Emotion

The Effect of Self-Distancing on Adaptive Versus Maladaptive Self-Reflection in Children

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Although children and adolescents vary in their chronic tendencies to adaptively versus maladaptively reflect over negative feelings, the psychological mechanisms underlying these different types of self-reflection among youngsters are unknown. We addressed this issue in the present research by examining the role that self-distancing plays in distinguishing adaptive versus maladaptive self-reflection among an ethnically and socioeconomically diverse sample of fifth-grade public schoolchildren. Children were randomly assigned to analyze their feelings surrounding a recent anger-related interpersonal experience from either a self-immersed or self-distanced perspective. They then rated their negative affect and described in writing the stream of thoughts they experienced when they analyzed their feelings. Children's stream-of-thought essays were content analyzed for the presence of recounting statements, reconstruing statements, and blame attributions. Path analyses indicated that children who analyzed their feelings from a self-distanced perspective focused significantly less on recounting the "hot," emotionally arousing features of their memory (i.e., what happened to me?) and relatively more on reconstruing their experience. This shift in thought content—less recounting and more reconstruing—led children in the self-distanced group to blame the other person involved in their recalled experience significantly less, which in turn led them to display significantly lower levels of emotional reactivity. These findings help delineate the psychological mechanisms that distinguish adaptive versus maladaptive forms of self-reflection over anger experiences in children. Their basic findings and clinical implications are discussed.

Keywords: childhood rumination, adaptive self-reflection, emotion regulation, psychological distance

Few issues have aroused as much debate in the adult clinical and social–cognitive literatures over the past two decades as the role that self-reflection plays in facilitating versus undermining peoples' capacity to cope with negative experiences. Whereas many studies indicate that it is helpful for people to understand their negative feelings (e.g., Pennebaker & Chung, 2007; Resick & Schnicke, 1992; Stanton, Kirk, Cameron, & Danoff-Burg, 2000; Wilson & Gilbert, 2008), others show that attempts to do this often backfire leading to maladaptive rumination (e.g., Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008).

Although research has begun to explicate the psychological mechanisms that distinguish between these different types of self-reflection in adults (for reviews, see Ayduk & Kross, 2010a; Kross, 2009), to our knowledge no research has examined how these processes operate in children. Examining this issue is important because the prevalence of emotional disorders increases rapidly during adolescence (Hankin et al., 1998), and recent findings have indicated that people's chronic tendencies to reflect over negative experiences adaptively versus maladaptively are closely linked with factors that contribute to the development of these disorders (e.g., Abela, Brozina, & Haigh, 2002; Broderick & Korteland, 2004; Burwell & Shirk, 2007; Hankin, 2008; Nolen-Hoeksema, Stice, Wade, & Bohon, 2007; Schwartz & Koenig, 1996; Ziegert & Kistner, 2002). Therefore, an important challenge is to identify the basic psychological processes that underlie adaptive versus maladaptive forms of self-reflection prior to adolescence so that interventions can be designed to buffer children against the negative consequences associated with rumination before they escalate. The main goal of this research was to address this issue.

The Self-Reflection Paradox

Over the past 25 years a great deal of research has examined the health implications of people's attempts to understand negative feelings. On the one hand, findings from a number of studies have linked this process with adaptive outcomes. For example, strategies and interventions that lead people to ponder their deepest thoughts and feelings surrounding negative experiences have been linked to a variety of mental and physical health benefits (e.g., enhanced immune system levels, less sickness, fewer intrusive thoughts over time; e.g., Pennebaker & Chung, 2007; Wilson & Gilbert, 2008). Similarly, several forms of psychotherapy focus explicitly on helping people develop explanations for negative events (e.g., Greenberg & Safran, 1989; Resick & Schnicke, 1992).

