

# Confronting Sadness Through Art-Making: Distraction Is More Beneficial Than Venting

Jennifer E. Drake  
Boston College

Ellen Winner  
Boston College and Project Zero, Harvard Graduate School of  
Education

We examined two ways in which art-making may function to elevate mood—venting (expressing negative feelings) and distraction (expressing something unrelated to the negative feelings). In Study 1 we induced a negative mood in participants by showing them a sad film clip and then assigned them to one of two conditions. In the venting condition they were asked to draw something related to the film; in the distraction condition they were asked to draw an image unrelated to the film (a house). In Study 2 we induced a negative mood by asking participants to think of the saddest event they had experienced and then assigned them to one of three conditions: venting, distraction, and sitting - a new condition in which participants just sat quietly. This latter condition allowed us to assess the effect of passage of time. In both studies, positive and negative affect were measured before and after the assigned activity. In both studies, mood improved significantly more in the distraction than in the venting or sitting condition. We argue that the mood elevating effects of art-making are stronger when art is used to distract than when used to vent.

*Keywords:* short-term mood repair, mood regulation, visual arts

Art-making is a universal activity, present in all human cultures from the earliest humans on, despite the case that there is no clear evolutionary, adaptive reason for creating works of art. Art-making is, among other things, a form of meaning making, a form of communication, and a form of emotion regulation (Winner, 1982). Many case studies of patients receiving art therapy report improvement (Briks, 2007; Pifalo, 2006; Tipple, 2008), though these case studies cannot tell us whether the art therapy was causally implicated in the improvement. However, experimental studies providing nonclinical participants with the opportunity to make art versus some other kind of activity show that art-making serves as a form of mood repair, at least in the short-term (Dalebroux, Goldstein, & Winner, 2008; DePetrillo & Winner, 2005; Drake, Coleman, & Winner, 2011; Pizarro, 2004).

Among the many strategies proposed to regulate mood (Larsen, 2000; Parkinson & Totterdell, 1999; Thayer, Newman, & McClain, 1994), two seem particularly related to art-making: venting (expressing one's negative feelings) and distraction (expressing feelings that take one away from negative feelings). By venting we mean attending to one's mood (Lischetzke & Eid, 2003). The underlying principle of art therapy is to use art to discharge negative feelings through self-expression (Kramer, 2000). And while artists have described purging themselves of suffering by expressing their pain in their art through venting, they also speak

of how creating takes them away from their feelings through distraction (Greene, 1980).

A large body of research by Pennebaker and his colleagues has demonstrated that expressive writing has many positive outcomes. Among other things, writing about a stressful event improves immune function (Pennebaker, Kiecolt-Glaser, & Glaser, 1988), raises academic performance (Pennebaker & Francis, 1996), and lowers the number of visits to a physician (Pennebaker & Beall, 1986; Pennebaker, Colder, & Sharp, 1990).

Expressive writing may allow individuals to integrate emotional information into their personal experiences (Koole, 2009). Perhaps expressive writing improves both physical and psychological health because it allows individuals to form coherent narratives of their experiences, and the formation of a coherent narrative may assist individuals in regulating and understanding their emotions (Klein & Boals, 2001; Pennebaker, Mayne, & Francis, 1997). Studies have shown that writing about a stressful event has long-term but not short-term affective benefits. The lack of short-term benefits was demonstrated by Pizarro (2004), who assigned participants to one of three conditions: writing about a stressful event, drawing about a stressful event, or drawing a still-life. Those in both drawing conditions reported lower negative affect after the intervention than did those in the writing condition. Other researchers have demonstrated that writing improves short-term mood only when the content of the writing is positive, and thus perhaps serving as a form of distraction from negative thoughts (Hemenover, Augustine, Shulman, Tran, & Barlett, 2008). Individuals who wrote about positive autobiographical events reported greater short-term mood improvement in comparison to those who wrote about their negative thoughts (Hemenover et al., 2008).

There is now corroborating evidence that supports Pizarro's findings that art-making has short-term affective benefits. DePetrillo and Winner (2005) showed that art-making improves

---

This article was published Online First January 30, 2012.

Jennifer E. Drake, Department of Psychology, Boston College; Ellen Winner, Department of Psychology, Boston College, and Project Zero, Harvard Graduate School of Education.

