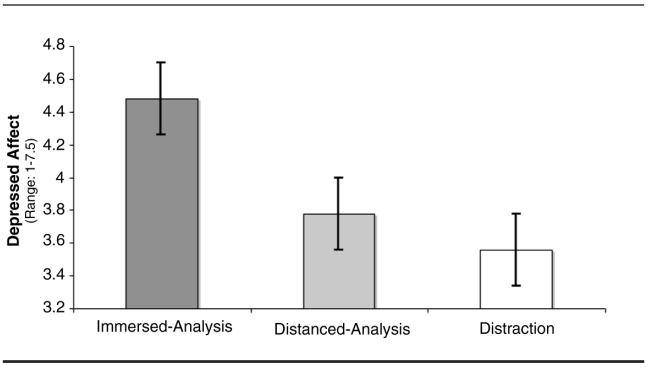


**Figure 1** Study 1, depressed affect.

### Thought Content (Recounting vs. Reconstruing)

A repeated-measures GLM was conducted with thought content (recounting vs. reconstruing) as the within-participant factor, condition as the between-participants factor, and engagement as the covariate. Because we did not have thought content data for the distraction group, condition was used as a two-level, between-participants factor. This analysis yielded a significant effect of thought content, indicating that participants in both the immersed-analysis and distanced-analysis groups engaged in more recounting than reconstruing, $F(1, 88) = 6.69$, $p \leq .01$, $\eta^2 = .07$. This effect was qualified, however, by a significant Condition × Thought Content interaction, $F(1, 88) = 6.87$, $p \leq .01$, $\eta^2 = .07$, indicating that participants in the distanced-analysis group engaged in relatively less recounting and relatively more reconstruing than did participants in the immersed-analysis group (see Figure 2, Panel A). Engagement was not a significant predictor of this variable ($F < 1$).

### Does Thought Content Mediate the Effect of Condition (Immersed-Analysis vs. Distanced-Analysis) on Depressed Affect?

Recounting and reconstruing statements were negatively correlated, $r(91) = -.27$, $p < .01$. Therefore, following Kross et al. (2005), mediation analysis was conducted after reconstruing scores were subtracted from recounting scores to form a single thought content index, with higher scores indicating a greater degree of recounting relative to reconstruing ($M = 0.80$, $SD = 0.77$). We followed Shrout and Bolger's (2002) approach for assessing mediation, which involves demonstrating the following four effects in order: (a) The predictor variable significantly affects the outcome variable; (b) the predictor variable significantly affects the mediator; (c) the effect of the mediator on the outcome variable is significant, controlling for the direct effect of the predictor variable, on the outcome variable; and (d) the mediated path from the predictor variable through the mediator to the outcome variable is significant, as indicated by a bootstrap test (Preacher & Hayes, 2004). All analyses controlled for engagement ratings. Betas reported are standardized.

As indicated above, a significant relationship was observed between condition (0 = immersed-analysis, 1 = distanced-analysis) and both the outcome variable, depressed affect ($\beta = -.26$, $p \leq .01$, 95% Confidence Interval [CI] = [–1.43, –0.17]), and the mediator, thought content ($\beta = -.27$, $p \leq .01$, 95% CI = [–0.72, –0.10]). Consistent with the third step required to establish mediation, the effect of thought content on depressed affect was significant when controlling for the effect of condition ($\beta = .36$, $p \leq .001$, 95% CI = [0.32, 1.12]). Finally, the results of a bootstrap test indicated that the mediated path from condition through thought content to depressed affect was significant (mediated condition effect: 95% CI = [–0.67, –0.06]; see Figure 3, Panel A).[3]

### First-Person Pronoun Use

Our final analysis examined whether distanced-analysis led to reductions in the amount of first-person pronouns in participants' essays. Because we did not have relevant thought content data for the distraction group,