On the other hand, an equally compelling body of research indicates that people's attempts to understand their feelings often backfire leading to rumination. *Rumination* is a process in which people focus repeatedly on the causes and symptoms of their mood to improve the way they feel (Nolen-Hoeksema et al., 2008). Rather than reduce distress, however, rumination maintains and exacerbates it. Among adults, the negative mental and physical health implications associated with rumination range from exacerbating and maintaining negative mood, to precipitating anger and aggression, to delaying cardiovascular recovery following stressful events, to impairing problem solving abilities, and increasing suicidal ideation (Brosschot, Gerin, & Thayer, 2006; Bushman, 2002; Lyubomirsky & Nolen-Hoeksema, 1995; Nolen-Hoeksema, Morrow, & Fredrickson, 1993; Nolen-Hoeksema et al., 2008).

Putting these findings together, it is clear that attempts to analyze one's feelings facilitate adaptive self-reflection under some circumstances but undermine it in others. The question is: Why does this happen?

Processes Distinguishing Adaptive Versus Maladaptive Self-Reflection in Adults

In an attempt to address this question, recent work has begun to examine the psychological processes that underlie adaptive versus maladaptive forms of self-reflection. According to one program of research that has addressed this issue, psychological distance plays a key role in determining whether people's attempts to understand negative feelings facilitate versus undermine adaptive self-reflection (Ayduk & Kross, 2010a; Kross, 2009).

Psychological distance refers to a process in which peoples' egocentric experience of a stimulus in the here and now is diminished (Trope & Liberman, 2003). Although research on this construct has increased rapidly in recent years, psychologists have noted the relevance of psychological distance for effective self-regulation for decades. For example, in reviewing 30 years of research on delay of gratification in children, Mischel and Rodriguez (1993) described psychological distance as one of the "basic ingredients" that enable children to exert self-control—an inference supported by research indicating that cognitive strategies that function to distance people from their emotions by leading them to cognitively represent affect-arousing stimuli less concretely and more abstractly facilitate impulse control and emotion regulation (Fujita, Trope, Liberman, & Levin-Sagi, 2006; Mischel, Shoda, & Rodriguez, 1992; Ochsner et al., 2004). In the clinical domain, Beck (1970) described *distancing* as an important enabling condi-

tion for allowing patients to implement cognitive techniques designed to alleviate depression. Ingram and Hollon (1986) echoed a similar view noting, "Cognitive therapy relies heavily on helping individuals switch to a controlled mode of processing that is metacognitive in nature . . . typically referred to as 'distancing'" (p. 272). They further suggested, "the long-term effectiveness of cognitive therapy may reside in teaching individuals how to initiate this process on their own" (p. 272).

Drawing from and integrating these different lines of research and viewpoints Kross, Ayduk, & Mischel (2005) reasoned that to facilitate adaptive self-reflection, a strategy was needed to "distance" people from their feelings so that they could adaptively reconstrue them. They further reasoned that one way of leading people to distance themselves is to manipulate the type of self-perspective they adopt as they analyze their feelings. Specifically, prior research indicates that people are capable of focusing on negative experiences from either a *self-immersed* perspective, in which they visualize events happening to them through their own eyes or a *self-distanced* perspective, in which they see themselves in their experience from the perspective of an observer or "fly on the wall" (Nigro & Neisser, 1983; Robinson & Swanson, 1993). Kross and colleagues hypothesized that cueing individuals to analyze their feelings from a self-distanced perspective, compared to a self-immersed perspective, should lead them to focus less on recounting, the "hot" emotionally arousing features of their past experience (i.e., What happened to me? What did I feel?) and relatively more on reconstruing the event in ways that provide them with meaning and closure. In turn, they hypothesized that this shift in thought content—less recounting and more reconstruing—would lead participants to experience less negative affect in the short term.

Findings from multiple studies with young adults support these predictions. Specifically, when people are cued to analyze their feelings from a self-distanced perspective (compared to a self-immersed perspective), they engage in less recounting (i.e., What happened to me? What did I feel?) and more reconstruing. This shift in thought content, in turn, leads to reductions in negative affect in the short term (Kross & Ayduk, 2008, 2009; Kross et al., 2005). Over time, analyzing negative experiences from a self-distanced perspective has been shown to buffer people against recurring negative thoughts, future negative affect, and prolonged cardiovascular reactivity (Ayduk & Kross, 2008). In none of these studies has guiding individuals to adopt a self-distanced perspective been linked with emotional avoidance.