Correspondence concerning this article should be addressed to Jennifer E. Drake, Department of Psychology, Boston College, Chestnut Hill, MA 02467. E-mail: drakejc@bc.edu

mood more strongly than does copying geometric shapes, perhaps because copying does not allow any self-expression or creativity. Support for this possibility comes from a demonstration that art-making improves short-term mood more than a control activity, but only for those who use art as a means of distraction rather than for venting their feelings (Dalebroux et al., 2008). In this study, mood improved the most in the distraction condition: mood improvement in the venting condition was no greater than mood improvement in a control condition.

These findings are consistent with other research showing that distraction is an effective way of coping with negative affect (Fredrickson & Cohn, 2008; Fredrickson & Levenson, 1998). However, in the Dalebroux et al. study, participants were explicitly instructed “to draw a picture that depicted happiness.” It remains possible that mood improved in this condition only because of the instructions to think of something happy. We do not know whether distracting oneself away from negative thoughts by thinking of something neutral would have the same effect.

In what follows we examine art-making as a form of mood repair, comparing the functions of venting versus distraction. While previous studies (Dalebroux et al., 2008) have conflated distraction with positive content (asking participants to draw something happy), here we investigate the effects of distraction by asking participants to draw an affectively neutral image. In addition, whereas previous studies have examined the effects of art-making on positive mood, here we investigate the effects of art-making on both positive and negative affect. Finally, with one exception, previous studies of the effect of art-making on mood have induced negative moods by showing participants sad films (Dalebroux et al., 2008). But sadness created by watching a negative event happen to another person is likely to be far milder than sadness engendered from a personal experience. In our second study we examined the effect of art-making on mood that emerges from a personal experience. To our knowledge, only one study has examined the effects of art-making on improving negative mood engendered from recall of past trauma (Pizarro, 2004). However, the distraction task used by Pizarro was quite constrained: Participants had to draw a still-life from observation. In the present study we examined the effects of a distraction task that allowed participants to generate their own images—we asked them to draw a house but did not specify anything more about what the house should look like. Finally, we investigated whether participants were aware of the emotion regulation strategy they were using.

In Study 1, we induced a sad mood in participants and then randomly assigned them to one of two conditions: a vent condition in which they were to draw something related to the film—an activity designed to allow them to express their negative feelings; and a distract condition in which they were to draw a house—an activity designed to distract them from the negative feelings of the film. Levels of positive and negative affect were assessed before and after the activity. In Study 2, we investigated whether art-making would improve negative affect related to a personal experience. We also included a control condition (sitting quietly with no drawing activity) to determine whether mood improved as a function of time passage. Consistent with previous findings, we hypothesized that using art to distract rather than to vent would be more beneficial for mood repair and that using art to distract would be more beneficial for mood repair than sitting quietly or venting.

## Study 1

### Method

**Participants.** Eighty undergraduates at a university in the northeast of the United States (60 women, 20 men) ranging in age from 18 to 22 ( $M = 19.2$ ,  $SD = 1.01$ ) were recruited. Participants were drawn from psychology classes and received one research credit as part of a course requirement. The sample was 63.8% White, 11.2% Asian, 11.2% Hispanic/Latino, 7.5% Black, 5.0% Biracial, and 1.2% Native Hawaiian/Pacific Islander.

### Materials.

**Mood induction.** To induce a negative mood, we showed participants a 6-min clip from the motion picture *The Laramie Project*, a documentary about the hate-crime murder of a young man who was tortured and killed for being openly homosexual. In the clip, the young man’s father speaks at the sentencing of his son’s murderer, describing his son’s death, the publicity that surrounded it, and the family’s opinion of the death penalty. Four judges rated this film clip on level of sadness using a 7-point scale ranging from 1 (*low*) to 7 (*high*) as very sad ( $M = 5.25$ ,  $SD = .96$ ). This clip has been shown to be effective in inducing a negative mood (Goldstein, 2009).

