Motiv Emot (2011) 35:444–460
DOI 10.1007/s11031-011-9229-6

ORIGINAL PAPER

Performance and learning goals for emotion regulation

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Published online: 23 June 2011

Abstract Goal orientation theory is concerned with performance and learning goals in academic, athletic, and other ability areas. Here we examine performance and learning goals for emotion regulation. We define performance goals for emotion regulation as seeking to *prove* one's ability to manage emotions; learning goals for emotion regulation are defined as seeking to *improve* one's ability to manage emotions. In two studies, we tested the hypothesis that performance goals for emotion regulation would be associated with greater use of defensive emotion regulation strategies and depressive symptoms. Results from both studies showed that individuals with greater performance goals for emotion regulation reported higher levels of rumination and thought suppression and greater depressive symptoms, while individuals with greater learning goals reported greater use of cognitive reappraisal. The findings suggest that goals for emotion regulation may help explain individual differences in use of defensive versus constructive emotion regulation strategies.

Keywords Emotion regulation · Goal orientation · Performance goals · Rumination · Depression

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Introduction

Following an emotionally upsetting event, people typically seek to feel better. However, some people adopt strategies that increase rather than alleviate negative emotion. For example, individuals prone to depression tend to ruminate on the causes and consequences of negative emotion, which exacerbates and prolongs rather than relieves negative emotion (Nolen-Hoeksema et al. 2008). People prone to depression are also more likely to use thought suppression, a strategy that can backfire and increase negative emotion (Wenzlaff and Wegner 2000). In contrast, individuals who use cognitive reappraisal to manage negative emotion have fewer depressive symptoms (John and Gross 2004).

Why do some people persistently use emotion regulation strategies that increase their negative emotion? Several lines of research suggest that people's strategies depend on their goals (e.g., Dykman 1998; Koole et al. 1999; Tamir 2005). In this research, we explore whether individuals who typically use rumination and thought suppression may be pursuing different goals for regulating their emotions than people who typically use cognitive reappraisal.

Performance and learning goals

Goal orientation researchers distinguish between two major goals: *performance* and *learning*. People with performance goals seek to prove their ability. When people with performance goals encounter stressful situations, they seek to avoid proof of low ability, which they associate with low self-worth (Grant and Dweck 2003; Dykman 1998). In contrast, people with learning goals (also known as mastery goals) seek to develop and improve their ability. When people with learning goals encounter stressful situations,

they seek to learn and grow from the experience (Dweck and Leggett 1988; Dykman 1998; Baer et al. 2006).

The two types of goals are associated with different strategies for dealing with negative feedback. People with performance goals tend to use *defensive* strategies for dealing with failure or rejection, including withdrawing effort, making excuses, and avoiding challenging tasks (e.g., Urdan et al. 2002). People with learning goals tend to use *constructive* strategies for dealing with failure or rejection, including increasing effort, persisting on difficult tasks, seeking help, and remaining open to information about their mistakes (see reviews by Dweck 1999; Kaplan and Maehr 2007).

Most of the research on performance and learning goals has focused on academic achievement. Goal orientation research has also been applied to the domains of athletics (Duda and Nicholls 1992), social interactions (Horst et al. 2007; Ryan and Shim 2008), and work (Button et al. 1996; Vandewalle 1997). However, none of the research on goal orientation has explored whether people have performance and learning goals for managing emotions. We define *performance goals for emotion regulation* as seeking to prove or demonstrate one's ability to manage emotions. We define *learning goals for emotion regulation* as seeking to improve or develop one's ability to manage emotions.

What does it mean to have performance goals for emotion regulation? Whereas people with performance goals for academic achievement strive to prove how well they perform in classes or to avoid looking stupid, people with performance goals for emotion regulation are concerned with perceptions of how well they manage their emotions. They want to prove they are in control of their emotions or to avoid looking like they have emotional problems.

What would it mean to have learning goals for emotion regulation? Just as people with learning goals for academic achievement seek to improve and learn from their mistakes, people with learning goals for emotion regulation seek to improve their ability to handle emotions. Just as individuals with learning goals for achievement view setbacks as an opportunity to learn and improve their ability (e.g., Mangels et al. 2006), people with learning goals for emotion regulation view emotional difficulties as opportunities for growth and development.

Defensive versus constructive emotion regulation strategies

We use emotion regulation to refer to the processes by which people seek to change their emotional experience or expression (Gross 2001, 2007). We adopt a functionalist view of emotions as response tendencies with subjective, physiological, and behavioral dimensions, based upon an individual's appraisal of a situation (Mauss et al. 2005). Emotions can be seen as providing information or feedback about progress or problems in reaching a desired state (Baumeister et al. 2007; Carver and Scheier 2000).

The adaptiveness of different emotion regulation strategies depend upon the particular situation in which they are applied (Gross 2007). However, habitual use of certain emotion regulation strategies, such as rumination and thought suppression, have been found to predict risk of depression and other mental health disorders (Nolen-Hoeksema et al. 2007; Gross and John 2003; Wegner and Zanakos 1994).

Thought suppression and rumination can be considered defensive emotion regulation strategies. Thought suppression is an attempt to avoid negative thoughts and feelings (Wenzlaff and Wegner 2000). When suppression breaks down, rumination on negative thoughts and feelings is likely (Wenzlaff and Luxton 2003). People who ruminate build "a mountain of evidence" (Nolen-Hoeksema et al. 2008, p. 407) that their situation is impossible to improve, which justifies avoidance of effort. The more people suppress or ruminate, the less likely they are to engage in positive reappraisal and attempts to repair negative emotions (Lyubomirsky and Nolen-Hoeksema 1993; Wenzlaff et al. 1988).

Cognitive reappraisal is the most widely researched constructive emotion regulation strategy (Aldao et al. 2010; John and Gross 2004). Reappraisal enables individuals to find new and often positive meanings for events—for example, to see negative events as an opportunity or as a challenge (Gross 1998; Gross and John 2003).

The present studies

The primary objective of the current studies was to examine whether performance and learning goals for emotion regulation are related to individual differences in emotion regulation strategies and depressive symptoms. As discussed above, prior goal orientation research has found that, in the face of difficulties, performance goals foster defensive strategies (e.g., withdrawal of effort) and learning goals foster constructive strategies (e.g., trying harder or challenge-seeking; Nichols et al. 1991). We expected that people who seek to prove their emotion regulation ability would be more likely to defensively justify or dismiss their negative emotions. Conversely, people who seek to improve their ability to regulate emotions would be more open to viewing their negative emotions from new perspectives. We thus predicted that higher performance goals for emotion regulation would be positively associated with rumination and thought suppression, and learning goals for emotion regulation would be positively associated with cognitive reappraisal.

To measure performance and learning goals for emotion regulation, we adapted two different goal orientation measures. In the first study, we adapted a measure of global performance versus learning goals (Dykman 1998; Lindsay and Scott 2005). In the second study, in addition to the global measure, we adapted an achievement goal measure. The achievement goal measure differentiates between *performance-approach* and *performance-avoidance* goals—in other words, seeking to *prove* ability versus seeking to *avoid proof* of low ability. Performance-avoidance goals in achievement domains have been found to be more highly related to defensive strategies (such as avoidance of challenge) and depressive symptoms than are performance-approach goals (e.g., Cole et al. 2007; Elliot et al. 1999; Sideridis 2005).