From Young Adults to Middle Schoolchildren

Although the findings reviewed above highlight self-distancing as a process that enables young adults to reflect adaptively over negative experiences, it is unclear whether these findings generalize to children and adolescents. Addressing this issue is important because youngsters vary in how they chronically reflect over negative feelings (Burwell & Shirk, 2007; Hankin, 2008; Lopez, Driscoll, & Kistner, 2009), and variability in these chronic tendencies predicts consequential outcomes. For example, children and adolescents' level of *trait brooding*, which is conceptualized as a maladaptive form of self-reflection (Treynor, Gonzalez, & Nolen-Hoeksema, 2003), has been shown to prospectively predict increases in depressive symptoms over time (Abela et al., 2002; Broderick & Korteland, 2004; Burwell & Shirk, 2007; Hankin, 2008; Nolen-Hoeksema et al., 2007; Schwartz & Koenig, 1996;

Ziegert & Kistner, 2002), and correlates cross-sectionally with avoidant coping practices. In contrast, *trait reflection*, which is conceptualized as an adaptive form of self-reflection (Treynor et al., 2003), has been associated with cognitive restructuring and, unlike trait brooding, has not been associated with prospective increases in symptoms of psychopathology (Burwell & Shirk, 2007; Lopez et al., 2009).

These findings demonstrate that the constructs of adaptive versus maladaptive self-reflection apply to youngsters and are closely linked with their mental health. However, they leave open questions concerning the basic psychological processes that underlie these different forms of self-reflection in childhood and adolescence—knowledge that is critical for understanding how to help youngsters reflect over negative experiences adaptively.

Overview of Present Research

We examined this issue in the present research by recruiting an ethnically and socioeconomically diverse sample of fifth-grade, middle-school children to participate in a computerized study on language and emotion. Participants were first cued to recall a recent anger-related interpersonal experience. They were then randomly assigned to analyze their feelings associated with this experience from either a self-immersed or self-distanced perspective. Subsequently, they rated how distressed they felt when thinking about their experience and described in writing the stream of thoughts that flowed through their mind as they analyzed their feelings during the study.

We focused on anger-related experiences in this study for two reasons. First, interpersonal experiences that trigger anger are common among children and have been linked with a variety of consequential negative outcomes including violence, aggression, and depression (Dodge, 1993; Hanish et al., 2004; Huesmann, 1998). Second, research with adults indicates that rumination potentiates subjective (e.g., angry affect), behavioral (e.g., aggression and violence), and physiological responses (e.g., blood pressure reactivity) associated with anger (Brosschot et al., 2006; Ray, Wilhelm, & Gross, 2008) highlighting the relevance of this cognitive process to the maintenance of angry emotional states and delinquent behavior.

Hypotheses

Three hypotheses guided our research. First, given prior work indicating that it is possible for children to reconstrue affect-arousing stimuli in ways that attenuate their intensity (Mischel et al., 1992) and prior research on self-distancing with adults described earlier, we predicted that children who analyzed their feelings from a self-distanced perspective would feel less upset about their anger-related experience than participants in the self-immersed group at the end of the study.

Second, prior research indicates that self-distancing leads to reductions in distress by leading individuals to recount the specific details of their past experience less and reconstrue their experiences more (Ayduk & Kross, 2010b; Kross & Ayduk, 2008; Kross et al., 2005). However, research on the role that appraisals play in emotion also indicates that blame attributions are a proximal predictor of anger (Dodge, 2006; Ellsworth & Scherer, 2003). Therefore, to integrate these findings we performed path analyses to examine how the tendency to recount versus reconstrue negative events and blame attributions contribute to explaining the relationship between self-distancing and negative affect. We hypothesized that self-distancing would lead to reductions in the tendency to recount versus reconstrue negative events, which would lead to less blame, which would then lead to less emotional reactivity.