**Activity.** All participants were given a set of colored pencils and a 9 “× 11” sheet of white paper and were randomly assigned to one of two conditions, venting or distraction, with 40 participants in each condition and no difference in gender distribution between conditions ( $\chi^2 = 0.0$ ,  $p = 1.0$ ). The venting condition was designed so that participants could express their negative feelings in their drawings. They were instructed as follows: “Use the next 10 minutes to draw something about the film.” The distraction condition was designed to distract participants from the negative feelings that the film elicited in them by drawing a neutral object unrelated to the film. They were instructed as follows: “Use the next 10 minutes to draw a house.” These conditions allowed us to tease apart the mood effects of using drawing as a form of venting versus as a form of distraction.

**Positive and Negative Affect Schedule (PANAS).** To measure affect, we administered the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988). The PANAS contains 20 words (10 positive and 10 negative) for feelings and emotions (e.g., interested, excited, distressed, upset). Participants were asked to indicate, for each word, the extent to which they were feeling that emotion on a five-point scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). The PANAS yields a global score for positive affect and negative affect.

**Procedure.** Participants were seen individually in a private room. Participants first completed the PANAS (Time 1). Next, participants watched the mood induction film clip and completed the PANAS a second time (Time 2). Participants then carried out the activity in their assigned condition. After drawing, participants were given the PANAS a final time and asked to indicate how they were feeling (Time 3).

### Results

**Preliminary results.** Table 1 presents the mean positive and negative affect scores for Time 1, Time 2, and Time 3 by condition. Participants in the two conditions had equivalent positive and

Table 1  
*Mean Positive and Negative Affect (and Standard Deviations) for Each Condition at Time 1, Time 2, and Time 3*

Condition	<i>n</i>	Time 1	Time 2	Time 3
Vent	40			
Positive Affect		25.85 (4.80)	23.60 (6.29)	25.02 (7.00)
Negative Affect		13.15 (3.55)	15.82 (4.06)	13.00 (4.11)
Distract	40			
Positive Affect		25.55 (6.11)	23.70 (6.27)	25.05 (6.39)
Negative Affect		12.62 (4.07)	16.68 (5.87)	11.20 (1.74)

negative affect scores prior to the mood induction. A one-way ANOVA by condition (2) at Time 1 revealed no effect of condition on positive affect,  $F(1, 78) = .060, p = .808$  or on negative affect,  $F(1, 78) = .378, p = .540$ . A one-way ANOVA by condition showed no differences between conditions at Time 2 for either positive affect,  $F(1, 78) = .005, p = .943$  or negative affect,  $F(1, 78) = .567, p = .454$ . Thus, there were no differences between the two conditions in affect at the start of the study, or after the mood induction.

**Effects of condition on decreasing negative affect.** To compare the effectiveness of venting versus distraction in decreasing negative affect, we performed a three-way repeated measures ANOVA, with condition as the between-subjects factor, and time as the repeated measures factor for negative affect. There was an effect of time,  $F(2, 156) = 33.650, MSE = 11.55, p < .001$ . Paired sample *t* tests showed negative affect increasing from Time 1 ( $M = 12.9$ ) to Time 2 ( $M = 16.3$ ),  $t(79) = -5.783, p < .001$ , and negative affect decreasing from Time 2 ( $M = 16.25$ ) to Time 3 ( $M = 12.10$ ),  $t(79) = 7.241, p < .001$ . There was no effect of condition,  $F(1, 78) = 3.042, p = .465$ .

Condition interacted with time,  $F(2, 156) = 3.042, p = .05$ . A one-way ANOVA by condition (2) on Time 3 negative affect scores revealed that negative affect was lower in the distraction condition than in the venting condition,  $F(1, 78) = 6.510, p = .013, d = -.57$ .

When the same analysis was conducted including gender as a factor, results were unchanged: there was no main effect of gender, nor were there any interactions with gender.

**Effects of condition on increasing positive affect.** To compare the effectiveness of venting versus distraction in increasing positive affect, we performed a three-way repeated measures ANOVA, with condition as the between-subjects factor, and time as the repeated measures factor for positive affect. There was an effect of time,  $F(2, 156) = 4.194, MSE = 20.874, p = .017$ . Paired sample *t* tests showed positive affect decreasing from Time 1 ( $M = 25.7$ ) to Time 2 ( $M = 23.7$ ),  $t(79) = 3.285, p = .001$ , and positive affect increasing from Time 2 ( $M = 23.6$ ) to Time 3 ( $M = 25.0$ ),  $t(79) = -1.831, p = .071$ . There was no effect of condition,  $F(1, 78) = .003, p = .958$ , nor did condition interact with time,  $F(2, 156) = .043, p = .958$ .