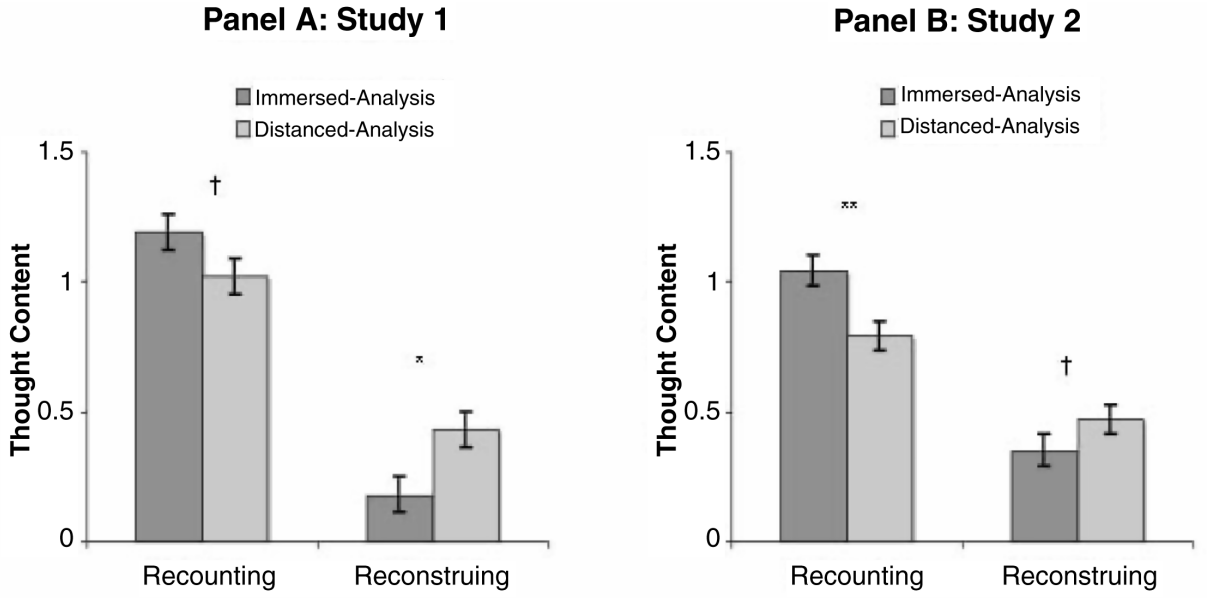


**Figure 2** Level of recounting versus reconstruing in immersed-analysis and distanced-analysis groups in Study 1 (Panel A) and Study 2 (Panel B).[4]
†$p \leq .10$. *$p \leq .05$. **$p \leq .01$.

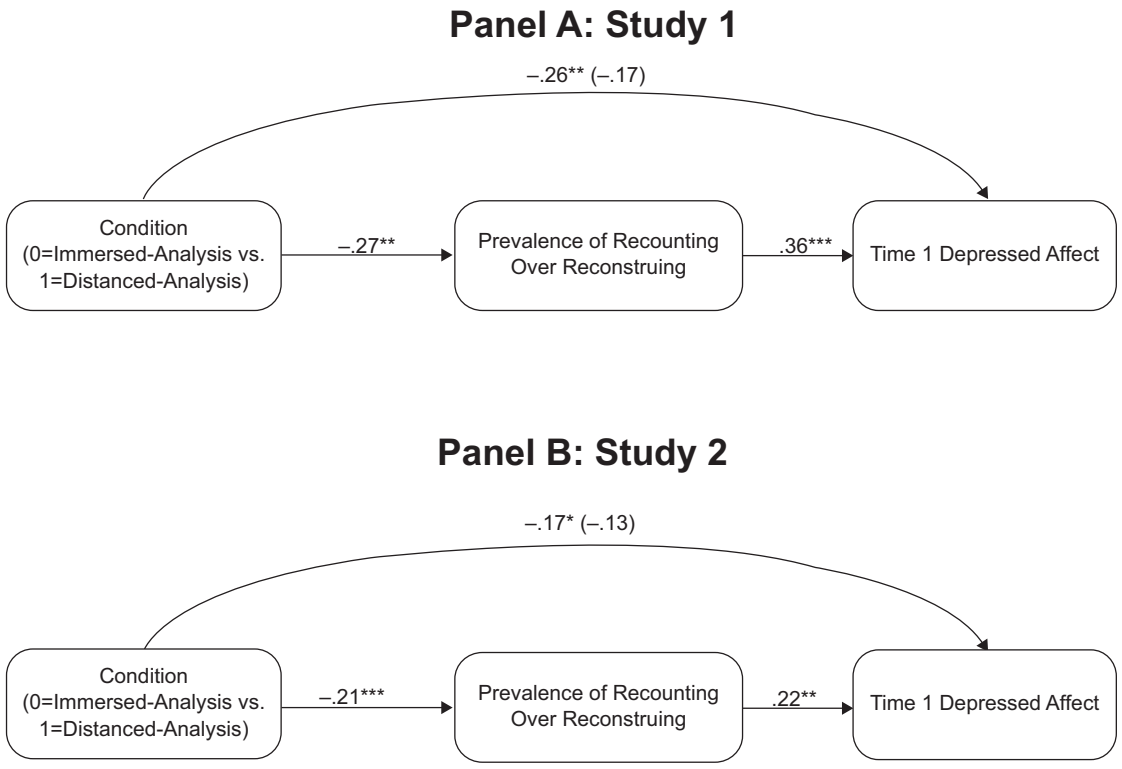


**Figure 3** Standardized betas from a path analysis examining the role that recounting versus reconstruing plays in mediating the effect of condition (immersed-analysis vs. distanced-analysis) on depressed affect, Study 1 (Panel A) and Study 2 (Panel B).
NOTE: The standardized beta in parentheses shows the relationship between condition and depressed affect after controlling for thought content.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .005$.

condition was again used as a two-level, between-participants factor. This analysis revealed a significant interaction between engagement and condition, $F(1, 86) = 4.48$, $p < .05$, $\eta^2 = .05$. Simple slope analyses indicated that among participants high in engagement (1 *SD* above the mean), there was a trend for distanced-analysis to be related to lower first-person pronoun use ($b = -2.14$, $p = .12$). This trend was reversed ($b = 1.98$, $p = .15$) among participants low in engagement (1 *SD* below the mean).

## STUDY 2

Study 1 showed that the beneficial effects associated with distanced-analysis, observed previously for reducing negative affect surrounding anger experiences, generalize to coping with depression experiences. In addition, they indicated that distanced-analysis is equally effective as distraction in reducing short-term depressed affect relative to immersed-analysis. The primary goal of Study 2 was to examine whether distanced-analysis leads to adaptive changes in the way individuals represent depression experiences that buffer them against future depressed affect and recurrent thinking about their depression experience over time.

