An Examination of Nolen-Hoeksema's Other Responses to Depression:

Meaningful Relationships of Distraction, Problem-Solving and Dangerous Behaviors to Depression and Anxiety

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INTRODUCTION

Most people will experience a depressed mood occasionally throughout their lifetime (Smith & Weissman, 1992). Usually, these symptoms are short lived. However, for some people these symptoms gradually escalate and lead to a major depressive episode (Segal et al., 1999).

Why can some people repair their negative mood while others spiral into depression?
Nolen-Hoeksema's (1987) Response Styles Theory of Depression posits that reactions to a depressed mood will affect the length, severity and recurrence of a depressive episode**.** Rumination, focusing passively and repetitively on one's symptoms of distress, is thought to be associated with prolonged depressive episodes. Active, mastery-oriented responses are hypothesized to result in shorter, less severe episodes of depression.
(Nolen-Hoeksema, 1987)

How can you measure responses to depression?
With Nolen-Hoeksema's Responses to depression questionnaire (RSQ), a self-report measure that assesses reactions to a depressed mood and is made up of 4 rationally derived subscales: **Rumination, Dangerous Behaviors, Problem Solving, & Distraction**.

What has previous research found?
Rumination → ↑ Depression & Anxiety
A well established finding.
(e.g., Fresco et al., 2002, Nolen-Hoeksema Morrow, 1991)

Distraction → ↓ Depression & Anxiety
Limited support for this finding.
(e.g., Bladgen & Craske, 1996; Nolen-Hoeksema & Morrow, 1991)

However, little research has been conducted on the relationships between the Problem Solving and Dangerous Behaviors subscales and depression and anxiety. **The current study examined whether the four RSQ subscales are related to symptoms of depression and anxiety.**

What were our hypotheses?
1) Rumination → ↑ Depression

2) The other subscales will contribute additional unique variance. Specifically:
Distraction → ↓ Depression
Problem Solving → ↓ Depression
Dangerous Behaviors → ↑ Depression

ABSTRACT

Nolen-Hoeksema's (1987) response style theory was evaluated in a sample of 734 college students. Participants completed the Response Style Questionnaire (RSQ) and measures of depression and anxiety symptoms. Using hierarchical multiple regression analyses, Rumination and three of four Dangerous Behaviors predicted greater depression whereas Distraction predicted fewer symptoms of depression. Rumination and two Dangerous Behaviors were related to higher anxiety but neither Distraction nor Problem Solving was related to anxiety symptoms. The implications of these findings and future directions are discussed.

PROCEDURE

734 (495 women) undergraduate students completed the following questionnaires:

1) *The Beck Depression Inventory (BDI):* A 21-item self-report measure of symptoms of depression (Beck, Rush, Shaw, & Emery, 1979).

2) *Anxious Arousal (AA) subscale of The Mood and Anxiety Symptom Questionnaire – Short Form:* A self-report measure that assesses symptoms of anxiety (Watson & Clark, 1991).

3) RSQ: a 71-item self-report instrument that measures how participants react to feelings and symptoms of dysphoria (Nolen-Hoeksema & Morrow, 1991). The internal consistency of the dangerous behaviors subscale was unacceptably low (α = .54). Thus, the 4 items which make up the subscale were entered individually into the regression equation.

RESULTS

Hierarchical linear regression analyses were performed for each measure of depression (i.e., BDI) and anxiety symptoms (i.e., AA).
Step 1 = Gender
Step 2 = Rumination
Step 3 = Distraction, Problem Solving, & the Dangerous Behaviors Items

As Predicted:
Rumination → ↑ Depression and Anxiety

Adding the RSQ subscales significantly improved model fit for all 3 measures of depression and anxiety

The effects were in the predicted directions. However, the effect sizes were small (see tables)

Surprisingly, gender was not predictive of depression or anxiety

Table 1.
Hierarchical Multiple Regression Analysis Predicting Depression Symptoms as assessed with the Beck Depression Inventory from the RSQ Subscales (N = 721)

	Step 1			Step 2			Step 3		
Variable	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Rumination	3.10	.20	.49**	3.31	.21	.52**	2.74	.22	.43**
Distraction				-1.23	.20	-.20**	-1.03	.25	-.16**
Problem Solving							-.25	.24	-.04
Take drugs or drink alcohol							.12	.21	.02
Take feelings out on others							.70	.21	.11**
Make yourself feel worse							.58	.21	.09*
Do something reckless							.64	.22	.10*
R^2	.24			.27			.32		
F for R^2 Change	223.49**			36.45**			8.59**		

Note. RSQ = Response Styles Questionnaire; Rumination = RSQ Ruminative Response Scale; Distraction = RSQ Distraction Scale; Problem Solving = RSQ Problem Solving Scale;
*p < .02,
**p < .001

Table 2.
Hierarchical Multiple Regression Analysis Predicting Symptoms of Anxious Arousal as assessed with the AA scale of the MASQ from the RSQ Subscales (N = 719).

	Step 1			Step 2			Step 3		
Variable	*B*	*SE B*	β	*B*	*SE B*	β	*B*	*SE B*	β
Rumination	2.99	.29	.49**	3.06	.29	.37**	2.08	.32	.25**
Distraction				-0.48	.29	-.06	-.38	.34	-.05
Problem Solving							-.04	.34	.01
Take drugs or drink alcohol							-.15	.30	-.02
Take feelings out on others							.29	.30	-.02
Make yourself feel worse							1.80	.30	.22**
Do something reckless							1.26	.31	.15**
R^2	.13			.13			.21		
F for R^2 Change	105.24**			2.69			14.19**		

Note. RSQ = Response Styles Questionnaire; Rumination = RSQ Ruminative Response Scale; Distraction = RSQ Distraction Scale; Problem Solving = RSQ Problem Solving Scale;
*p < .02, ** p < .001

DISCUSSION

The way in which one reacts to a depressed mood appears to be related to both symptoms of anxiety and depression. However, the effects may be greater for depression than anxiety.

All of the RSQ subscales appear to contribute to the prediction of anxiety and depression, yet more research is required to increase their reliability.

Interestingly, none of the RSQ scales were related to reduced anxiety. This may be due to the fact that these scales measure activities that may lead to increased self-esteem, social support and hope (e.g. RSQ 13: Help someone else in order to distract yourself) which may more effectively counter symptoms of depression than anxiety.

The only dangerous activity that was not predictive of greater depression or anxiety was taking drugs or alcohol. It is possible that this finding is due to the composition of the sample. Substance use is common practice among college students (Wechsler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998) and thus may not differentiate between high and low levels of depression in this sample.

The lack of significant gender differences is not unexpected in a population of college students (Nolen-Hoeksema, 1990). Thus, future research with different populations could be informative.

These findings suggest that the dangerous behavior and problem solving scales of the RSQ should not be overlooked as they can contribute important information about symptoms of depression and anxiety.

Future Directions

Create more internally consistent subscales of the RSQ.

Create a questionnaire assessing responses to anxiety. Currently the RSQ asks about responses to depression. However, the way people react to symptoms of anxiety may influence the severity of anxiety or depression symptoms that they experience.

Longitudinal study examining the temporal relationship between responses to depression and the onset of anxiety and depression symptoms.