When the same analysis was conducted including gender as a factor, there was no main effect of gender, nor was there any two-way interaction. There was a significant three-way interaction (Mood  $\times$  Condition  $\times$  Gender),  $F(2, 152) = 4.236, MSE = 11.130, p = .016$ . A one-way ANOVA was performed by gender on negative affect for those in the venting condition. There were no

gender differences as a function of Time 1 ( $p = .447$ ) or Time 2 ( $p = .413$ ) but male participants reported higher negative affect at Time 3 than female participants reported ( $p = .049$ ). We also performed a one-way ANOVA by gender on the negative affect scores in the distraction condition. There were no gender differences for Time 1 ( $p = .341$ ), Time 2 ( $p = .150$ ), or Time 3 ( $p = .537$ ).

## Discussion

This study compared the effectiveness of using art-making to vent negative feelings versus to distract oneself from negative feelings. Negative affect was reduced significantly more after distraction than venting. There was no analogous effect for positive affect. This finding is consistent with previous research showing that using art-making to vent is less effective in improving mood than is using art-making to distract (Dalebroux et al., 2008; Drake et al., 2011). But the results presented here are stronger: although Dalebroux et al. found the positive effect of distraction when participants were explicitly asked to make a positive image, here we report the effect even when participants are asked to create a neutral image.

## Study 2

Study 2 was motivated by three questions. First, we reasoned that distraction might have been more effective than venting in Study 1 only because the negative mood participants felt was not about events that were personally experienced. Perhaps venting is more effective when confronting the more intense negative feelings that might be triggered by recalling a personal sadness. Thus, in Study 2 we induced a negative mood by asking participants to think of the saddest event they had ever experienced. Second, Study 1 did not allow us to disentangle the mood improvement that could result from mere time passage from the improvement that could result from drawing. Thus, in Study 2 we included a condition in which participants were asked to sit quietly for 10 minutes. And third, Study 1 did not include a manipulation check to determine whether participants were actually venting in the venting condition and distracting themselves in the distraction condition. Thus, in Study 2 we asked participants whether they believed that the activity in which they had just engaged served to help them vent their feelings, think about things besides the sad event, or something else.

Study 2 was similar in design to Study 1. We induced a sad mood by asking participants to think of the saddest event they had

experienced. Participants were then randomly assigned to one of three conditions: vent, distract, or sit. Mood was assessed before and after thinking of the sad event and after the activity.

## Method

### Participants.

Participants were 90 undergraduates at the same university as in Study 1 (63 women, 27 men) ranging in age from 18 to 22 ( $M = 18.9$ ,  $SD = .95$ ). Participants were recruited from psychology classes and received one research credit as part of a course requirement. The sample was 65.6% White, 13.3% Asian, 13.3% Hispanic/Latino, 3.3% Black, 3.3% Other, and 1.1% Native Hawaiian/Pacific Islander.

### Materials.

**Mood induction.** Participants were instructed as follows: "Think of the saddest event that has ever happened to you. I want you to close your eyes and make yourself feel like you did then." Participants were given a full minute to think about this event. They were then asked to write down a short description of the event they had recalled.

**Activity.** Participants were randomly assigned to one of three conditions: vent, distract, or sit, with 30 in each condition and no difference in gender distribution across conditions, ( $\chi^2 = 0.0$ ,  $p = 1.0$ ). Participants in the vent and distract conditions were given a set of colored pencils and a 9" × 11" sheet of white paper. Vent condition instructions were: "Use the next 10 minutes to draw the event." Distract condition instructions were: "Use the next 10 minutes to draw a house." In the sit condition, participants were instructed to "Use the next 10 minutes to sit quietly."

**Positive and Negative Affect Schedule (PANAS).** To measure affect, we again administered the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988).

