Relationship of depressive rumination and distraction to subsequent depressive symptoms following successful antidepressant medication therapy for depression

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INTRODUCTION

Prior research implicates Susan Nolen-Hoeksema's Response Styles Theory (RST) as an important cognitive predictor in determining the duration and onset of a depressive episode. (Just & Alloy, 1997; Roberts, Gilboa & Gotlib, 1998). RST posits that the way in which a person responds to their symptoms of depression impacts the duration and severity of such symptoms. Nolen-Hoeksema argues for the existence of the following three types of patterned responses; depressive rumination, distraction and problem-solving. Depressive rumination, defined as the process of "focusing passively and repetitively on one's symptoms of distress and the meaning of those symptoms without taking action to correct the problems one identifies," (Nolen-Hoeksema,1998; p. 216) Whereas rumination is postulated to prolong depressive symptoms problem-solving and distraction are hypothesized to alleviate one's symptoms. Distraction involves engaging in pleasant, engrossing and positively reinforcing activities whereas problem-solving refers to an active attempt to change unfavorable life situations or resolve problems. Empirical support has been garnered for the detrimental influence of depressive rumination on depressive symptoms. Specifically, depressive rumination, as assessed by Nolen-Hoeksema's Response Styles Questionnaire (RSQ; Nolen-Hoeksema & Morrow, 1991), has been associated with onset (Just & Alloy, 1997), deteriorating course (Kuehner & Weber, 1999), chronicity (Nolen-Hoeksema, 2000), and duration of depressed mood (Just & Alloy, 1997; Nolen-Hoeksema, Morrow, & Fredrickson, 1993).

Perhaps the greatest support for the prophylactic effect of distraction within this area has been from experimental studies investigating the effects of distraction on the severity and duration of depressed mood (Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema & Morrow, 1993; Trask & Sigmon, 1999; Katz & Bertelson, 1993). At the same time, however, results from naturalistic studies examining the effects of distraction on the severity and duration of depressed mood have been mixed (Butler & Nolen-Hoeksema, 1994; Just & Alloy, 1997; Nolen-Hoeksema & Morrow, 1991).

Thus despite research implicating the role of rumination and distraction in predicting and characterizing future episodes of depression, the role of these response styles in relapse following treatment has yet to be investigated. The goal of the current study was to examine the relationship of rumination and distraction to levels of depression symptoms one year following successful antidepressant medication treatment for depression.

ABSTRACT

Nolen-Hoeksema's Response Styles Theory (RST) proposes that the way in which people respond to their depressive symptoms determines both the severity and duration of such symptoms. Research generally supports the finding that rumination is not only able to predict the duration of a depressive episode, but that it also useful in predicting the onset of a new depressive episode in both previously non-depressed and previously depressed individuals (Just & Alloy, 1997; Roberts, Gilboa & Gotlib, 1998). In contrast, individuals who distract themselves in response to their depressed mood will experience shorter and less severe depressive moods (Nolen-Hoeksema, 1991, Nolen-Hoeksema & Morrow,1993; Nolen-Hoeksema, Morrow and Fredrickson, 1993)

Thus despite research implicating the role of rumination in predicting future episodes of depression, the role of rumination in relapse following treatment has yet to be investigated. The goal of the current study was to examine the relationship of rumination and distraction to levels of depression symptoms one year following successful antidepressant medication treatment for depression. Fifty-two depressed outpatients were treated to remission with standard antidepressant pharmacotherapy. The Response Styles Questionnaire and the Hamilton Rating Scale for Depression (HRSD) were both administered at the end of treatment (Time 1). At one year following the end of treatment, participants completed, the Beck Depression Inventory-II as a measure of current depression symptoms (Time 2).

Two hierarchical multiple regression analyses were estimated with Time 2 depression symptoms as the dependent variable. Findings from both models indicated independent contributions of rumination and distraction in the prediction of subsequent depression symptoms after accounting for baseline depression levels. Our results suggest that both rumination and distraction predict recurrence of depression in a sample of remitted participants.

METHODS

Participants

57 adults
20 (35%) male, 37 (65)% female
Age range 19-62, Mean age 42 years old
23 single, 27 married, 5 divorced, 1 widowed, 1 none of the above

Measures

The *Response Styles Questionnaire* (RSQ; Nolen-Hoeksema, 1991b)
Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979)
Hamilton Rating Scale for Depression (HRSD; Hamilton,1960)

RESULTS

Two hierarchical multiple regression analyses were estimated with Time 2 depression symptoms as the dependent variable. In both models, HRSD scores were entered into the model first to control for symptom severity at Time 1. In the first model, Time 1 rumination was entered followed by Time 1 distraction. In the second model, HRSD was entered first followed by Time 1 distraction and Time 1 rumination.

Findings from both models indicated independent contributions of rumination and distraction in the prediction of subsequent depression symptoms after accounting for baseline depression levels. In the first model, rumination exhibited a strong positive association (pr = .33; Cohen's f^2 = .16) with future depression symptom scores. This relationship corresponds to a medium effect size (Cohen, 1992). Distraction exhibited a strong negative relationship with future depression symptoms (pr = -.23; f^2 = .11) corresponding to an effect size approaching the convention for a medium effect. In the second model, distraction exhibited a strong negative relationship with future depression symptoms (pr = -.27; f^2 = .11) approaching conventions for a medium effect while rumination exhibited a strong positive relationship with future depression symptoms (pr = .30; f^2 = .16) which corresponded to the convention for a medium effect.

Table 1.
Hierarchical Multiple Regression Analysis Predicting Depression Symptoms as assessed with the Hamilton Rating Scale for Depression from the RSQ Rumination Subscale (N = 57)

	Step 1			Step 2			Step 3		
Variable	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
HRSD	1.83	.41	.53*	1.37	.41	.40*	1.18	.40	.35*
Rumination				-0.40	.14	.36*	.37	.13	.33*
Distraction							-.60	.27	.24*
R^2	.29			.39			.45		
F for R^2 Change	20.31**			8.92*			4.84*		

Note. BDI-II = Beck Depression Inventory; Rumination = RSQ Ruminative Response Scale; HRSD = Hamilton Rating Scale for Depression; *p < .05, **p < .001

Table 2.
Hierarchical Multiple Regression Analysis Predicting Depression Symptoms as assessed with the Hamilton Rating Scale for Depression from the RSQ Rumination Subscale (N = 57)

	Step 1			Step 2			Step 3		
Variable	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
HRSD	1.83	.41	.53*	1.37	.41	.40*	1.18	.40	.35*
Distraction				-0.69	.29	-.28*	-.60	.27	.24*
Rumination							.37	.13	.33*
R^2	.29			.36			.45		
F for R^2 Change	20.31**			7.95*			5.70*		

Note. BDI-II = Beck Depression Inventory; Rumination = RSQ Ruminative Response Scale; HRSD = Hamilton Rating Scale for Depression; *p < .05, **p < .001

DISCUSSION

The goal of the current study was to examine the relationship of rumination and distraction to levels of depressive symptoms one year following the successful medication treatment for depression Findings from both models indicated independent contributions of rumination and distraction in the prediction of subsequent depression symptoms after accounting for baseline depression levels. Our results indicate that both rumination and distraction predict recurrence of depression in a sample of remitted participants.

Results suggest that successful treatment with antidepressant medication fails to provide prophylactic benefits against certain cognitive vulnerabilities such as the tendency to ruminate.

Limitations:

Results cannot be generalized to other forms of treatment for depression.

Future Directions:

Results should be replicated with a larger sample and with comparison groups who have received other forms of treatment for depression.

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