Study 1

Study 1 tested the hypothesis that individuals with greater performance goals for emotion regulation would use more defensive regulation strategies and experience more depressive symptoms, and that individuals with greater learning goals for emotion regulation would use less defensive strategies and experience lower depressive symptoms. We also examined emotion regulation strategies as potential mediators between goals and depressive symptoms, because rumination and suppression have been found to be strong predictors of depression (Nolen-Hoeksema et al. 2008) and because strategies for dealing with negative feedback (e.g., shallow versus deep processing) have been previously investigated as mediators between achievement goals and achievement outcomes (e.g., Elliot et al. 1999; Harackiewicz et al. 2000).

We also examined how individuals' goals for emotion regulation relate to their beliefs about their emotion regulation ability. We predicted that learning goals would relate positively and performance goals would relate negatively to these beliefs because, in goal orientation research, learning goals for achievement typically relate positively to perceived academic ability, while performance goals for achievement, particularly performance-avoidance goals, relate negatively to perceived ability (Friedel et al. 2007). We also tested whether beliefs about emotion regulation ability moderated the effect of performance goals on depressive symptoms. Some achievement goal theorists have suggested that perceived ability is a moderator of the effects of performance goals, such that those with lower perceived ability are more likely to suffer from negative effects of performance goals (e.g., Elliott and Dweck 1988). Although we had no specific hypotheses regarding gender, we examined it because females tend to experience higher levels of rumination and depressive symptoms than males (Nolen-Hoeksema and Jackson 2001).

Method

Participants and procedure

Participants were 27 male and 35 female undergraduate students, ages 18–24. They were recruited through an announcement posted online for a study on emotions and paid $15 for their participation. All participants met individually with a research assistant blind to the hypotheses and completed self-report measures as part of a larger study. Measures included performance and learning goals for emotion regulation, emotion regulation strategies, beliefs about emotion regulation ability, and depressive symptoms.

Materials

Performance and learning goals for emotion regulation We adapted a self-report measure from the 36-item Goal Orientation Inventory by Dykman (1998). Items were reworded so that they focused on learning and performance goals for managing emotions. For example, the item "It seems like I'm constantly trying to prove that I'm 'okay' as a person" was reworded as "It seems like I'm constantly trying to prove that I'm 'okay' at dealing with my emotions." A 7-point Likert scale, from 1 (*strongly disagree*) to 7 (*strongly agree*), was employed. Learning and performance goals for emotion regulation were added separately, with higher scores representing stronger goal endorsement.

Principal components analysis with oblique rotation was used on the 36 items set. This exploratory analysis indicated that a two-component solution best described the intercorrelations among the items. Based on this initial analysis, we reduced the scale to 16 of the 36 items. Items retained from the initial item set were those deemed to be most central to the constructs guiding item generation and also had a correlation of at least .69 with its respective subscale, and a correlation of less than .20 with the other subscale. "Appendix 1" lists the component loadings for the final item set and illustrates the presence of the two distinct components. The two components together accounted for 64.7% of the total variance in the first study and 72.2% in the second study, with eigenvalues of 6.75 and 3.60 in the first, 6.40 and 5.16 in the second, and all other eigenvalues below 1. Internal reliability for the subscales was high, $\alpha = .92$ for performance goals and $\alpha = .92$ for learning goals. Results of analyses for the reduced 16-item scale were equivalent to those for the initial 36 items, with no differences in significance.

Rumination and reflection Rumination was assessed using a version of the Response Styles Questionnaire short form (RSQ-S; Nolen-Hoeksema 1991), which included 10 items, each rated on a scale from 1 (*almost never*) to 4 (*almost always*). Treynor et al. (2003) identified two distinct subscales within this 10-item scale: brooding (5 items; e.g., "Think about a recent situation, wishing it had gone better") and reflection (5 items; e.g., "Go someplace alone to think about my feelings"). The brooding items operationalize rumination as an abstract, self-evaluative self-focus (i.e., Nolen-Hoeksema 1991; Watkins 2008). In contrast, the reflection items capture a problem-solving form of self-reflection. Treynor et al. (2003) found that the brooding subscale was related to depression cross-sectionally and longitudinally, whereas the reflective subscale was less reliably associated with depression. We thus report on brooding rumination ($\alpha = .69$) and reflection ($\alpha = .61$) separately. We focus on the brooding subscale in the analyses, given its stronger and more consistent association with depression (e.g., Joormann et al. 2006). For ease of discussion, we refer to the brooding subscale as *rumination* and the reflective subscale as *reflection* (for similar usage, see Nolen-Hoeksema et al. 2007).

Thought suppression Thought suppression was assessed via the White Bear Suppression Inventory (WBSI; Wegner and Zanakos 1994), which consists of 10 items (e.g., "There are things that I try not to think about"). Each of these items is rated from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher ratings indicating greater thought suppression ($\alpha = .83$).

Beliefs about emotion regulation ability Participants completed the 30-item Negative Mood Regulation (NMR) scale (Catanzaro and Mearns 1990) which assesses beliefs about whether one will be able to alleviate negative affect using cognitive strategies (e.g., "I can feel better by thinking about more pleasant times"), behavioral strategies (e.g., "going out to dinner with friends will help"), and general beliefs (e.g., "I can find a way to calm down"). Each item is rated from 1 (*strongly disagree*) *to* 5 (*strongly agree*), with higher ratings indicating greater belief in one's ability to feel better when upset ($\alpha = .87$). The NMR scale consistently has been found to be negatively associated with depression and to explain variance in depressive symptoms beyond that explained by emotion regulation strategies or coping responses (e.g., Catanzaro et al. 2000; Drwal 2008).

Depressive symptoms The Beck Depression Inventory II (BDI-II; Beck et al. 1996) yields a score for severity of symptoms based on 21 items, each of which is rated on a 4-point scale (range = 0 to 63, $\alpha = .88$). The BDI-II has been validated for use with normative samples of college students as well as with clinical populations (Beck et al. 1996).

Results and discussion

Descriptive statistics and intercorrelations

The means, standard deviations, and correlations for the variables are reported in Table 1. The distribution of scores for performance and learning goals for emotion regulation were similar to the distribution obtained for the original global performance and learning goal measure (Lindsay and Scott 2005).

As predicted, performance goals for emotion regulation were positively associated with depressive symptoms ($r = .67$, $p < .001$). Those goals were also positively associated with rumination ($r = .62$, $p < .001$) and thought suppression ($r = .46$, $p < .001$) and were negatively associated with beliefs about emotion regulation ability ($r = -.49$, $p < .001$).

As expected, learning goals for emotion regulation were negatively associated with depressive symptoms ($r = -.40$, $p = .001$), with rumination ($r = -.35$, $p = .005$), and with thought suppression ($r = -.28$, $p = .031$). Learning goals for emotion regulation were positively correlated with beliefs about emotion regulation ability ($r = .49$, $p < .001$). As shown in Table 1, gender was not significantly correlated with goals or with the other variables.