**Strategy questionnaire.** To determine whether participants were aware of the strategy they used, at the end of the session we asked participants to indicate on a questionnaire: "Which of the following functions did the task serve for you?" They were presented with three choices and asked to select one: 1) "It helped me vent my feelings;" 2) "It helped me to think about things other than the sad event;" and 3) "Other—specify." Nineteen (19.8%) participants checked "Other" and thus were excluded from the strategy analyses. We used the remaining responses ( $n = 71$ ) to classify individuals as believing that while drawing or sitting they were

expressing negative feelings about the event or allowing themselves to be distracted.

**Procedure.** Participants were seen individually in a private room. Participants first completed the PANAS (Time 1). Next, participants were asked to think of the saddest event that happened to them and again completed the PANAS (Time 2). Participants then carried out the activity in their assigned condition. After the activity, participants were given the PANAS again and asked to indicate how they were feeling (Time 3). Finally, participants completed the Strategy Questionnaire.

## Results

**Preliminary results.** Table 2 presents the mean positive and negative affect scores for Time 1, Time 2, and Time 3 by condition. Participants in the three conditions had equivalent positive and negative affect scores prior to the mood induction. A one-way ANOVA by condition (3) revealed at Time 1 no effect of condition on positive affect,  $F(2, 87) = .261$ ,  $p = .771$  or on negative affect,  $F(2, 87) = .254$ ,  $p = .777$ . A one-way ANOVA by condition also showed no differences across conditions at Time 2 either for positive affect,  $F(2, 87) = 1.190$ ,  $p = .154$  or negative affect,  $F(2, 87) = .086$ ,  $p = .918$ . Thus, there were no differences across conditions in affect at the start of the study or after the mood induction.

**Effects of condition on decreasing negative affect.** To compare the effectiveness of the conditions in improving short-term mood, we performed a three-way repeated measures ANOVA, with condition as the between-subjects factor, and time as the repeated measures factor for negative affect. There was an effect of time,  $F(2, 174) = 53.936$ ,  $MSE = 18.420$ ,  $p < .001$ . Paired sample  $t$  tests showed negative affect increasing from Time 1 ( $M = 12.9$ ) to Time 2 ( $M = 19.4$ ),  $t(89) = -8.963$ ,  $p < .001$ ; and decreasing from Time 2 ( $M = 19.4$ ) to Time 3 ( $M = 14.7$ ),  $t(89) = 5.879$ ,  $p < .001$ . There was no effect of condition,  $F(2, 87) = 2.532$ ,  $p = .085$ .

As in Study 1, condition interacted with time,  $F(4, 174) = 8.385$ ,  $p < .001$ . A one-way ANOVA by condition (3) on negative affect scores revealed an effect of condition,  $F(2, 87) = 22.396$ ,  $p < .001$ . Least Significant Difference post hoc tests showed that negative affect decreased significantly more in the distract than in the vent condition ( $p < .001$ ,  $d = -.61$ ), significantly more in the sit than in the vent condition ( $p < .001$ ,  $d = -.32$ ), and marginally more in the distract than in the sit condition ( $p = .061$ ,  $d = -.45$ ).

Table 2  
Mean Positive and Negative Affect (and Standard Deviations) for Each Condition at Time 1, Time 2, and Time 3

Condition	<i>n</i>	Time 1	Time 2	Time 3
Vent	30			
Positive Affect		27.44 (7.01)	20.63 (7.11)	20.06 (8.19)
Negative Affect		13.38 (3.75)	19.06 (6.23)	18.72 (6.39)
Distract	30			
Positive Affect		25.53 (6.17)	17.38 (5.43)	25.90 (7.39)
Negative Affect		12.53 (2.99)	19.91 (8.34)	11.38 (2.03)
Sit	30			
Positive Affect		26.35 (7.39)	20.84 (7.74)	20.00 (8.63)
Negative Affect		12.78 (2.81)	18.84 (8.60)	13.41 (3.71)

When the same analysis was conducted including gender as a factor, results were unchanged: There was no main effect of gender, nor were there any interactions with gender.

**Effects of condition on increasing positive affect.** To compare the effectiveness of venting versus distraction in improving short-term mood, we performed a three-way repeated measures ANOVA, with condition as the between-subjects factor, and time as the repeated measures factor for positive affect. There was an effect of time,  $F(2, 174) = 65.018$ ,  $MSE = 17.135$ ,  $p < .001$ . Paired sample  $t$  tests showed positive affect decreasing from Time 1 ( $M = 26.5$ ) to Time 2 ( $M = 19.6$ ),  $t(89) = 14.561$ ,  $p < .001$ ; and positive affect increasing from Time 2 ( $M = 19.6$ ) to Time 3 ( $M = 22.1$ ),  $t(79) = -3.161$ ,  $p = .002$ . There was no effect of condition,  $F(2, 87) = .179$ ,  $p = .836$ .