A secondary goal of this study was to examine further the effect of distanced-analysis on first-person pronoun use because the results from Study 1 were inconclusive—there was a trend for distanced-analysis (compared to immersed-analysis) to reduce first-person pronoun use among highly engaged participants, whereas the reverse trend was observed for low-engagement participants. Because we did not predict this interaction and no similar interactions were observed between condition and engagement in predicting any other findings, we examined the effect of distanced-analysis on this variable again in Study 2 using a larger sample size.

To address these issues, participants in Study 2 first went through the Study 1 procedure and then returned to the lab either 1 day or 7 days later. During the second session, they were instructed to bring to mind the same experience they thought about during the first session and to think about their "deepest thoughts and feelings" regarding it. Thus, all participants received the same instructions during the second session, none of which directed them to engage in a specific strategy. Participants then indicated their current level of depressed affect and the number of times they thought about their depression experience throughout the time period separating the two sessions.

At Time 1, we hypothesized that the present study would replicate the Study 1 findings for depressed affect and thought content. In addition, we predicted that distanced-analysis would lead to lower levels of first-person pronoun use than immersed-analysis. At Time 2, we hypothesized that the Time 1 experimental manipulations would have the following effects.

### Time 2 Depressed Affect

We predicted that instructing individuals to analyze depression experiences from a self-distanced perspective at Time 1 would lead to changes in the way they cognitively represent those events, altering their meaning in ways that reduce their aversiveness. Thus, we expected distanced-analysis to buffer individuals against depressed affect when thoughts about their experience become reactivated during Session 2. In contrast, because neither immersed-analysis nor distraction were expected to lead to similar changes in the way participants represent their experiences, participants in both of these groups were expected to report higher levels of depressed affect at Time 2 relative to the distanced-analysis group.

We also predicted that the experimental manipulations administered at Time 1 would have implications for the amount of depressed affect participants experienced over time. Specifically, we expected the distraction group to display higher levels of depressed affect at Time 2 (when participants were not instructed to distract) than at Time 1 (when they were distracted). In contrast, no significant changes in affect were hypothesized for the distanced-analysis and immersed-analysis groups. That is, whereas we expected the former group to display the same relatively low levels of depressed affect across the two sessions, we expected the latter group to display the same relatively high levels of depressed affect across the two sessions.

### Recurrence of Event-Related Thoughts

Immersed-analysis participants displayed significantly higher levels of depressed affect than did distanced-analysis participants in Study 1. The rumination literature indicates that increased levels of depressed affect lead event-related thoughts to remain accessible because people focus on them in an effort to understand them (Nolen-Hoeksema, 1991). Therefore, we hypothesized that to the extent that the immersed-analysis group continues to experience high levels of depressed affect about their recalled experience after Session 1, they also should report greater recurrence of event-related thoughts during the time period separating the two study sessions.

Although participants in the distraction and distanced-analysis groups demonstrated similar levels of depressed affect in Study 1, we hypothesized that distraction participants also would spend more time thinking about their

experience over time relative to distanced-analysis participants. This hypothesis was motivated by research indicating that strategies that reduce negative affect via distraction (or other forms of avoidance) often lead to a "rebound effect" in which thoughts and feelings about the experience that the individual is trying to avoid become reactivated after the experimental manipulation has run its course (e.g., Wegner, Schneider, Carter, & White, 1987; Wenzlaff & Wegner, 2000).

## Method

### *Sample*

Participants were 328 English-native-language-speaking Columbia University affiliates (129 men, 199 women) who took part in the study to earn $15. Participants were recruited to participate in either a 1-day ($n$ = 177) or 7-day ($n$ = 151) study investigating language and memory. The 1-day and 7-day versions of the experiments were run separately but overlapped in time, tapped the same subject pool, and were identical in the procedures used. Preliminary analyses indicated that the results from the two studies were highly similar. Therefore, to be parsimonious and increase the reliability of the reported findings, data from the two samples were combined, with delay period (1 day vs. 7 days) included as a factor in all analyses. The mean age of participants in the combined sample was 21.90 years ($SD$ = 5.22 years); 54% of participants were Caucasian, 14% were African American, 21% were Asian American, and 11% were from other ethnicities. The two samples did not differ significantly from each other on demographic variables.

### *Attrition Rates*

Attrition was significantly higher for the 7-day sample, $\chi^2(1) = 30.52$, $p < .001$. Whereas 24% of participants from the 7-day sample did not return for the second session, 3% of participants from the 1-day sample did not return, resulting in a total of 42 people who did not return for the second session. Attrition rates were not associated with condition, $\chi^2(2) = 2.38$, $p = .31$. All data reported are from participants who completed both sessions.

### *Time 1 Procedure and Materials*

*Depression memory recall task and experimental manipulations*. The procedure used to cue individuals to recall a depression experience and the instructions used to manipulate distanced-analysis (1-day: $n$ = 57, 7-day: $n$ = 38), immersed-analysis (1-day: $n$ = 56, 7-day: $n$ = 40), and distraction (1-day: $n$ = 58, 7-day: $n$ = 37) were identical to those used in Study 1.

*Time 1 depressed affect*. As in Study 1, participants completed the valence subscale of the SAM ($M$ = 5.10, $SD$ = 1.42) and the depression scale ($M$ = 3.06, $SD$ = 1.90). Ratings on these scales were averaged to form a single index of depressed affect ($\alpha$ = .67, $M$ = 4.09, $SD$ = 1.45) after depression scale scores were rescaled. Two participants omitted this question.