Goals for emotion regulation as predictors of depression

To examine whether goals for emotion regulation predicted depressive symptoms, we conducted linear regression analyses, with performance and learning goals for emotion regulation as the predictor variables and depressive symptoms as the outcome variable. The overall model was significant, $F(2, 59) = 28.52$, $p < .001$, $R^2 = .49$. Performance goals for emotion regulation ($\beta = .60$, $p < .001$) and learning goals for emotion regulation ($\beta = -.22$, $p = .031$) each significantly contributed to predicting depressive symptoms.

Testing for interaction effects with beliefs about emotion regulation ability

We used procedures by Aiken and West (1991) to test for interactions between goals for emotion regulation and beliefs about emotion regulation ability. Main effect terms were standardized and then multiplied to create interaction terms. Significance of interactions was determined if the R^2 increased by a significant amount and if the beta coefficient

Table 1 Study 1: Descriptive statistics and correlations among the primary variables ($N = 62$)

Variable	1	2	3	4	5	6	7	8
1. Depressive symptoms	–							
2. Rumination (brooding)	.56***							
3. Reflection	.37**	.31*						
4. Thought suppression	.66***	.42**	.37**					
5. Beliefs about emotion regulation ability	−.65***	−.40**	−.21	−.48***				
6. Performance goals for emotion regulation	.67***	.62***	.38**	.46***	−.49***			
7. Learning goals for emotion regulation	−.40***	−.35**	.00	−.28*	.49***	−.31*		
8. Gender[a]	.21	.20	.13	.16	−.01	.08	−.15	
M	8.62	4.81	3.90	46.29	105.40	22.12	34.10	.56
SD	7.06	3.05	2.78	9.93	13.69	10.59	9.32	.50

* $p < .05$; ** $p < .01$; *** $p < .001$, all tests are two-tailed

[a] Gender is coded 1 = female and 0 = male

for the interaction term was significant. We entered unstandardized regression coefficients to plot the interaction effects, using formulas provided by Dawson and Richter (2006).

The final model with performance goals for emotion regulation, beliefs, and their interaction predicting depressive symptoms yielded significant effects, $F(3, 58) = 33.26$, $p < .001$, $R^2 = .63$. A significant interaction between performance goals for emotion regulation and beliefs for emotion regulation ability ($\beta = -.24$, $p = .009$) indicated that higher performance goals were less likely to be associated with depressive symptoms for individuals with greater beliefs in their ability to regulation emotions (see Fig. 1). Higher performance goals for emotion regulation significantly contributed to depressive symptoms, even when controlling for beliefs about emotion regulation ability ($\Delta R^2 = .16$, $p < .001$). Learning goals for emotion regulation did not significantly contribute to depressive symptoms when controlling for beliefs about emotion regulation ability ($\beta = -.11$, $p = .350$) and did not have a significant interaction with beliefs ($\beta = .17$, $p = .084$).

Emotion regulation strategies as mediators

To test whether rumination and suppression mediated the relation between performance goals for emotion regulation and depressive symptoms, we followed the steps described by Baron and Kenny (1986), Kenny et al. (1998), Kenny (2009). Given the correlational design and limited sample size of this study, these analyses may be considered informal tests of mediation (Preacher and Leonardelli 2001). Regression analyses indicated that performance goals for emotion regulation significantly predicted depressive symptoms ($\beta = .67$, $p < .001$) and rumination

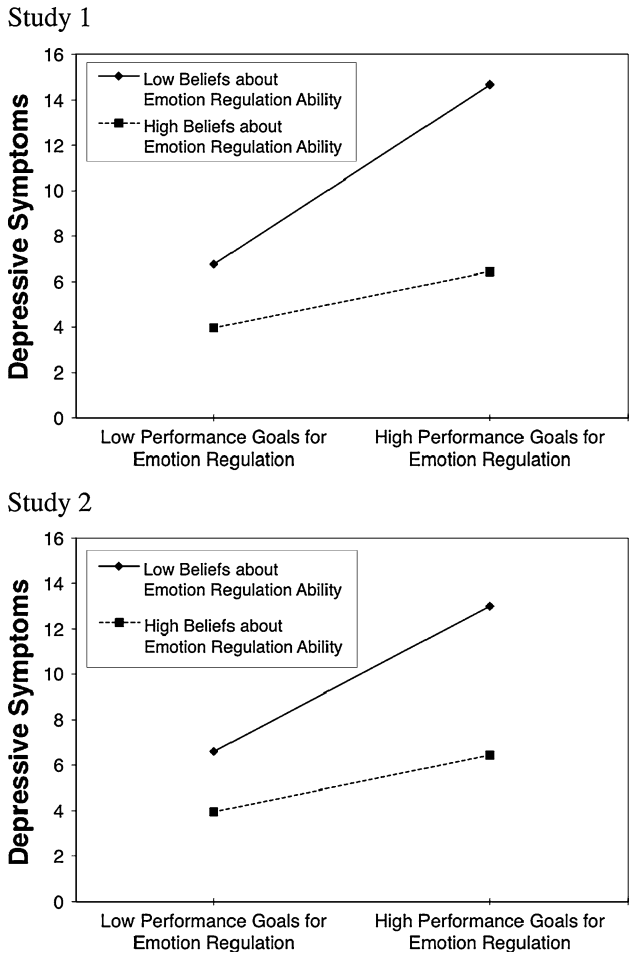

Fig. 1 Beliefs about emotion regulation ability as a moderator of the effect of performance goals for emotion regulation on depressive symptoms. The interaction effect was significant for Study 1, was a nonsignificant trend in Study 2, and was significant for the combined responses from Studies 1 and 2

($\beta = .62$, $p < .001$). When performance goals and rumination were included together in a model predicting depressive symptoms, the contribution of rumination bordered on significance ($\beta = .24$, $p = .053$), the relation between performance goals and depression was still significant ($\beta = .52$, $p < .001$) and was not significantly reduced (Sobel's $z = 1.80$, $p = .072$). Thus, the relation between performance goals and depressive symptoms was not mediated by rumination.

The relation between performance goals for emotion regulation and depressive symptoms was partially mediated by thought suppression. Performance goals for emotion regulation predicted thought suppression ($\beta = .46$, $p < .001$) and the effect of thought suppression on depressive symptoms was significant when performance goals was added to the model ($\beta = .45$, $p < .001$). The contribution of performance goals for emotion regulation was significantly reduced when thought suppression was added to the model (Sobel's $z = 3.10$, $p = 0.002$), but still significantly contributed to depressive symptoms when controlling for suppression ($\beta = .46$, $p < .001$).

Summary

The results of Study 1 indicated that individuals with higher performance goals were more likely to experience rumination, thought suppression, and depressive symptoms. The relation between performance goals and depression differed for those with high versus low beliefs about emotion regulation ability, with individuals scoring high in performance goals and low in beliefs reporting more depressive symptoms than other participants (Fig. 1). While learning goals for emotion regulation were negatively associated with rumination and depressive symptoms, learning goals did not significantly predict depressive symptoms when controlling for beliefs about emotion regulation ability.