Condition interacted with time,  $F(4, 174) = 14.587$ ,  $p < .001$ . A one-way ANOVA by condition (3) on positive affect scores revealed an effect of condition,  $F(2, 87) = 6.519$ ,  $p = .002$ . Least Significant Difference post hoc tests showed that positive affect increased significantly more in the distract than in the vent condition ( $p = .003$ ,  $d = .82$ ), and significantly more in the distract than in the sit condition ( $p = .002$ ,  $d = .84$ ). The sit and vent conditions did not differ in their effect on positive affect ( $p = .936$ ,  $d = -.02$ ). When the same analysis was conducted including gender, there was a main effect of gender: Male participants had a marginally higher positive affect at Time 1 ( $p = .059$ ), a significantly higher positive affect at Time 2 ( $p = .003$ ), and marginally higher positive affect at Time 3 ( $p = .074$ ) than did female participants. There were no interactions with gender.

**Self-report strategy.** As a manipulation check, we investigated participants' beliefs about the strategy they were using. A chi-square test on assigned condition by reported strategy (vent, distract) was performed, with those who selected "Other" excluded from the analysis ( $n = 19$ ). There was a difference in the proportion of reported strategies by condition,  $\chi^2 = 43.533$ ,  $p < .001$ . In the vent condition, 83% said they thought the activity helped them to vent their feelings. In the distract and sit conditions, 93% and 92%, respectively, said they thought the activity helped them to think about things other than the sad event. Thus, those in the vent condition believed they were venting; and those in both the distract and the sit conditions believed they were distracting themselves.

## Discussion

This study examined the effectiveness of two kinds of mood regulation strategies when coping with a negative mood engendered by thinking about a personal event (venting vs. distraction). Consistent with previous research (Dalebroux et al., 2008; Drake et al., 2011), positive affect was significantly higher in the distraction condition than in the venting condition. Positive affect was also higher in the distraction condition than in the sitting condition, showing that we cannot explain the positive effects of distracting oneself through drawing by using the mere passage of time. Negative affect was reduced the least in the vent condition, again showing venting to be less effective than distracting oneself. Although the sit condition reduced negative affect marginally less than did the distract condition, it was in the distract condition that negative affect was reduced along with an elevation of positive affect. Thus, drawing something distracting, a house, was more

effective in repairing mood than both venting negative feelings and simply allowing time to pass for the mood to fade.

## General Discussion

The physical and psychological benefits of positive emotions are numerous. Positive moods are associated with a lessening of pain, improved immune functioning, and better recovery from cardiovascular illness (Fredrickson & Cohn, 2008). Positive emotions also allow us to cope with stressors. People who experience more positive emotions are able to cope with natural disasters more efficiently compared to those who experience fewer positive emotions (Fredrickson & Cohn, 2008). People who have more positive emotions also report greater psychological well-being after the death of someone close (Fredrickson & Cohn, 2008).

In Study 1, we induced a negative mood by showing a sad film, and then assessed mood after participants used drawing to vent negative feelings or to distract themselves from thinking about negative feelings. In Study 2 we induced a negative mood by asking people to think about something sad that they personally experienced, and we tested whether mood improvement from art-making could be attributed to the passage of time after thinking about a sad event.

Consistent with previous research (Dalebroux et al., 2008; Drake et al., 2011), we found that distraction through art-making is a more effective means of short-term mood repair than is venting. We also found that male participants in Study 1 reported more negative affect after using art to vent than to distract themselves. The benefits of distraction through drawing occur when sadness is due to viewing a sad film as well as to recalling a personally sad experience. Previous research had demonstrated that creating a positively valenced drawing renders mood more positive (Dalebroux et al., 2008). The present research shows that this effect is not a function of making a drawing that is positively valenced given that the same findings were obtained when people drew a neutral image (a house). We also found in Study 2 that participants were aware of the strategy they were using. Of course this is a global assessment of emotion regulation strategy. Future research would benefit from investigating more specifically individuals' awareness of emotion regulation strategies and their relation to drawing activities.