*Stream of thought essays*. Participants' essays were coded for two types of information.

Essays in the immersed-analysis and distanced-analysis groups were coded for the presence of recounting ($M$ = 0.91, $SD$ = 0.56) and reconstruing ($M$ = 0.40, $SD$ = 0.53) statements by two independent judges blind to condition following the coding procedure described in Study 1 (all interjudge $r$s > .78). Data from 22 participants were missing on this variable because they either failed to write an essay or their essay did not describe a specific emotional experience and was thus judged to be uncodable.

The LIWC was used to assess the percentage of first-person singular pronoun use in participants' essays ($M$ = 10.76%, $SD$ = 4.34%).

### *Time 2 Procedure and Materials*

*Depression memory recall*. Upon returning to the laboratory, all participants were cued via taped instructions to recall the depression experience they thought about during the first session and then to think about their deepest thoughts and feelings regarding that event.

*Time 2 depressed affect*. Following the recall task, participants completed the same set of affect measures administered at Time 1. Ratings on the SAM valence subscale and the depression scale were again collapsed to form a single index of Time 2 depressed affect ($\alpha$ = .70, $M$ = 4.04, $SD$ = 1.48).

*Recurring thoughts*. Participants were next asked to estimate the number of times they thought about their depression experience during the time span separating the two sessions ($M$ = 11.25, $SD$ = 33.27).[5] The distribution of scores for this variable was highly skewed (skew = 5.65). To reduce skewness, the distribution was winsorized where scores higher than the 95th percentile were rescored into 95% values. Three participants omitted this question.

*Engagement*. Participants rated their engagement levels at Time 1 ($M$ = 4.82, $SD$ = 1.35) and Time 2 ($M$ = 4.43, $SD$ = 1.41). Data from one participant on Time 1 engagement and one participant for Time 2 engagement ratings were missing. In this study, group differences

**TABLE 1:** *F* Values and Significance Levels for Univariate ANCOVAs in Study 2

| | | | *Predictors* | | | |
|---|---|---|---|---|---|---|
| | *Dependent Variables* | N | *Condition* | *Delay Time (1-Day vs. 7-Day)* | *Task Engagement* | *Psychotherapy Status* |
| Time 1 | Depressed affect[a] | 278 | 6.30*** (.04) | 1.88 (.01) | 4.20* (.02) | 1.05 (.00) |
| | First-person pronoun[b] | 167 | 6.50** (.04) | 2.47 (.02) | 0.03 (.00) | 0.15 (.00) |
| Time 2 | Depressed affect[a] | 279 | 3.53* (.03) | 0.60 (.00) | 11.07*** (.04) | 3.40† (.01) |
| | Change in depressed affect[a] | 277 | 4.33* (.03) | 0.22 (.00) | 0.64 (.00) | 0.50 (.00) |
| | Recurring thoughts[a] | 276 | 4.27* (.03) | 4.22* (.02) | 1.99 (.01) | 7.65** (.03) |

NOTE: Numbers in parentheses indicate partial eta-squared effect sizes. For Time 2 dependent variables, task engagement is an average of Time 1 and Time 2 ratings.
a. Condition is a three-level factor (immersed-analysis vs. distanced-analysis vs. distraction).
b. Condition is a two-level factor (immersed-analysis vs. distanced-analysis).
†$p \leq .10$. *$p \leq .05$. **$p \leq .01$. ***$p \leq .005$.

emerged at Time 1, $F(2, 282) = 8.54$, $p < .001$, $\eta^2 = .06$, such that engagement was lower in the distraction group than in the immersed-analysis, $F(1, 282) = 11.41$, $p \leq .001$, $\eta^2 = .04$, and distanced-analysis, $F(1, 282) = 14.07$, $p < .001$, $\eta^2 = .05$, groups. No significant differences were observed between the three groups on Time 2 engagement ($F = 1$).

*Psychotherapy status*. To the extent that being in psychotherapy is a marker of heightened distress, we reasoned that participants undergoing psychotherapy would display higher levels of depressed affect and recurring thoughts. Consequently, we used this variable as an exploratory covariate in all analyses; 13% of participants in the two samples indicated that they were currently undergoing psychotherapy. Participants did not differ across conditions on this variable, $\chi^2(2) = 3.92$, $p = .14$.

## Results

### *Exclusions and Missing Data*

Data from one subject whose condition information was not recoverable due to a computer malfunction and five participants who did not follow instructions were excluded from all analyses. In addition, as mentioned above, for each dependent variable, a number of values were missing due to participants' failure to complete the study materials.

### *Overview of Analyses*

Preliminary analyses indicated that condition and delay period did not interact with each other or with the covariates. Therefore, interaction terms between these variables were not included in the analyses reported below. In addition, as in Study 1, condition was used as a two-level, between-participants factor for all analyses involving participants' essays because we did not have relevant data for the distraction group. Omnibus *F*s and group means are presented in Tables 1 and 2, respectively (refer again to Note 2).