Finally, although prior research has consistently found that self-distancing does not lead to emotional avoidance—a process that is reliably linked with negative outcomes (Foa & Kozak, 1986)—the term distancing is often equated with avoidant strategies. Therefore to rule out the alternative hypothesis that reductions in negative affect caused by self-distancing are a function of avoidance, we asked participants to indicate the extent to which they tried to avoid focusing on their experience during this study. We hypothesized that self-distancing would not lead to significant increases in avoidance in comparison to self-immersion.

Method

Participants

A convenience sample of 110 rising fifth-grade students (gender: 53% girls; 47% boys; $M_{age} = 10.21$, $SD_{age} = 0.37$) from a public school in the Northeast took part in the study in two waves, one during the Summer ($n = 53$) and the other during the Fall ($n = 57$). Participants were run in waves to ensure that an appropriate sample size could be recruited, as we were limited in our ability to run a sufficient number of participants during Wave 1 because of scheduling issues. The racial distribution was 45.5% White, 30.0% African American, 14.5% Asian, 4.5% Hispanic, 5.5% other. The school consists of primarily middle-class families ($M_{income} = \$40,200.96$, $SD_{income} = \$17,477.85$). Written parental consent and child assent were received for all participants. The summer and fall samples did not differ on gender, $\chi^2(1) = 1.36$, *ns*; race, $\chi^2(4) = 2.16$, *ns*; or family income, $t(106) = 0.98$, *ns*.

Overview of Experiment Environment

The experiment was administered on school premises. Participants were run through the procedures described below while seated in a computer lab with approximately 15 other students. Each student was provided with his or her own computer. A pair of headphones was attached to each computer. They were used to privately deliver the study instructions and experimental manipulations to participants. U-shaped partitions were positioned around each computer and students sat at every other computer to prevent participants from being able to view other participants and to ensure that they completed the task in privacy. Two research assistants remained in each classroom throughout the experiment to ensure that participants performed the task without speaking or looking at other participants. All materials presented during the task were codeveloped by two elementary school teachers/former teachers to ensure participant comprehension.

Recall Task and Experimental Manipulations

After a brief introduction, participants were cued to recall an interpersonal experience in which they felt overwhelming feelings of anger using instructions adapted from prior research (Kross et al.,

2005).[1] They were then randomly assigned to adopt either a self-immersed ($n = 52$) or a self-distanced ($n = 58$) perspective. Participants in the self-immersed group received the following instructions:

> Now close your eyes. Go back to the time and place of the experience you just recalled and see the scene in your imagination. Now see the situation unfold through your own eyes as if it were happening to you all over again. Replay the event as it unfolds in your imagination through your own eyes.

Participants in the self-distanced group received the following instructions:

> Now close your eyes. Go back to the time and place of the experience you just recalled and see the scene in your imagination. Now take a few steps back. Move away from the situation to a point where you can now watch the event unfold from a distance and see yourself in the event. As you do this, focus on what has now become the distant you. Now watch the situation unfold as if it were happening to the distant you all over again. Replay the event as it unfolds in your imagination as you observe your distant self.

Participants were given as much time as they needed to follow these instructions. After the self-perspective manipulation, participants in both groups were cued to analyze the emotions that they (or their "distant self") experienced during their recalled event for 30 s. These instructions were based on those used in prior research (Kross & Ayduk, 2008; Kross et al., 2005) but modified to enhance their comprehension among younger participants.

Event Specific Emotional Reactivity

After analyzing their feelings, participants indicated their agreement with the following items using a 7-point scale ranging from 1 (*completely disagree*) to 7 (*completely agree*): "As I think about the event now, my feelings and physical reactions to the conflict are still intense" ($M = 3.81$; $SD = 2.36$), "Thinking about this event still makes me feel upset" (e.g., rejected, angry, hurt, sad; $M = 4.32$; $SD = 2.55$). Ratings on these questions were significantly correlated ($r = .53$, $p < .001$) and collapsed into a single emotional reactivity index ($M = 4.07$, $SD = 2.15$).