Study 2

In Study 2, we sought to replicate and to extend Study 1 findings in three ways. First, we wanted to investigate avoidant versus approach forms of performance goals for emotion regulation. Based on robust findings that performance-avoidance goals for academic achievement predict negative outcomes (e.g., test anxiety and depression) reported in previous goal orientation research (e.g., McGregor and Elliot 2002; Sideridis 2005), we predicted that performance-avoidance goals for emotion regulation (seeking to avoid evidence of incompetence at managing emotions) would be significantly more predictive of depressive symptoms than performance-approach goals (seeking to prove or demonstrate competence at managing emotions).

Second, we sought to examine whether performance and learning goals for emotion regulation would be related to cognitive reappraisal. We expected that learning goals for emotion regulation would be positively related to cognitive reappraisal and that performance goals, particularly performance-avoidance goals, for emotion regulation would be inversely related to reappraisal. We also wanted to examine whether reappraisal would serve as a mediator of the relation between learning goals and depressive symptoms.

Third, we sought to investigate whether the measures of goals for emotion regulation developed for this study relate to the original measures from which they were derived. The measure of goals for emotion regulation used in Study 1 was based on a measure of global performance and learning goals, which apply across social, academic, work, and other situations. The global goal measure particularly focuses on individuals' goals in the face of failure, rejection, or other stressful situations (Goal Orientation Inventory, Dykman 1998). We expect that goals for emotion regulation are likely to arise in these situations, and thus expected that results for our adapted measure and the original global goal measure may be highly correlated.

We used the previously described measure of goals for emotion regulation (Measure A) as well as a new measure of those goals (Measure B). The new measure, based on a widely used measure of academic achievement goals (Achievement Goal Scale, Elliot and Church 1997), distinguishes between performance-approach goals (seeking to prove ability to manage emotions) and performance-avoidance goals (seeking to *avoid* proof of low ability), as well as learning goals. As noted above, performance-avoidance goals for achievement have proven more predictive of defensive strategies (McGregor and Elliot 2002; Pekrun et al. 2006) and of depression (Cole et al. 2007; Sideridis 2005, 2007). Performance-avoidance goals focus attention on avoidance of negative outcomes and are seen as interfering with the development of skills and competencies (Elliot 1999). Results for performance-approach goals for achievement have been mixed (Kaplan and Maehr 2007). Whereas in some studies performance-approach goals do not relate to outcomes, or relate to positive outcomes (e.g., academic grades), in other studies those goals relate to negative outcomes such as withdrawal of effort after failure and shallow processing of content (Darnon et al. 2007; Midgley et al. 2001).

We anticipated that each type of goal (performance-avoidance, performance-approach, and learning) in the new measure would be positively related to but distinct from the goals in the original measure. We also expected that results for the two measures of goals for emotion regulation

(Measures A and B) would relate closely to each other, given that they are seeking to assess the same underlying construct, despite differences in the measures on which they are based.

To replicate the results of Study 1, we investigated: (a) whether performance goals for emotion regulation relate positively to rumination, suppression, and depressive symptoms; (b) whether learning goals relate negatively to those variables; (c) whether beliefs about emotion regulation moderate the relation between performance goals and depressive symptoms; and (d) whether rumination and thought suppression serve as mediators of the relation between goals for emotion regulation and depressive symptoms.

Method

Participants and procedure

Participants were 49 female and 44 male undergraduate and graduate students, ages 18–27 ($M = 19.5$ years). All measures were individually administered using paper-and-pencil by a graduate student blind to the hypotheses. These measures were administered as a second session in a two-part study on students' emotion regulation. Participants were paid $15 for completing the study.

Materials

Global performance and learning goals We used the Goal Orientation Inventory (Dykman 1998; described above) to assess global performance and learning goals (which Dykman refers to as "Validation-Seeking" and "Growth-Seeking", respectively). Internal reliabilities for the subscales were high, .98 for global performance goals and .99 for global learning goals.

Achievement performance and learning goals We employed an 18-item achievement goal scale developed by Elliot and Church (1997). This achievement goal measure, which has been widely used in classroom goal studies (Kaplan and Maehr 2007), consists of three subscales with six items each: performance-approach (striving to prove ability; $\alpha = .94$), performance-avoidance (avoiding the appearance of low ability, $\alpha = .86$); and learning ("mastery"; wanting to learn as much as possible; $\alpha = .88$). A 7-point Likert scale, from 1 (*strongly disagree*) to 7 (*strongly agree*) was employed, with the score for each subscale being added separately and divided by the number of items in that subscale.

Performance and learning goals for emotion regulation As described above, we used two measures for performance and learning goals for emotion regulation in this study. The first measure (Measure A) was identical to that used in Study 1 ($\alpha = .94$ for performance goals; $\alpha = .95$ for learning goals). In addition, we adapted the Elliot and Church (1997) Achievement Goal Scale, described above. Items were reworded so that they focused on goals for managing emotions. For example, the item, "I often think to myself, 'What if I do badly in my classes?'" was reworded as, "I often think to myself, 'What if I can't control my emotions?'". In rewording the measure, we were careful not to indicate negative emotionality or depressive symptoms. Thus, words such as "badly," "poorly," and "dumb" from the original measure were omitted or reworded. As on the original scale, a 7-point Likert rating scale, from 1 (*strongly disagree*) to 7 (*strongly agree*), was employed, and the scores for each subscale were calculated by averaging the ratings for that subscale.

Principal components analysis with oblique rotation was used to examine the component structure. The results showed loadings on three components, with eigenvalues of 7.45, 3.51, and 1.31, and no other loading above .88. The scales were reduced by removing items that had more than .20 loading on more than one component, resulting in 4 items for performance-avoidance; 4 items for performance-approach, and 5 items for learning goals ($\alpha = .93$ for performance-approach, $\alpha = .78$ for performance-avoidance, and $\alpha = .90$ for learning goals) which together explained 72.8% of the variance in the scale. The component loadings for each item are included in "Appendix 2". Results of analyses for the reduced scale were equivalent to those when all 18 items were included, with no difference in significance.

Beliefs about emotion regulation ability As in Study 1, participants completed the Negative Mood Regulation (NMR) scale (Catanzaro and Mearns 1990). The NMR scale assesses beliefs about one's ability to regulate negative affect when upset, with higher scores indicating greater belief in one's emotion regulation ability ($\alpha = .84$).

Depressive symptoms As in Study 1, participants completed the BDI-II (Beck et al. 1996) to assess severity of depressive symptoms. Higher scores (ranging from 0 to 63; $\alpha = .87$) indicate greater depressive symptoms.

Rumination As in Study 1, rumination was assessed using the 10-item Response Styles Questionnaire (RSQ-S; Nolen-Hoeksema 1991; Treynor et al. 2003). As in Study 1, brooding rumination ($\alpha = .75$) and reflection ($\alpha = .72$) were separately scored. Higher scores indicate greater rumination.