### *Time 1 Variables*

*Depressed affect*. The effect of condition on depressed affect was significant (see Tables 1 and 2). Pairwise comparisons indicated that participants in the immersed-analysis group displayed significantly higher levels of depressed affect than did participants in both the distanced-analysis, $F(1, 272) = 5.90$, $p < .05$, $\eta^2 = .02$, and distraction, $F(1, 272) = 11.77$, $p \leq .001$, $\eta^2 = .04$, groups. Distanced-analysis and distraction participants did not differ significantly from each other on this variable ($F \leq 1$). Although there was no effect of delay period or psychotherapy status on this variable, higher engagement predicted higher levels of negative affect (see Table 1).

*Thought content*. As in Study 1, a repeated-measures GLM was run on thought content. This analysis yielded a significant effect of thought content indicating that participants in both the immersed-analysis and distanced-analysis groups engaged in more recounting than reconstruing, $F(1, 162) = 12.55$, $p \leq .001$, $\eta^2 = .07$. However, this effect was again qualified by a significant Condition × Thought Content interaction, $F(1, 162) = 7.94$, $p \leq .005$, $\eta^2 = .05$, indicating that distanced-analysis participants engaged in relatively less recounting and relatively more reconstruing compared to immersed-analysis participants (see Figure 2, Panel B).

This analysis also revealed a significant Delay Period × Thought Content interaction, $F(1, 162) = 13.01$, $p < .001$,

**TABLE 2:** Adjusted Means and Standard Errors for the Effect of Condition on Study 2 Dependent Variables (DVs)

| | | *Experimental Condition* | | |
|---|---|---|---|---|
| | *Sample* | *Immersed-Analysis* | *Distanced-Analysis* | *Distraction* |
| Time 1 DVs | | | | |
| Depressed affect | Combined | 4.48[a] (0.15) | 3.98[b] (0.15) | 3.75[b] (0.15) |
| | 1-day | 4.42 (0.19) | 3.94 (0.19) | 3.58 (0.19) |
| | 7-day | 4.58 (0.22) | 4.00 (0.23) | 4.04 (0.24) |
| Recounting statements | Combined | 1.04[a] (0.06) | 0.79[b] (0.06) | — |
| | 1-day | 1.12 (0.07) | 0.88 (0.08) | |
| | 7-day | 0.93 (0.10) | 0.66 (0.10) | |
| Reconstruing statements | Combined | 0.35[a] (0.06) | 0.47[a] (0.06) | — |
| | 1-day | 0.23 (0.07) | 0.38 (0.07) | |
| | 7-day | 0.54 (0.10) | 0.60 (0.10) | |
| Recounting minus reconstruing | Combined | 0.70[a] (0.09) | 0.33[b] (0.09) | — |
| | 1-day | 0.89 (0.11) | 0.50 (0.12) | |
| | 7-day | 0.39 (0.16) | 0.06 (0.16) | |
| First-person pronouns | Combined | 11.69[a] (0.46) | 10.03[b] (0.46) | — |
| | 1-day | 12.03 (0.61) | 10.53 (0.63) | |
| | 7-day | 11.26 (0.66) | 9.20 (0.64) | |
| Time 2 DVs | | | | |
| Depressed affect | Combined | 4.29[a] (0.15) | 3.73[b] (0.15) | 4.12[ab#] (0.15) |
| | 1-day | 4.22 (0.19) | 3.75 (0.19) | 4.00 (0.19) |
| | 7-day | 4.39 (0.24) | 3.68 (0.25) | 4.32 (0.26) |
| Change in depressed affect | Combined | –0.18[a] (0.17) | –0.26[a] (0.17) | 0.40[b] (0.17) |
| | 1-day | –0.21 (0.21) | –0.22 (0.21) | 0.49 (0.21) |
| | 7-day | –0.16 (0.28) | –0.34 (0.29) | 0.27 (0.30) |
| Recurring thoughts | Combined | 8.67[a] (1.15) | 4.22[b] (1.18) | 8.06[a] (1.17) |
| | 1-day | 7.86 (1.31) | 3.76 (1.34) | 6.14 (1.28) |
| | 7-day | 9.94 (2.03) | 4.67 (2.11) | 11.25 (2.19) |

NOTE: Numbers in parentheses are standard errors. For each row, means with different superscripts are different from each other at $p \leq .05$.
[#]The pairwise comparison between distraction and distanced-analysis for time 2 depressed affect was marginally significant ($p = .08$).

$\eta^2 = .07$, indicating that participants in the 7-day group engaged in relatively less recounting and relatively more reconstruing than did participants in the 1-day group (for means, see Table 2). However, the three-way interaction between delay period, condition, and thought content was not significant ($F < 1$). Thus, the effects of the experimental manipulations on both the 7-day and 1-day groups were in the same direction. There were no effects of engagement or psychotherapy status ($F$s < 1.25, $p$s > .34).

### *Does Thought Content Mediate the Effect of Condition (Immersed-Analysis vs. Distanced-Analysis) on Depressed Affect?*

Recounting and reconstruing scores were negatively correlated, $r(168) = –.33$, $p < .001$. Therefore, reconstruing scores were subtracted from recounting scores to create a single thought content index ($M = 0.51$, $SD = 0.89$) where higher scores indicated a greater degree of recounting relative to reconstruing. As noted above, and consistent with the first two steps required for establishing mediation (Shrout & Bolger, 2002), the effect of condition was significant for both depressed affect ($\beta = –.17$, $p < .05$, 95% CI = [–0.94, –0.08]) and thought content ($\beta = –.21$, $p \leq .005$, 95% CI = [–0.63, –0.11]). Consistent with the third step required to establish mediation, the effect of the mediator on the outcome variable was significant when controlling for the effect of the condition variable ($\beta = .22$, $p < .01$, 95% CI = [0.10, 0.61]). Finally, a bootstrap test indicated that the effect of the condition variable on depressed affect was significantly mediated by thought content (mediated condition effect: 95% CI = [–0.29, –0.03]; see Figure 3, Panel B; refer again to Note 3).