Avoidance

Participants indicated the extent to which they "tried to avoid thinking about [their experience]" when they were prompted to think about it during the study using a 1 (*completely disagree*) to 7 (*completely agree*) scale, with higher scores reflecting greater attempts at avoidance ($M = 3.36$, $SD = 2.38$).

Essay Content Analyses: Recounting, Reconstruing, and Blame

Following prior research (Kross & Ayduk, 2008; Kross et al., 2005) participants were next asked to describe in writing the thoughts that flowed through their mind during the study as they thought about their negative experiences. Four judges blind to condition rated participants' essays on the extent to which they contained recounting statements, reconstruing statements, and blame attributions based on the following scale ranging from 0 (*not at all*) to 3 (*very much*). Interjudge reliabilities were good (αs $> .86$). Therefore, final ratings were averaged across judges.

Following coding guidelines established in prior research (Kross & Ayduk, 2008; Kross et al., 2005), recounting statements were operationalized as episodic "what" statements describing the specific chain of events, behaviors, and emotions experienced ($M = 1.49$, $SD = 0.95$). Reconstruing statements were operationalized as statements describing a realization about or change in the way the participant understood the causes underlying the event or their feelings and 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 ($M = 0.43$ $SD = 0.57$).

Blame attributions were operationalized as statements in which the child ascribed fault to the other person involved in their recalled experience ($M = 0.55$, $SD = 0.86$).

Results

Overview of Data Analyses

Participants in the self-immersed and self-distanced groups did not differ on gender, $\chi^2(1) = 0.37$, *ns*; race, $\chi^2(4) = 1.18$, *ns*; family income, $t(106) = .98$, *ns*; or age, $t(107) = 1.35$, *ns*; suggesting that random assignment was successful. Preliminary analyses indicated that gender and sample were significantly related to some of the dependent variables, but did not interact with condition to predict them. Therefore, these variables were included as covariates. We additionally controlled for the length of participants essays in all analyses involving variables derived from participants' essays. This variable did not interact with condition to predict any of the essay variables and was not related to condition, $t(100) = 1.03$, *ns*.

Data from 15 participants who indicated that they did not recall an anger experience were excluded. These exclusions were related to condition, $\chi^2(1) = 7.16$, $p = .007$; 12 participants were from the self-immersed group. Because preliminary analyses indicated that random assignment was successful, and participants were cued to recall a negative experience before the experimental manipulations were administered, we suspect this effect was due to random chance. Degrees of freedom vary slightly across analyses because of omitted responses.[2]

Event Specific Emotional Reactivity

The effect of condition on negative affect was significant, $F(1, 84) = 5.26$, $p = .02$, $\eta^2 = .06$. As Figure 1 illustrates, self-distanced participants indicated that they felt less upset when they thought about their experience at the end of the study compared to self-immersed participants. We also observed significant effects of

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[1] Examination of participants' stream-of-thought essays indicated that the majority of children recalled fights they had with other people, such as their friends and siblings.

[2] To further ensure that participants recalled anger-related events, we content analyzed participants stream-of-thought essays for the presence of anger words using the Linguistic Inquiry Word Count (Pennebaker, Booth, & Francis, 2007). To the extent that participants recalled an anger-related event, we reasoned that their stream-of-thought essays should include a significant number of anger words. The results of a one-sample *t* test confirmed this prediction, $t(86) = 7.25$, $p < .001$, $d = 1.56$.

sample, $F(1, 84) = 4.95$, $p = .03$, $\eta^2 = .06$, indicating that summer participants ($M = 4.80$, $SE = 0.33$) displayed higher levels of emotional reactivity than participants who completed the study in the fall ($M = 3.83$, $SE = 0.29$), and gender, $F(1, 84) = 3.88$, $p = .05$, $\eta^2 = .04$, indicating that girls ($M = 4.74$, $SE = 0.32$) were more upset than boys ($M = 3.88$, $SE = 0.29$).