Thought suppression As in Study 1, thought suppression was assessed using the WBSI (Wegner and Zanakos 1994; $\alpha = .82$). Higher scores indicate greater thought suppression.

Cognitive reappraisal To measure cognitive reappraisal, we used the 6-item reappraisal subscale of the Emotion Regulation Questionnaire (ERQ; Gross and John 2003; $\alpha = .82$). The reappraisal items assess the extent to which individuals typically attempt to change their thoughts in order to change how they feel (e.g., "When I want to feel more positive emotion, I change the way I'm thinking about the situation"). Each item is rated on a 7-point scale, from 1 (*strongly disagree*) to 7 (*strongly agree*), with higher total scores indicating greater use of cognitive reappraisal.

Results and discussion

Descriptive statistics and intercorrelations

The means, standard deviations, and intercorrelations for the measured variables are reported in Table 2. As predicted and consistent with the results of Study 1, performance goals for emotion regulation were significantly and positively correlated with rumination, thought suppression, and depressive symptoms, and negatively correlated with beliefs about emotion regulation ability. As predicted, learning goals for emotion regulation were positively associated with cognitive reappraisal. Other findings for learning goals for emotion regulation were mixed, and are discussed further below. Gender was positively correlated with cognitive reappraisal and beliefs about emotion regulation ability, but was not significantly correlated with rumination, thought suppression, depressive symptoms, or any of the achievement or emotion regulation goal measures.

Fischer r to z transformations revealed that performance-avoidance goals for emotion regulation had higher positive correlations than performance-approach on each of these variables: rumination ($z = 2.32$, $p = .020$), thought suppression ($z = 2.16$, $p = .031$), and depressive symptoms ($z = 2.34$, $p = .019$). The corresponding difference in correlations between these goals and beliefs about emotion regulation ability was not significant. Neither performance-avoidance nor performance-approach goals for emotion regulation were related to cognitive reappraisal. Contrary to expectations, there were no significant differences between the correlations of the goals for emotion regulation (performance-avoidance, performance-approach, learning) and the corresponding goals for academic achievement for any of the variables of interest, including rumination, thought suppression, cognitive reappraisal, depressive symptoms, or beliefs about emotion regulation ability.

Performance goals and depressive symptoms

Multiple regression analyses were conducted to examine goals for emotion regulation (Measure B) and achievement goals as predictors of depressive symptoms. As shown in Table 3, the first set of analyses examined multiple goals entered simultaneously. The second set of analyses examined only factors that contributed significantly to the model. Performance-avoidance goals for emotion regulation and performance-avoidance goals for achievement both predicted depressive symptoms. As shown in Table 3, the influence of performance-avoidance goals for emotion regulation remained significant, but the influence of the corresponding goals for achievement did not when beliefs about emotion regulation ability were added to the model. When controlling for the beliefs and performance-avoidance goals for academic achievement, performance-avoidance goals for emotion regulation explained an additional 12% of the variance in depressive symptoms ($p < .001$; total $R^2 = .41$).

Results for learning goals for emotion regulation

As predicted, learning goals for emotion regulation were positively associated with cognitive reappraisal ($r = .45$, $p < .001$ for Measure A; $r = .32$, $p = .002$ for Measure B). However, learning goals for emotion regulation were not significantly related to rumination ($r = -.06$, $p = .61$ for Measure A; $r = .13$, $p = .23$, for Measure B) or depressive symptoms ($r = -.15$, $p = .146$ for Measure A; $r = .04$, $p = .705$, for Measure B). This contrasts with the significant negative correlations of learning goals with rumination and with depressive symptoms in Study 1 (although the differences between the correlations in Study 1 and 2 were not significant, $z = -1.86$, $p = .062$ for rumination; $z = -1.61$, $p = 0.106$ for depressive symptoms). Learning goals for emotion regulation, Measure B, was significantly *positively* related to reflection ($r = .37$, $p < .001$) but the corresponding correlation for Measure A was not ($r = .10$, $p = .354$). This difference in the correlations of learning goals with reflection for Measure A versus B was significant ($z = -3.58$, $p < .001$).

Comparison of different goal measures

We examined the association between the two measures of goals for emotion regulation (Measure A and Measure B) and their association to the original measures from which they were derived. Measure A (adapted from the *global* goals measure) and Measure B (adapted from the *academic*

Table 2 Study 2: Descriptive statistics and correlations among the primary variables ($N = 93$)

Variable	1	2	3	4	5	6	7	8	9
1. Depressive symptoms	–								
2. Rumination (brooding)	.59***								
3. Reflection	.50**	.61***							
4. Thought suppression	.38***	.38***	.38***						
5. Cognitive reappraisal	−.22*	−.06	−.01	−.07					
6. Beliefs about ER ability	−.46***	−.31**	−.21*	−.22*	.57***				
7. Performance goals for ER[a]	.46***	.60***	.54***	.44***	−.02	−.25*			
8. Performance-avoidance goals for ER[b]	.53***	.64***	.62***	.44***	.00	−.25*	.73***		
9. Performance-approach goals for ER[b]	.30**	.44***	.20	.24*	.00	−.20	.68***	.52***	
10. Learning goals for ER (A)[a]	−.15	−.06	.10	−.16	.45***	.44***	−.09	−.01	−.02
11. Learning goals for ER (B)[b]	.04	.13	.37***	.14	.32**	.26*	.16	.27*	.14
12. Performance-avoidance achievement goals	.42***	.48***	.21*	.39***	−.14	−.38***	.41***	.43***	.36***
13. Performance-approach achievement goals	.24*	.40***	.17	.25*	−.09	−.29**	.40***	.36***	.43***
14. Learning achievement goals	−.01	.10	.19	.10	.41***	.24*	.17	.16	.16
15. Global performance goals	.47***	.58***	.45***	.41***	−.05	−.39***	.86***	.59***	.61***
16. Global learning goals	−.22*	−.14	.05	−.24*	.45***	.54***	−.19*	−.17	−.18
17. Gender[c]	.01	.03	.13	−.02	.28**	.26*	.06	.07	−.09
M	7.73	5.46	4.39	43.61	28.04	110.11	19.74	3.09	3.46
SD	6.33	3.07	3.41	9.26	5.54	14.16	10.78	1.31	1.48

Variable	10	11	12	13	14	15	16	17
1. Depressive symptoms								
2. Rumination (brooding)								
3. Reflection								
4. Thought suppression								
5. Cognitive reappraisal								
6. Beliefs about ER ability								
7. Performance goals for ER[a]								
8. Performance-avoidance goals for ER[b]								
9. Performance-approach goals for ER[b]								
10. Learning goals for ER (A)[a]	–							
11. Learning goals for ER (B)[b]	.73***							
12. Performance-avoidance achievement goals	−.26*	−.11						
13. Performance-approach achievement goals	−.20	−.08	.59***					
14. Learning achievement goals	.41***	.35**	.07	.21*				
15. Global performance goals	−.26*	−.06	.53***	.54***	.12			
16. Global learning goals	.87***	.58***	−.38***	−.32**	.41***	−.36**		
17. Gender[c]	.07	.10	.02	−.06	.18	.10	.04	
M	34.72	4.47	4.73	4.49	5.61	50.36	85.52	.53
SD	11.24	1.35	1.33	1.59	1.07	26.83	25.45	.50