*First-person pronoun use*. The essays of participants in the immersed-analysis group contained significantly more first-person singular pronouns compared to the essays of participants in the distanced-analysis group. There was no effect of delay time, engagement, or psychotherapy status on this variable (see Tables 1 and 2).

### *Time 2 Variables*

*Depressed affect*. The effect of condition on Time 2 depressed affect was significant (see Tables 1 and 2). Distanced-analysis participants displayed significantly lower levels of depressed affect at Time 2 than both immersed-analysis, $F(1, 273) = 6.75$, $p \leq .01$, $\eta^2 = .02$,

and distraction, $F(1, 273) = 3.13$, $p = .08$, $\eta^2 = .01$, participants. The latter two groups did not differ on this variable ($F < 1$). In addition, the effect of engagement was significant for this variable, with higher levels of engagement predicting higher levels of depressed affect, and the effect of psychotherapy status was marginal, with participants who were undergoing psychotherapy displaying marginally higher levels of depressed affect than participants who were not. There was no effect of delay period (see Table 1).

*Change in depressed affect over time*. To examine changes in negative affect over time, difference scores were computed by subtracting Time 1 depressed affect from Time 2 depressed affect and subjected to GLM analysis. This analysis revealed a significant effect of condition (Table 1), with participants in the distraction group showing a significant increase in depressed affect over time compared to participants in both the immersed-analysis, $F(1, 271) = 5.72$, $p < .05$, $\eta^2 = .02$, and distanced-analysis, $F(1, 271) = 7.33$, $p < .01$, $\eta^2 = .03$, groups. Participants in the latter two groups did not differ on this variable ($F < 1$) and there were no effects of delay period, psychotherapy status, or engagement (see Table 1).

To examine whether changes in depressed affect were significantly different from zero within each group, we conducted one-sample *t* tests on the Time 1 – Time 2 adjusted (for covariates) depressed affect difference scores. These analyses revealed that participants in the distraction group displayed a significant increase in negative affect over time, $t(91) = 2.06$, $p < .05$, $d = .43$. In contrast, participants in the distanced-analysis, $t(90) = -1.50$, $p = .14$, $d = .32$, and immersed-analysis, $t(93) = -1.06$, $p = .29$, $d = .22$, groups did not show any significant changes in depressed affect over time.

*Recurring thoughts*. GLM analysis revealed a significant effect of condition on recurring thoughts (see Table 1), with distanced-analysis participants displaying significantly fewer recurring thoughts than participants in the immersed-analysis, $F(1, 270) = 7.34$, $p < .01$, $\eta^2 = .03$, and distraction, $F(1, 270) = 5.28$, $p < .05$, $\eta^2 = .02$, groups. Participants in the latter two groups did not differ on this variable ($F < 1$; for means, see Table 2). In addition, controlling for Time 2 depressed affect did not substantively reduce the significance of these effects ($F$s > 3.72, $p$s ≤ .055), indicating that these results were not simply a result of mood priming due to participants having just completed the Time 2 affect measure.

This analysis also revealed that participants in the 7-day group and participants in psychotherapy experienced more recurring thoughts than did participants in the 1-day group and participants who were not in psychotherapy, respectively (see Table 1). Of importance, however, neither of these effects interacted with the effect of condition in predicting recurring thoughts ($F$s < 1).

## Discussion

The present research replicated Kross et al.'s (2005) findings on anger experiences with depression experiences, illustrating the advantage of distanced-analysis over immersed-analysis for reducing depressed affect by leading participants to engage in relatively less recounting of their experience and relatively more reconstruing of it. In addition, it extends previous research in several new directions.

First, the present studies document the relative long-term benefits associated with distanced-analysis. Study 2 demonstrated that when cued to recall and think about the same depression experience 1 day or 7 days after the initial experimental manipulations, distanced-analysis participants continued to show lower levels of depressed affect compared to immersed-analysis participants. This finding indicates that distanced-analysis facilitates emotional processing because it attenuates depressed affect when the memory of an eliciting event is encountered in the future. In addition, distanced-analysis participants reported experiencing fewer recurring thoughts about their depression experience over time compared to the immersed-analysis group. The fact that these long-term effects were observed in response to a relatively brief experimental manipulation speaks to the potential power of distanced-analysis for facilitating adaptive coping.

Second, the present findings indicate that whereas distraction and distanced-analysis were equally powerful in reducing depressed affect in the short term, only the latter retained its benefits in the long term. These findings converge with prior work indicating that avoidance strategies such as distraction, although effective for reducing depressed affect in the short term (Nolen-Hoeksema, 1991), do not lead to changes in the way negative experiences are reacted to in the future (e.g., Holahan, Moos, Holahan, Brennan, & Schutte, 2005).