We asked participants to draw a house—a topic selected because of its presumably neutral nature. It is possible that drawing a house conjured up personal positive or negative memories. To determine what participants are thinking about when distracting themselves by drawing a house, future research should ask participants directly to recall what they were thinking of while drawing the house. It is also possible that because participants were asked draw a set item (the house), they felt as if their drawing was being evaluated. The expectation of being evaluated may have focused participants' attention on the drawing task and away from their negative mood. Future research should examine whether an expectation that one's drawing will be evaluated affects whether the drawing experience leads to mood improvement.

Of course, drawing is just one of the ways in which people can distract themselves to improve mood. Working on a complex math problem improves mood more than does working on a simple math problem (which presumably is less distracting because it requires less concentration), and also more than does working on no math

problem at all (van Dillen & Koole, 2007). The same effect occurs when people view cognitively demanding yet humorous stimuli (Strick, Holland, van Baaren, & van Knippenberg, 2009): Mood improved more after viewing stimuli that were high in cognitive demand. These studies demonstrate that distraction from a negative mood can occur when individuals engage in cognitively demanding tasks. As van Dillen and Koole (2007) have argued, such tasks distract us by loading our working memory and “preventing mood-congruent processing” (p. 715). We suggest that when participants drew the house, they were forced to create images that were incongruent with their negative memories. This incongruence may have made the house-drawing distraction task more cognitively demanding than the venting task—and this may be the mechanism by which mood was elevated after drawing a house. Future research should administer an independent measure of cognitive demand to determine whether level of cognitive load predicts mood improvement.

We have demonstrated here that the effect of art-making on mood cannot be attributed to the mere passage of time, given that affect was higher in the distraction condition than in the sitting condition. To be sure, we found that negative affect was reduced more in the distraction and sitting conditions than in the venting condition. However, although the sitting condition reduced negative affect marginally less than did the distraction condition, it was only in the distraction condition that there simultaneously was a reduction of negative affect with an elevation of positive affect.

Taken together, this research begins to inform our understanding of how the near-universal activity of drawing may serve to regulate an individual’s emotions—particularly sadness. Drawing to distract is a short-term emotion regulation strategy that can be used at any time and in any place. Whereas the present research examines immediate effects of drawing on mood, the next step would be to examine the long-term effects of drawing on mood. Similar to expressive writing, drawing may improve mood in the long term because it allows individuals to form coherent narratives of their experiences. One of the functions of art therapy is to make meaning of a personal experience through drawing and talking about the personal experience (American Art Therapy Association, 2011). In nonclinical populations, the process of using a drawing to build a meaningful narrative may take longer than a brief intervention. Thus, future research should examine the long-term mood benefits of drawing, comparing drawing as a form of venting versus distraction. Future research might also examine the effect of drawing on other kinds of negative and positive emotions (disgust, pride, etc.).

We conclude that art-making helps to repair negative affect, whether this affect was caused by observing bad things happening to others, or by recalling personal sorrows. Although using art to vent negative feelings and to distract oneself from negative feelings are both effective means of mood repair, the studies reported here, along with previous studies, show that using art to distract oneself is a significantly more effective form of mood regulation than is using art as a form of venting. This finding runs counter to the commonly held view that self-expression through art (another way of describing venting) serves a therapeutic function. We suggest that what is therapeutic about the activity of art-making is that it redirects our thoughts, and keeps us from ruminating.