ER emotion regulation

[a] Measure A, adapted from the Goal Orientation Inventory (Dykman 1998)

[b] Measure B, adapted from the Achievement Goal Scale (Elliot and Church 1997)

[c] Gender is coded 1 = female and 0 = male

* $p < .05$; ** $p < .01$; *** $p < .001$, all tests are two-tailed

Table 3 Study 2: Standardized regression coefficients and change in R^2 for predicting depressive symptoms from goals for emotion regulation, achievement goals, and beliefs about emotional regulation ability

Predictors	β	ΔR^2
Set I: Simultaneous analysis of goals		
Block 1		.280***
Performance-avoidance goals for emotion regulation	.525***	
Performance-approach goals for emotion regulation	.038	
Learning goals for emotion regulation	−.100	
Block 2		.046
Performance-avoidance goals for emotion regulation	.444**	
Performance-approach goals for emotion regulation	.011	
Learning goals for emotion regulation	−.028	
Achievement performance-avoidance goals	.254*	
Achievement performance-approach goals	−.044	
Achievement learning goals	−.079	
Block 3		.085**
Performance-avoidance goals for emotion regulation	.390**	
Performance-approach goals for emotion regulation	−.012	
Learning goals for emotion regulation	.027	
Achievement performance-avoidance goals	.175	
Achievement performance-approach goals	−.075	
Achievement learning goals	.004	
Beliefs about emotion regulation ability	−.338**	
Total R^2		.410***
Predictors	β	ΔR^2
Set II: Performance-avoidance goals only		
Block 1		
Performance-avoidance goals for emotion regulation	.525***	.275***
Block 2		.046*
Performance-avoidance goals for emotion regulation	.422***	
Achievement performance-avoidance goals	.238*	
Block 3B		.089**
Performance-avoidance goals for emotion regulation	.389***	
Achievement performance-avoidance goals	.129	
Beliefs about emotion regulation ability	−.324**	
Total R^2		.411***

* $p < .05$; ** $p < .01$; *** $p < .001$

achievement measure) were highly correlated ($r = .73$, $p < .001$ for performance goals with performance-avoidance goals; $r = .68$; $p < .001$ for performance goals with performance-approach goals; $r = .73$, $p < .001$ for learning goals). Despite differences in structure and wording, the two measures of goals for emotion regulation appear to tap closely related constructs.

We then examined the relation between goals for emotion regulation (Measure A), and the original global goals measure from which it was derived (GOI, Dykman 1998). The scores for performance goals for emotion regulation were highly correlated with global performance goals ($r = .86$, $p < .001$). Learning goals for emotion regulation (Measure A) were also highly correlated with global learning goals ($r = .87$, $p < .001$). These findings suggest that these two measures are tapping largely overlapping constructs.

The correlation between goals for emotion regulation and academic achievement goals suggest discriminant validity between the two types of goals. The correlations were moderate between performance-avoidance goals for emotion regulation and for achievement ($r = .43$,

$p < .001$), between performance-approach goals for emotion regulation and for achievement ($r = .43$, $p < .001$), and between learning goals for emotion regulation and for achievement ($r = .35$, $p = .001$).

Beliefs about emotion regulation ability as moderators

We replicated the same procedures used in Study 1 to test for interactions between goals for emotion regulation and beliefs about emotion regulation ability. The regression model with performance goals for emotion regulation, beliefs about emotion regulation ability, and their interaction as predictors was significant, $F(3, 87) = 16.03$, $p < .001$, $R^2 = .36$. There was a main effect for performance goals for emotion regulation ($\beta = .35$, $p < .001$) and for beliefs about emotion regulation ability ($\beta = -.36$, $p < .001$). The interaction term did not reach significance ($\beta = -.14$, $p = .108$), however, the slopes of the lines based on the unstandardized regression coefficients revealed a similar pattern to those in Study 1 (see Fig. 1). To further explore this pattern of results, we combined the data for Study 1 and 2, and found a significant interaction effect ($\beta = -.21$, $p = .001$) in addition to main effects for performance goals for emotion regulation ($\beta = .36$, $p < .001$) and beliefs about emotion regulation ability ($\beta = .37$, $p < .001$). The overall model for the combined data set was significant, $F(3, 149) = 45.61$, $p < .001$, $R^2 = .48$.

Emotion regulation strategies as mediators

As in Study 1, we conducted a series of regression analyses to examine whether emotion regulation strategies mediate the relation between goals for emotion regulation and depressive symptoms. Performance goals for emotion regulation predicted depressive symptoms ($\beta = .46$. $p < .001$) and rumination ($\beta = .60$, $p < .001$). When both performance goals for emotion regulation and rumination were included in a model predicting depressive symptoms, rumination significantly predicted depressive symptoms ($\beta = .49$. $p < .001$), and the relation between the goals and depression was no longer significant ($\beta = .17$. $p = .120$). The reduction in the effect of performance goals for emotion regulation on depression when rumination was added to the model was statistically significant (Sobel's $z = 3.92$, $p < .001$). Thus, the relation between performance goals for emotion regulation and depressive symptoms was fully mediated by rumination.

Rumination partially mediated the relation between depression and performance-avoidance goals for emotion regulation, with performance-avoidance goals for emotion regulation predicting depressive symptoms ($\beta = .53$, $p < .001$) and rumination ($\beta = .64$, $p < .001$). The effect of performance-avoidance goals for emotion regulation on depressive symptoms when rumination was added to the model was significantly reduced (Sobel's $z = 3.61$, $p < .001$), but the goals still significantly contributed to depressive symptoms ($\beta = .44$, $p = .026$).

Rumination fully mediated the relation between performance-approach goals for emotion regulation and depressive symptoms. Performance-approach goals for emotion regulation predicted depressive symptoms ($\beta = .30$, $p = .003$) and rumination ($\beta = .44$, $p < .001$). The effect of performance-approach goals for emotion regulation on depressive symptoms was reduced (Sobel's $z = 3.71$, $p < .001$) and no longer significant when rumination was added to the model ($\beta = .05$, $p = .602$).

As in Study 1, the relation between performance goals for emotion regulation and depressive symptoms was partially mediated by thought suppression. Performance goals for emotion regulation significantly predicted thought suppression ($\beta = .44$. $p < .001$) and the effect of these goals on depressive symptoms was significantly reduced when thought suppression was added to the model (Sobel's $z = 1.98$, $p = .048$), but performance goals for emotion regulation still significantly contributed to depressive symptoms ($\beta = .37$, $p = .001$). Thought suppression did not account for a significant portion of the effect of performance-avoidance or performance-approach goals for emotion regulation on depressive symptoms. Learning goals for emotion regulation did not significantly predict depressive symptoms in Study 2 ($\beta = -.15$, $p = .146$) and thus did not pass the first step in meditational analyses (Baron and Kenny 1986).