Last, findings from Study 2 showed that distanced-analysis participants used first-person singular pronouns less frequently than did immersed-analysis participants when describing the thoughts that streamed through their mind as they analyzed their feelings during the experiment. This finding provides additional evidence that distanced-analysis leads to adaptive shifts in the way individuals think about depression experiences, buffering against heightened self-focus. Taken together with recent findings showing that distanced-analysis reduces physiological reactivity (Ayduk & Kross, 2008), as well as the thought content and longitudinal data reported in this study, this finding also argues against the possibility that the effects reported here are simply a result of experimenter demand.

### *Does Distanced-Analysis Facilitate Avoidance?*

The term *distanced*, used throughout this article to refer to a psychological process that facilitates adaptive emotional analysis, is often used to refer to an emotional avoidance defense mechanism that undermines adaptive emotion regulation (e.g., Foa & Kozak, 1986; Greenberg, 2002). This contradiction raises the question: Does distanced-analysis reduce depressed affect via avoidance? Two findings from the present studies provide explicit evidence against this interpretation.

First, because distraction is a type of avoidance strategy, distanced-analysis should have led participants to display similar outcomes as the distraction group if it facilitated avoidance. Findings from the present research were not consistent with this account. Whereas participants in the distraction group were left vulnerable to future negative outcomes, demonstrating higher levels of depressed affect at Time 2 and higher levels of recurrent thoughts over time, distanced-analysis participants were buffered against these negative outcomes.

Second, in both studies, recounting statements that contained expressions of "hot" affect were more prevalent than reconstruing statements in both the distanced-analysis and immersed-analysis groups. This finding indicates that participants in both conditions focused on their emotions and feelings during the experiment. As described earlier, the key difference distinguishing them was that the balance of what people thought about was shifted such that distanced-analysis participants engaged in relatively less recounting and relatively more reconstruing. If distanced-analysis led people to focus on depression experiences in a cold, clinical way while completely suppressing emotion (i.e., intellectualization), then distanced-analysis participants should have displayed significantly lower levels of recounting than reconstruing.

### *Relationship to Clinical Research on Adaptive Versus Maladaptive Self-Focus*

It is noteworthy that some research suggests that a "conceptual-evaluative" (abstract) mode of thinking about negative feelings undermines adaptive coping, whereas an "intuitive-experiential" (concrete) mode facilitates it (e.g., Watkins, 2004; Watkins & Moulds, 2005). At first, this work seems to contradict the present findings, which suggest that thinking less concretely (less recounting) and more abstractly (more reconstruing) facilitates emotional processing. We suggest, however, that there are more similarities than differences associated with these two lines of research, with each literature providing an important construct validation of the other. In this vein, it is important to note two overlapping features of the two literatures.

First, both literatures indicate that directing individuals to analyze depressed feelings from their own perspective undermines adaptive emotional analysis. Although the aforementioned clinical research has not focused on the role that type of self-perspective plays in emotional analysis, these studies manipulate "abstract focus" by directing individuals to analyze their feelings from a de facto self-immersed perspective. The present research adds to this literature by demonstrating that it is possible to evaluate one's feelings from different types of self-perspectives and that the type of self-perspective one adopts has implications for adaptive emotional analysis. Although it is unclear whether the present findings generalize to clinical populations, recent research suggests that processes that are conceptually similar to distanced-analysis, such as "decentering" and "metacognitive awareness," facilitate adaptive coping with depression and dysphoria (Teasdale et al., 2002; Watkins, Teasdale, & Williams, 2000, 2003). Thus, preliminary evidence suggests that the beneficial effects associated with distanced-analysis may extend to clinical populations. Future research is clearly needed, however, to address this issue.

Second, although the idea that an "intuitive-experiential" (concrete) focus on depressed feelings facilitates adaptive coping seems directly at odds with present findings, a close examination of how this way of thinking is manipulated—by directing individuals to focus on a series of self-focused items (e.g., "the physical sensations in your body") and then instructing them to "find a phrase, image, or set of words that best describes the quality of what [they] sense" (e.g., Watkins & Moulds, 2005, p. 322)—reveals an important consistency across both lines of research. Namely, both the distanced-analysis and intuitive-experiential focus manipulations lead people to focus on a specific emotional state and then transform that feeling into a symbolic, abstract linguistic representation (i.e., a phrase to describe their experience; a narrative to capture the event). Much theory and research indicates that this process of organizing feelings into language helps facilitate adaptive coping (e.g., Lieberman et al., 2007; for review, see Chung & Pennebaker, 2007). Thus, the fact that both the distanced-analysis and intuitive-experiential manipulations instruct individuals to engage in this process of converting feelings into language suggests that they may provide alternative ways of manipulating similar underlying mechanisms. Of course, feelings can be converted into language to varying degrees (i.e., converting feelings into words, as in the case of affect labeling vs. converting feelings into stories, as in the case of Pennebaker-style writing interventions) and it remains unclear whether, why, and when one type of linguistic transformation is more effective than the other.