## References

- American Art Therapy Association. (2011). What is art therapy? Retrieved from <http://www.americanarttherapyassociation.org/aata-history-background.html>
- Briks, A. (2007). Art therapy with adolescents: Vehicle to engagement and transformation. *Canadian Art Therapy Association Journal*, 20, 2–15.
- Dalebroux, A., Goldstein, T. R., & Winner, E. (2008). Short-term mood repair through art-making: Attention redeployment is more effective than venting. *Motivation and Emotion*, 32, 288–295. doi:10.1007/s11031-008-9105-1
- DePetrillo, L., & Winner, E. (2005). Does art improve mood? A test of a key assumption underlying art therapy. *Art Therapy*, 22, 205–212.
- Drake, J. E., Coleman, K., & Winner, E. (2011). Short-term mood repair through art: Effects of medium and strategy. *Art Therapy*, 28, 26–30.
- Fredrickson, B. L., & Cohn, M. A. (2008). *Positive emotions*. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of emotions* (3rd ed., pp. 777–796). New York: Guilford Press.
- Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition and Emotion*, 12, 191–220. doi:10.1080/026999398379718
- Goldstein, T. R. (2009). The pleasure of unadulterated sadness: Experiencing sorrow in fiction, nonfiction, and “in person.” *Psychology of Aesthetics, Creativity, and the Arts*, 3, 232–237. doi:10.1037/a0015343
- Greene, G. (1980). *Ways of escape*. New York, NY: Simon & Schuster.
- Hemenover, S. H., Augustine, A. A., Shulman, T. E., Tran, T. Q., & Barlett, C. (2008). Individual differences in the ability to repair negative affect. *Emotion*, 8, 468–478. doi:10.1037/1528-3542.8.4.468
- Klein, K., & Boals, A. (2001). Expressive writing can increase working memory capacity. *Journal of Experimental Psychology: General*, 130, 520–533. doi:10.1037/0096-3445.130.3.520
- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23, 4–41. doi:10.1080/02699930802619031
- Kramer, E. (2000). *Art as therapy*. London, England: Jessica Kingsley Publishers.
- Larsen, R. J. (2000). Toward a science of mood regulation. *Psychological Inquiry*, 11, 129–141. doi:10.1207/S15327965PLI1103\_01
- Lischetzke, T., & Eid, M. (2003). Is attention to feelings beneficial or detrimental to affective well-being? Mood regulation as a moderator variable. *Emotion*, 3, 361–377. doi:10.1037/1528-3542.3.4.361
- Parkinson, B., & Totterdell, P. (1999). Classifying affect-regulation strategies. *Cognition and Emotion*, 13, 277–303. doi:10.1080/026999399379285
- Pennebaker, J. W., & Beall, S. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, 95, 274–281. doi:10.1037/0021-843X.95.3.274
- Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology*, 58, 528–537. doi:10.1037/0022-3514.58.3.528
- Pennebaker, J. W., & Francis, M. E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognition and Emotion*, 10, 601–626. doi:10.1080/026999396380079
- Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. *Journal of Consulting and Clinical Psychology*, 56, 239–245. doi:10.1037/0022-006X.56.2.239
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology*, 72, 863–871. doi:10.1037/0022-3514.72.4.863
- Pifalo, T. (2006). Art therapy with sexually abused children and adolescents: Extended research study. *Art Therapy*, 23, 181–185. doi:10.1080/07421656.2006.10129337
- Pizarro, J. (2004). The efficacy of art and writing therapy: Increasing

- positive mental health outcomes and participant retention after exposure to traumatic experience. *Art Therapy, 21*, 5–12.
- Strick, M., Holland, R. W., van Baaren, R. B., & van Knippenberg, A. (2009). Finding comfort in a joke: Consolatory effects of humor through cognitive distraction. *Emotion, 9*, 574–578. doi:10.1037/a0015951
- Thayer, R. E., Newman, R., & McClain, T. M. (1994). Self-regulation of mood: Strategies for changing a bad mood, raising energy, and reducing tension. *Journal of Personality and Social Psychology, 67*, 910–925. doi:10.1037/0022-3514.67.5.910
- Tipple, R. (2008). Paranoia and paracosms: Brief art therapy with a youngster with Asperger's syndrome. In C. Case & T. Dalley (Eds.). *Art therapy with children: From infancy to adolescence*. (pp. 175–192). New York: Routledge/Taylor & Francis Group.
- van Dillen, L. F., & Koole, S. L. (2007). Clearing the mind: A working memory model of distraction from negative mood. *Emotion, 7*, 715–723. doi:10.1037/1528-3542.7.4.715
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology, 54*, 1063–1070. doi:10.1037/0022-3514.54.6.1063
- Winner, E. (1982). *Invented worlds: The psychology of the arts*. Cambridge, MA: Harvard University Press.

Received July 14, 2011

Revision received November 1, 2011

Accepted November 30, 2011 ■