Avoidance

Neither condition nor either of the covariates were related to avoidance ($Fs < 1$). To further demonstrate that the effects of the experimental manipulation on emotional reactivity were not due to avoidance we reran the aforementioned analysis of covariance (ANCOVA) on emotional reactivity, including condition and avoidance as predictor variables, controlling for gender and sample. This analysis revealed a significant relationship between avoidance and emotional reactivity, $F(1, 83) = 14.46$, $p < .001$, $\eta^2 = .15$, indicating that the more children tried to avoid focusing on their memory during the experiment, the more upset they felt about their experience at the end of the study ($pr = .39$, $p < .001$). Controlling for avoidance did not substantively alter the significance of the relationship between condition and emotional reactivity, $F(1, 83) = 4.42$, $p = .04$, $\eta^2 = .05$. Avoidance and condition did not interact ($F < 1.06$, ns).

Recounting Versus Reconstruing

To examine whether the experimental manipulations influenced children's tendency to recount versus reconstrue their experience we performed a repeated-measures ANCOVA with thought content (recounting vs. reconstruing) as the within-participant factor, condition as the between participants factors, and sample, gender, and essay word count as covariates. Consistent with prior research, this analysis revealed a significant effect of thought content, $F(1, 82) = 11.64$, $p = .001$, $\eta^2 = .12$, indicating that participants in both groups engaged in more recounting than reconstruing. As predicted, however, there was also a significant thought content by condition interaction, $F(1, 82) = 6.95$, $p = .01$, $\eta^2 = .08$, indicating that participants in the self-distanced group engaged in relatively less recounting and relatively more reconstruing than participants in the self-immersed group (see Figure 2).

This analysis also revealed significant interactions between sample and thought content, $F(1, 82) = 5.40$, $p = .02$, $\eta^2 = .06$, and essay word count and thought content, $F(1, 82) = 4.74$, $p = .03$, $\eta^2 = .06$. These interactions indicated that summer partici-

pants engaged in more recounting ($M = 1.73$, $SE = 0.14$) and less reconstruing ($M = .26$, $SE = 0.09$) than fall participants (recounting: $M = 1.42$, $SE = 0.12$; reconstruing: $M = 0.56$, $SE = 0.08$), and essay length was related to recounting statements ($pr = .38$, $p < .001$) but not reconstruing statements ($pr = .10$, ns). There were no three-way interactions between thought content, condition and the covariates ($Fs < 1$, ns).

Blame

The effect of condition on blame approached statistical significance, $F(1, 82) = 3.62$, $p = .06$, $\eta^2 = .04$, indicating that the essays of self-immersed participants ($M = 0.83$, $SE = 0.14$) contained more blame attributions than the essays of self-distanced participants ($M = 0.47$, $SE = 0.11$). Essay length was also related to blame, $F(1, 82) = 4.56$, $p = .04$, $\eta^2 = .05$, with longer essays containing more blame attributions ($pr = .23$, $p = .04$). The effects of gender and sample were not significant ($Fs < 1.11$, ns).

Path Analyses

Finally, we examined the role that thought content and blame play in mediating the relationship between condition and emotional reactivity by performing path analyses in AMOS 7.0 (Arbuckle, 2006). We hypothesized that self-distancing would lead to reductions in the tendency to recount versus reconstrue negative events (i.e., recounting minus reconstruing difference score), which would lead to less blame, which would lead to less emotional reactivity. Consistent with this prediction, the corresponding path model (see Figure 3) showed a good fit to the data, $\chi^2(2, N = 86) = .80$, $p = .67$; comparative fit index (CFI) = 1.0; standardized root mean square residual (SRMR) = .02; root mean square error of approximation (RMSEA) = .00; 90% CI [.00, .16]. Following recommendations of Taylor, MacKinnon, and Tein (2008), we used a bias-corrected bootstrapping procedure to estimate the hypothesized indirect effect and found that it was significant (standardized indirect effect = $-.03$, 95% CI [$-.079$, $-.004$], $p = .009$). We next examined whether switching the order of blame and the tendency to recount versus reconstrue negative events in the model would provide a better model fit. The results indicated that this was not the case, $\chi^2(2, N = 86) = 11.95$, $p = .003$; CFI = .66; SRMR = .07; RMSEA = .24; 90% CI [.12, .38]. We similarly found that including recounting versus reconstruing and blame as joint predictors that simultaneously impact emotional reactivity also fit the data less well than the hypothesized model, $\chi^2(1, N = 86) = 8.25$, $p = .004$; CFI = .75; SRMR = .06; RMSEA = .29; 90% CI [.13, to .49].