General discussion

Two studies provide evidence that goals for emotion regulation are related to emotion regulation strategies and depressive symptoms. As predicted, the more individuals endorse performance goals for emotion regulation—seeking to prove that they can control their emotions—the more likely they are to ruminate on their negative emotions, to engage in thought suppression, and to experience depressive symptoms. In contrast, the more individuals pursue learning goals—seeking to improve their ability to manage emotions—the more likely they are to use cognitive reappraisal, which has been shown to be an effective way of handling negative emotions (John and Gross 2004; Aldao et al. 2010).

Beliefs about emotion regulation ability

The findings suggest that the influence of performance goals for emotion regulation varies depending on individuals' beliefs in their ability to alleviate negative emotions.

As indicated by the significant interaction effect for the combined responses from Studies 1 and 2, it is the pairing of high performance goals for emotion regulation with low confidence in ability to regulate emotions that is particularly associated with depressive symptoms. This finding is consistent with findings from the academic goal literature that the effects of performance goals for achievement are most problematic for those with low perceived ability (e.g., Elliott and Dweck 1988).

Performance-avoidance goals for emotion regulation

As predicted, performance-avoidance goals for emotion regulation were better predictors of depressive symptoms than performance-approach goals for emotion regulation. Performance-avoidance goals for emotion regulation significantly contributed to depressive symptoms, even when controlling for beliefs about emotion regulation ability and for other emotion regulation and academic achievement goals. Thus, seeking to avoid evidence of incompetence at managing emotions appears to play a unique role in the development of depressive symptoms. Avoiding evidence of regulatory incompetence may make people reluctant to experience positive emotions because of concerns about regulating (maintaining or replicating) those emotions. Similarly they may avoid efforts to change negative emotions because trying and failing to change them provides evidence of their regulatory incompetence.

Previous studies (Cole et al. 2007; Sideridis 2005, 2007) as well as the present findings indicate that performance-avoidance goals for achievement also are associated with depression and defensive strategies. Why might performance-avoidance goals for emotion regulation and for achievement each contribute independently to depressive symptoms? Whereas people with performance-avoidance goals for academic achievement equate failure on achievement tasks with inadequacy in academic domains, people with performance goals for emotion regulation equate emotional difficulties (i.e., failure to change negative emotions) with inadequacy across situations. In support of the notion that goals for emotion regulation relate to goals across situations is the finding that those goals were extremely highly correlated with the global goals measure.

An additional reason why performance-avoidance goals for emotion regulation may add to the prediction of depression over and above performance-avoidance goals for achievement is that they influence how people respond to emotions arising from failures to achieve desired outcomes. Performance-avoidance goals for achievement lead to lack of effort on achievement tasks, shallow processing of content, and negative emotions. Similarly, performance-avoidance goals for emotion regulation may lead to lack of effort on the task of managing emotions, to shallow processing of emotions, and to negative emotions about negative emotions, or what depression researchers sometimes refer to as negative *meta-emotions* (Teasdale 1985; Fisher and Wells 2009). Future research should explore the role of goals for emotion regulation in meta-emotions and whether meta-emotions help mediate the relation between performance-avoidance goals for emotion regulation and depression.

Defensive strategies as mediators

The findings provide evidence that the pathway from performance goals for emotion regulation to depressive symptoms is partially mediated by defensive strategies, including rumination and thought suppression. These results parallel findings in the achievement goal literature showing that the relation between performance goals and outcomes is mediated by defensive strategies, such as denial coping, attribution of failure to lack of ability, and withdrawal of effort (e.g., Ames and Archer 1988, Jagacinski and Nicholls 1990; Kaplan and Midgley 1999). Thought suppression can be seen as a type of denial coping which has counterproductive effects that contribute to anxiety and depression (Roemer and Borkovec 1994; Wenzlaff and Wegner 2000). Yet, thought suppression differs from denial in that it is more focused on emotions than on specific thoughts (Wegner and Zanakos 1994) and thus may be more relevant to goals for emotion regulation. Rumination can be seen as a strategy for justifying lack of effort—a core feature of depression (Nolen-Hoeksema et al. 2008). Unfortunately, seeking justification requires reviewing failures, which exacerbates negative emotion (Spasojevic and Alloy 2001).

Learning goals for emotion regulation and constructive strategies

In contrast to individuals with performance goals for emotion regulation, individuals with learning goals for emotion regulation see negative emotions as feedback suggesting a need for development and growth. Their goal is to be aware of their emotions and to improve their skills at coping with them. The present findings on emotion regulation goals and responses to negative emotions parallel findings on achievement goals and responses to negative feedback. Students with performance goals for achievement are more likely to attempt to block out or brood about negative feedback, whereas students with learning goals for achievement are more likely to view their mistakes as providing useful cues about how to improve their ability (Dweck 1999; Friedel et al. 2007; Mangels et al. 2006). In the emotional domain, people with performance-avoidance goals are less likely to reappraise

situations and to use negative emotions as feedback for learning. In contrast, people with learning goals for emotion regulation are more open and able to view situations in new ways.

Contrary to expectations, the measure of learning goals that focused on learning as much as possible about emotions (Measure B, adapted from Elliot and Church 1997) was significantly *positively* correlated with reflection, and was not significantly correlated with rumination or depressive symptoms. In contrast, the measure that focused on learning and growing as a person in response to negative emotions (Measure A, adapted from Dykman 1998) was not significantly related to reflection and was *negatively* correlated with suppression, rumination, and depressive symptoms (the correlations were significant in the first study but did not reach significance in the second). The unexpected results for the former measure suggest that focusing on negative emotions *per se* fosters the reflective aspects of rumination, which involves contemplating one's negative emotions or mood (Nolen-Hoeksema et al. 2008; Trapnell and Campbell 1999). In contrast, viewing negative emotions as a signal to pursue growth and development may foster lower defensive emotion regulation strategies and fewer depressive symptoms. This contrast parallels mindfulness-based researchers' distinction between analyzing emotions versus adopting a curious, non-judging perspective towards emotions so as to foster personal growth and commitment (Brown and Ryan 2003; Hayes et al. 2006; Segal et al. 2002). Measures of learning goals for emotion regulation that place less emphasis on analyzing emotions and more emphasis on using emotions as feedback for problem-solving and growth may be better predictors of constructive emotion regulation strategies and low levels of depression.

As mentioned in the beginning of the article, leading emotion regulation theorists suggest that emotions can provide useful feedback about progress towards desired or valued states (e.g., Baumeister et al. 2007; Carver and Scheier 2000). The current research suggests that individuals with learning and performance goals for emotion regulation may interpret feedback from emotions differently. People with learning goals may be more open to learning from emotional feedback (Baumeister et al. 2007). In contrast, those with performance goals may interpret negative emotions, particularly persistent negative emotions, as signs of personal inadequacy.

Limitations and future directions

Two limitations of the studies were the correlational nature of the design and the exclusive reliance on self-report measures. Future studies should employ experimental inductions of performance and learning goals for emotion regulation to establish whether the goals lead to different strategies as well as to depressive symptoms. The inductions might be adapted from studies manipulating emotion regulation (e.g., Tamir et al. 2007) or from studies manipulating performance versus learning goals in other realms (e.g., Elliott and Dweck 1988). Experimental and longitudinal studies of performance and learning goals for emotion regulation could lead to the development of causal models that explain how these goals may foster or relate to beliefs about emotion regulation, emotion regulation strategies, and depression, as well as emotional well-being.