### Caveats

A word of caution is in order when interpreting the results of the mediation analyses reported in this article. The present studies were designed to test a specific hypothesis regarding the causal chain of events explaining the effects of distanced-analysis and immersed-analysis on depressed affect. We predicted and found that distanced-analysis would lead to reductions in depressed affect by leading individuals to engage in less recounting and more reconstruing of their experience. Although this finding is consistent with the rationale guiding this research (Ayduk & Kross, 2008; Kross et al., 2005; also see Strack et al., 1985; Trope & Liberman, 2003), it is possible, and indeed likely, that depressed affect may feed back and affect how participants think about their experience (Mor & Winquist, 2002). In this vein, it is noteworthy that the reverse causal pathway from condition to depressed affect to thought content was significant in both of the present studies.[6] We are wary of interpreting this reverse mediation effect, however, because the thought content and negative affect measures used in this study, although administered cross-sectionally, targeted processes at different points in time. Specifically, whereas the thought content question asked participants to describe the stream of thoughts that flowed through their mind during the recall and manipulation phases of the experiment (i.e., as they analyzed their feelings), the affect measures asked participants to indicate how they felt "right now" after the emotional analysis phase of the experiment was over. Thus, on theoretical grounds, the interpretation of this reverse causal pathway (i.e., condition → depressed affect → thought content pathway) is unclear in the present research. Future research should address this issue by assessing thought content and affect in vivo and repeatedly over time.

It is also important to recognize that although distanced-analysis led to a reduction in the use of first-person pronouns in Study 2, in Study 1, only distanced-analysis participants who also reported being highly engaged in the study showed a trend toward lower first-person pronoun use. Because engagement did not moderate any of the other findings in either of the two studies, and because Study 2 found the predicted main effect of condition on pronoun use with a larger sample, we are wary of interpreting the interaction in Study 1.

### Future Directions

Although the present research suggests that the effects of distanced-analysis last more than a week, it remains to be seen whether these effects persist over longer intervals. It also remains unclear how the present findings generalize to different types of emotions (e.g., anxiety) and populations and whether people can be taught how to engage in distanced-analysis in response to negative experiences that occur in vivo. Addressing these issues will help elucidate the translational potential of this research.

As research in this area continues, it also will be important to identify the boundary conditions that determine when distanced-analysis is likely to be productive and when it is not. It is possible, for example, that immediately after a negative emotional response is triggered, individuals may lack the cognitive resources to effectively engage in this strategy (Schmeichel & Baumeister, 2004). Under such circumstances, being flexible and engaging in avoidant strategies to "cool" down may instead be helpful (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004). It is also possible that distanced-analysis may be adaptive for helping people regulate only some negative emotional responses. For example, treatment of certain types of emotional disturbances (e.g., trauma, phobia) may be most effective when individuals are repeatedly exposed to emotion-arousing stimuli until they habituate and no longer display maladaptive reactions (Foa & Kozak, 1986; Telch, Valentiner, Ilai, Petruzzi, & Hehmsorth, 2000). Under such circumstances, it is possible that distanced-analysis might impede adaptive coping.

## NOTES

1. Although we used the terms *concrete*, *descriptive* and *abstract*, *meta-cognitive* to refer to the types of statements participants used in their writing in our prior research (Kross, Ayduk, & Mischel, 2005), here we use the terms *recounting* and *reconstruing* to be closer to our theory and coding.

2. Consistent with prior research (Ayduk & Kross, 2008), it took significantly longer for participants to adopt a self-distanced perspective than a self-immersed perspective in both studies ($t$s > 6.5, $p$s ≤ .001). Perspective time was not a significant predictor of any findings, did not interact with condition in predicting any results, and controlling for this variable did not reduce the significance of any results.

3. Using structural equation modeling (SEM), we compared how well the model in which the difference between recounting and reconstruing is the mediator of the condition → depressed affect link (Model 1) fits the data against a model in which both recounting and reconstruing are included as separate mediators (Model 2). In both studies, Model 1 fit the data well (Goodness of Fit Indices [GFIs] ≤ .98, root mean square errors of approximation [RMSEAs] ≤ .07, $\chi^2$s ≤ 4.45, $p$s ≤ .22), whereas in both studies, Model 2 provided a relatively poor fit (GFIs ≥ .98, RMSEAs ≥ .11, $\chi^2$s ≤ 8.53, $p$s ≤ .07). Furthermore, path coefficients of interest were statistically significant in both studies for Model 1 but not Model 2.

4. Pooling across both studies, the main effect of condition on recounting, $F(1, 255) = 11.25$, $p \leq .001$, $\eta^2 = .04$, and reconstruing, $F(1, 255) = 7.57$, $p < .01$, $\eta^2 = .03$, were both statistically significant.

5. For five participants who indicated thinking about the event "all day" or "all the time," we used the highest numerical value reported in the data set. For another five who indicated having experienced "several" thoughts or thought about their experience "a lot," we used the sample mean.

6. Bootstrapping indicated that depressed affect mediated the effect of condition on thought content in both studies (Study 1: mediated condition effect 95% Confidence Interval [CI] = [–0.29, –0.03]; Study 2: mediated condition effect 95% CI = [–0.15, –0.01]). We compared the explanatory power of this reverse mediation model (condition → depressed affect → thought content) against the theoretically predicted model (condition → thought content → negative affect) using SEM. In Study 1, both models fit the data well (GFIs ≥ .98, RMSEAs ≤ .08, $\chi^2$s ≤ 3.20, *p*s ≥ .20). In Study 2, however, the theoretical model yielded a good fit (GFI = .99, RMSEA = .05, $\chi^2 = 4.45$, $p = .22$), whereas the reverse mediation model did not (GFI = .98, RMSEA = .11, $\chi^2 = 9.08$, $p = .028$).

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