Discussion

Recent findings demonstrate that variability exists in how children chronically reflect over negative feelings, which consequentially influences their health. The main goal of this study was to examine what we perceived to be one of the key questions raised by these findings. Namely, to the extent that it is possible for children to reflect either adaptively or maladaptively over their feelings, what psychological processes determine which type of self-reflection children engage in?
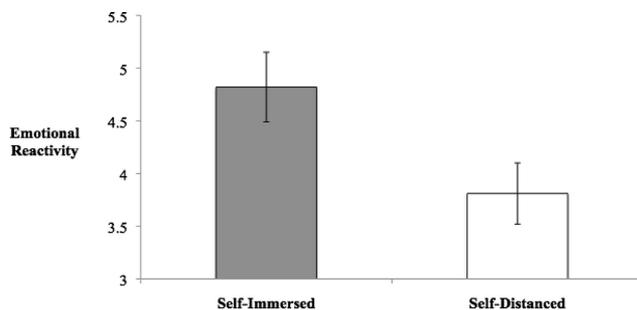

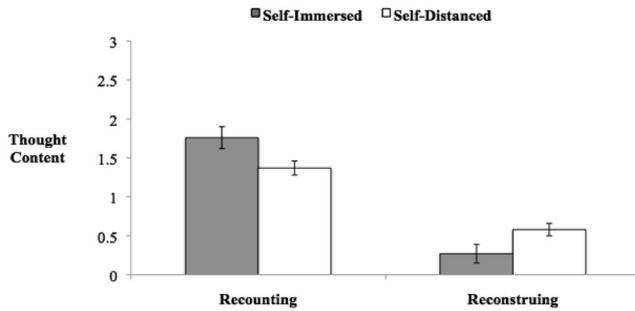*Figure 1.* Effect of experimental manipulation on emotional reactivity.

Figure 2. Effect of experimental manipulation on participants' tendency to recount versus reconstrue their recalled negative experience.

Drawing from research examining the role that self-distancing plays in distinguishing adaptive versus maladaptive self-reflection in adults, we predicted and found that cueing fifth graders to analyze their anger-related feelings from a self-distanced perspective led them to experience less emotional reactivity than children who analyzed their feelings from a self-immersed perspective. Self-distancing led to these reductions in emotional reactivity by leading children to focus less on recounting the hot, emotionally arousing features of their past experience (i.e., what happened during the event?) and relatively more on reconstruing the event in ways that promoted insight and closure. This shift in thought content—less recounting and more reconstruing—led self-distanced participants to blame the other person involved in their recalled experience less, which in turn led them to experience less emotional reactivity. Finally, we found no evidence indicating that self-distancing led to these effects through avoidance.

Taken together, these findings provide promising preliminary evidence suggesting that self-distancing enables children to reflect over anger experiences adaptively, whereas self-immersion undermines this process. Furthermore, the fact that neither race, nor gender, nor socioeconomic status moderated these results suggests that they may generalize to children from different backgrounds.

Future Research Directions

These findings suggest numerous directions for future research. For example, do these findings generalize to other types of nega-

tive experiences (e.g., depression experiences) and can youngsters who are especially vulnerable to mood disorders characterized by rumination, benefit from self-distanced reflection? Although future research is needed to address these questions, recent findings with adults indicate that self-distancing enables individuals experiencing subclinical levels of depression (Kross & Ayduk, 2009) and bipolar disorder (Gruber, Harvey, & Johnson, 2009) to adaptively reflect over different types of emotional experiences. For example, Kross and Ayduk (2009) found that the effectiveness of self-distancing for buffering individuals against negative affect associated with both anger experiences and depression experiences increased linearly with depressive symptoms. These findings suggest vulnerable youngsters may benefit even more than nonvulnerable youngsters from analyzing their feelings from a self-distanced perspective.