The self-report measures of goals for emotion regulation need additional testing, revision, and refinement. We based the measures of these goals on well-established measures of performance and learning goals in other domains. The current measures include various interpretations of what seeking to improve emotion regulation ability may involve. The items in the measures refer to learning *about* emotions, learning *from* emotions, learning from emotional situations, and more generally developing emotion regulation ability. We need to determine the extent to which each of these concepts, and which aspects of them, are most associated with improvement in emotion regulation ability, as measured through self-report as well as physiological and behavioral measures (cf. Troy et al. 2010).

There is extensive research from organizational psychology indicating that "performing" emotion display rules in occupational settings often leads to suppression and emotional distress (Bono and Vey 2005; Brotheridge and Grandey 2002). That research differs from our notion of performance goals for emotion regulation in that it is focused on external expression of emotion and on extrinsic rewards (e.g., job salary). By contrast, we are focused on both internal regulation and external expression of emotion, and we are more concerned with intrinsic motivation for regulating emotions. The research on emotional displays also points to circumstances in which people are more likely to engage in deep processing and reappraisal of emotions (Hochschild 1983, Hennig-Thurau et al. 2006). The concept of learning goals for emotion regulation may be relevant in those circumstances.

The findings from research on performance and learning goals for emotion regulation may have implications for interventions to minimize use of rumination and suppression and to promote constructive emotion regulation strategies. Currently, therapeutic interventions for depression focus on people's beliefs about emotions, their regulatory strategies, and their activities and behaviors for influencing emotions (e.g., Hollon et al. 2002; Jacobson et al. 2001). In order to alleviate depression, it may also be important to attend to their goals for emotion regulation—to avoid triggering performance goals for emotion

regulation and to foster learning goals for emotion regulation. Toward this end, it may be helpful to deemphasize the goal of demonstrating one's ability to manage emotions and instead focus on learning and growing from positive and negative emotions.

A direction for further research would be to investigate whether aspects of environments that have been found effective for promoting learning rather than performance goals in other domains might also foster learning goals and constructive strategies in the domain of emotion regulation. Aspects of the environment that have been found to foster learning rather than performance goals in educational settings include: the nature of the task (e.g., how personally meaningful and challenging it is); the amount of autonomy granted; the behavior that is recognized (e.g., extending effort versus excelling with minimal effort); the procedures for grouping participants (e.g., by interest versus ability); the type of evaluation provided; and how time is structured (see TARGET framework, Kaplan and Maehr 2007, Table III, p. 159). Several of these qualities for promoting learning goals may be identified in existing therapeutic techniques that incorporate mindful acceptance. For example, dialectal behavior therapy encourages clients to choose whether to change or accept emotions and emphasizes pursuing personally meaningful activities as the therapeutic goal, rather than focusing solely on alleviation of symptoms (Lynch et al. 2006).

Acknowledgments This research was supported in part by a Faculty Research Awards Committee grant from Tufts University. The authors are grateful to Johnmarshall Reeve for his editorial guidance, and to Anna Drapkin, Lindsay Fogerty, Charlene Gay, Dominique Lieu, Linda Sullivan, and Eden Wall for their assistance with the research, and to Hee-Sun Lee and Kristen Bethke Wendell for advice on the initial draft.

Appendix 1: Goals for emotion regulation, Measure A

See Table 4.

Table 4 Loadings for two-component solution for goals for emotion regulation, Measure A, Study 1, adapted from Dykman (1998) Goal Orientation Inventory

Item	Component 1	Component 2
Performance goals for emotion regulation		
4. I feel as though my basic worth is "on the line" when I am trying to lift myself out of a negative mood.	.75	−.14
6. It seems like I'm constantly trying to prove that I'm "okay" at dealing with my emotions.	.81	.09
7. Dealing with my moods feels to me like a major test of my basic worth, competence, and likeability as a person.	.78	−.09
9. I feel like my ability to cheer myself up is something I'm constantly struggling to prove to myself and others.	.84	.00
12. Whereas other people see themselves as competent at getting out of a bad mood, it's something I'm still trying to prove I can do.	.78	−.07
14. I feel like I'm always testing out whether or not I am able to handle emotions as well as other people.	.91	.12
15. In many things that I do, my emotional reactions tell me whether or not I'm a competent, worthy or likeable person.	.70	.06
16. I tend to view emotionally difficult or stressful situations as all-or-none tests of my basic worth as a person.	.84	−.08
Learning goals for emotion regulation		
1. When I'm faced with an emotionally difficult or stressful life situation, I'm likely to view it as an opportunity to learn and grow.	−.03	.80
2. My attitude towards failure and rejection is that they are opportunities for emotional growth and self-improvement.	−.13	.77
3. In situations where I am feeling really down, it's natural for me to focus on how I can grow or what I can learn from the experience.	−.01	.73
5. The attitude I take toward emotional setbacks and disappointments is that they'll end up being good learning experiences.	−.05	.77
8. My natural tendency is to try to view sad situations as providing opportunities for growth and self-improvement.	.05	.88
10. I approach difficult life situations welcoming the opportunity to learn how to improve my mood.	.10	.84
11. I approach stressful situations knowing that the important thing is for me to learn and grow from these experiences.	.09	.74
13. I look upon feelings of disappointment as opportunities to improve and grow as a person.	−.15	.77

Appendix 2: Goals for emotion regulation, Measure B

See Table 5.

Table 5 Loadings for three-component solution for goals for emotion regulation, Measure B, Study 2, adapted from the Achievement Goal Scale (Elliot and Church 1997)

Item	Component 1	Component 2	Component 3
Performance-avoidance goals for emotion regulation			
5. I often think to myself, "What if I can't control my emotions?"	.80	.04	.05
6. I just want to avoid being unable to change how I feel.	.85	−.14	.02
7. I'm afraid that if I ask people for help in managing my emotions, they might think I'm emotionally unstable.	.61	.09	−.10
12. I worry about the possibility of being unable to control my emotions.	.72	.19	.14
Performance-approach goals for emotion regulation			
2. My goal is to manage my emotions better than most other people.	.12	.78	.07
9. It is important to me to handle my emotions better than other people do.	.00	.92	.07
10. I am motivated by the thought of outperforming other people in controlling my emotions.	−.05	.94	−.07
13. It is important to me to do well compared to others in managing my emotions.	.02	.94	−.04
Learning goals for emotion regulation			
1. I want to learn as much as possible from my emotions.	.05	−.01	.80
3. It is important for me to understand my emotions as thoroughly as possible.	−.02	.16	.80
4. In many situations, I prefer to experience emotions that challenge me to learn more about myself.	−.10	−.08	.90
8. I hope to gain a broader and deeper knowledge of my emotions every time I try to deal with them.	.09	.04	.86
11. In many situations, I prefer to experience emotions that allow me to learn about myself, even if they are unpleasant.	.01	−.10	.88

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