Another important issue for future research is the behavioral implications of self-distancing. Findings from a number of studies indicate that blame is a proximal predictor of aggression in children (Dodge, 2006), and in the present study children in the self-distancing group blamed the other person involved in their recalled experience less than participants in the self-immersed group. These findings suggest that self-distancing may function to attenuate maladaptive behavioral responses such as violence and aggression.

It is also possible that self-distancing may have more general implications for the quality of children's interpersonal relationships. Research with adults indicates that rumination has deleterious social consequences. For example, people who ruminate display poorer interpersonal problem solving (Lyubomirsky & Nolen-Hoeksema, 1995), are perceived unfavorably by their peers (Schwartz & Thomas, 1995), and report receiving less social support (Nolen-Hoeksema & Davis, 1999). To the extent that self-distancing buffers children against rumination, one would expect this process to enrich children's interpersonal relationships as well.

Finally, it is important to note that a corpus of findings demonstrate that immersive techniques such as prolonged exposure are effective at helping both adults (Foa & Kozak, 1986; Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010) and children (Ehntholt & Yule, 2006) cope with certain kinds of emotional disturbances (e.g., trauma, phobias). As research in this area con-
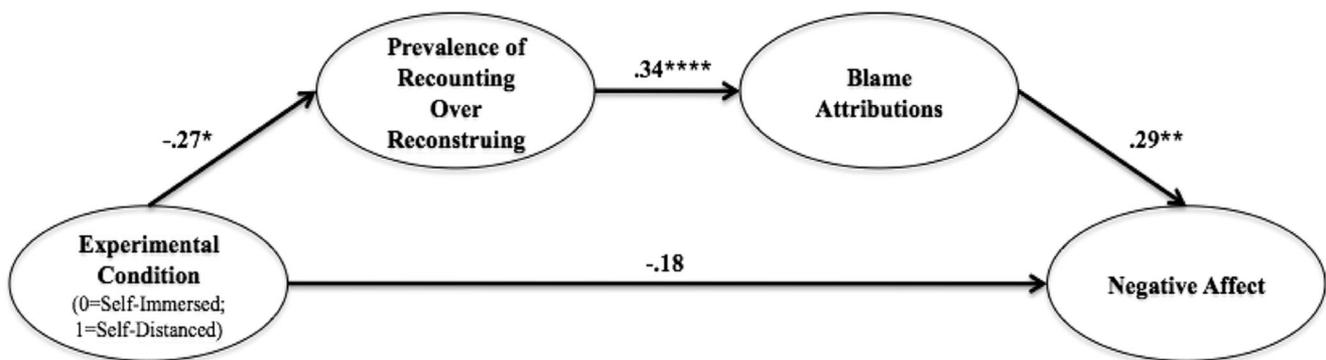

Figure 3. Hypothesized meditational path model. Gender and sample are used as covariates but are not shown in the figure. Values represent standardized path coefficients. * $p < .05$. ** $p < .01$ *** $p < .001$.

tinues, it will also be important to identify the psychological conditions under which self-immersion, rather than self-distancing, may be a more useful strategy for facilitating adaptive self-reflection, and vice versa.

Limitations

It is important to note two limitations of this research before concluding. First, because the current research relied on a normative sample of children, it is unclear how these findings will generalize to more vulnerable youngsters. As noted earlier, future research is needed to address this issue. Second, a single item was used to measure avoidance in this study. Future research should consider using multiple questions to assess this construct to enhance measurement reliability.

Conclusions

The present findings provide initial evidence highlighting the beneficial value of guiding children to self-distance while analyzing anger-related feelings. They also raise a number of questions for future research that need to be addressed to further enhance our basic understanding of how this process operates in youngsters, is influenced by development, and can potentially be harnessed to facilitate adaptive coping and adjustment throughout development.

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