

The Relationship of Worry and Experiential Avoidance to Emotion Dysregulation in Generalized Anxiety Disorder

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INTRODUCTION

Borkovec's **avoidance theory of worry** contributes to our understanding of Generalized Anxiety Disorder (GAD), by positing that worry is predominantly negative, verbal/linguistic activity that serves an avoidance function (Borkovec et al., 2004). Borkovec and colleagues (2004) argue that worrisome thinking of aversive stimuli allows individuals to avoid aversive mental imagery, autonomic arousal, and intense emotions. Although the use of worry may appear to be beneficial in the short run, its long term effects may be detrimental for the individual. Because worrying does not foster emotional processing, anxiety is maintained rather than eliminated through this activity.

Experiential avoidance refers to the tendency to avoid internal experiences by engaging in maladaptive behaviors (Hayes et al., 1999). Similar to worry, experiential avoidance is only temporarily effective and can increase unwanted thoughts and negative emotions over the long term (Marx & Sloan, 2002). Empirical evidence indicates that experiential avoidance is implicated in most forms of psychotherapy. For example, avoidance of thoughts and emotions has been found to be related to worry and GAD (Roemer et al., 2005), panic (e.g., Borden & Turner, 1989) and posttraumatic psychopathology (e.g., Tull et al., 2001).

In an effort to explore what prompts individuals with GAD to use avoidance strategies such as worrying, Mennin and colleagues (2002) developed an emotion dysregulation model that built upon Borkovec's theory of worry. The model proposes that **emotion dysregulation** in individuals with GAD may involve heightened intensity of emotions, poor understanding of emotions, negative reactivity to emotions, and maladaptive management of emotions. Mennin et al. (2005) provided evidence for this emotion dysregulation model of GAD in a series of three studies. In the first two studies, participants with self-reported GAD (Study 1) or individuals with clinician-assessed GAD (Study 2) reported greater emotion dysregulation than controls. In Study 3, participants with self-reported GAD and non-GAD controls were subjected to either negative or neutral-mood priming music inductions. GAD participants in the negative mood condition, but not the controls, showed increases in negative mood as well as difficulties in their ability to regulate the negative mood, particularly with respect to their clarity of and willingness to accept their emotions. Fresco and colleagues (2006) replicated and extended the findings of Mennin et al. (2005) by showing similar differences in self-report emotion regulation measures in individuals with clinician-assessed GAD relative to non-GAD controls.

The Present Study

The goals of the present study were as follows:

1. Assess levels of pathological worry, experiential avoidance, and emotion dysregulation as a function of GAD status.
Predicted: participants with GAD would endorse higher levels of worry, experiential avoidance, and emotion dysregulation compared to non-GAD controls.
2. Investigate the relationship of worry and experiential avoidance to emotion dysregulation.
Predicted: worry and experiential avoidance would be uniquely associated with emotion dysregulation and thus predict emotion dysregulation levels above and beyond GAD status.

ABSTRACT

Purpose: The emotion dysregulation model of GAD (Mennin et al., 2002; 2005) has provided a new perspective for understanding the nature of the disorder. The present study examined the relationship of worry and experiential avoidance to emotion dysregulation in GAD.

Method: A sample of 296 college students, 35 with self-reported GAD, and 261 with no GAD, completed measures of worry, experiential avoidance, and emotion dysregulation that broadly assessed the dimensions of heightened intensity of emotions, poor understanding of emotions, negative reactivity to emotions, and maladaptive management of emotions.

Results: Results indicated that participants with GAD endorsed higher levels of worry, experiential avoidance, and emotion dysregulation than non-GAD controls. Furthermore, worry was associated with emotional intensity, poor understanding and negative reactivity to emotions, whereas experiential avoidance was associated with all four indices of emotion dysregulation.

Discussion: The results of the present study provide additional support for the emotion dysregulation model of GAD. Further, this study provides evidence for the association of worry and experiential avoidance to emotion dysregulation in GAD.

METHOD

Participants:

- 296 (200 females; 68%) undergraduate students
- Ethnic composition: 34.5% Caucasian, 29% African American, 10% Asian American, 1.7% Hispanic, 6.9% mixed, 17.9% other

Procedure:

- Participants completed a number of self-report questionnaires including:
- Generalized Anxiety Disorder Questionnaire - IV (**GAD-Q-IV**; Newman et al., 2001)
 - Penn State Worry Questionnaire (**PSWQ**; Meyer, 1990)
 - Acceptance and Action Questionnaire (**AAQ**; Hayes et al., 2003)
 - Affective Control Scale (**ACS**; Williams, 1997)
 - Toronto Alexithymia Scale-20 (**TAS**; Bagby et al., 1994a; Bagby et al., 1994b)
 - Trait Meta-Mood Scale (**TMMS**; Salovey et al., 1995)
 - Berkeley Expressivity Questionnaire (**BEQ**; Gross & John, 1997)

RESULTS

- Independent sample t-tests were conducted for worry and experiential avoidance. Sets of independent sample t-tests were also conducted separately for the measures of emotion dysregulation. Results are summarized in **Table 1**.
- Hierarchical linear regression analyses were performed for each subscale of each of the 4 measures of emotion dysregulation (**Table 2**):
Step 1: GAD entered; Step 2: Worry, experiential avoidance entered simultaneously

DISCUSSION

The results of the present study offer:

- Additional support for the emotion dysregulation model of GAD
 - Evidence for the association of worry and experiential avoidance to emotion dysregulation in GAD
 - An emotion regulation approach in understanding the nature of GAD and may provide the foundation for the development of new integrative-based therapies for its treatment
- Future research studies need to replicate the present findings in clinical settings and allow for more objective assessment of emotion dysregulation.

Table 1. Means and standard deviations of worry, experiential avoidance, and emotion dysregulation indices with and without GAD (N = 296)

	Group		t (293)	Cohen's d
	Non-GAD (n = 261)	GAD group (n = 35)		
Worry	44.53 (11.86)	65.60 (10.51)	-10.00***	1.17
Experiential Avoidance	32.62 (6.00)	37.46 (6.38)	-4.45***	0.52
<i>Heightened Intensity of Emotions</i>				
BEQ Impulse Strength	26.91 (6.50)	29.57 (6.00)	-2.29*	0.27
BEQ Negativity Expressivity	24.24 (3.60)	25.00 (3.99)	-1.16	0.14
BEQ Positive Expressivity	20.61 (4.00)	20.51 (4.37)	0.14	0.02
<i>Poor Understanding of Emotions</i>				
TMMS Clarity of Emotions	3.36 (0.53)	3.00 (0.48)	3.85***	0.45
TAS Difficulty Identifying Emotions	2.28 (0.79)	2.86 (0.74)	-4.15***	0.48
TAS Difficulty Describing Emotions	2.69 (0.79)	3.20 (0.70)	-3.63***	0.42
<i>Negative Reactivity to Emotions</i>				
TMMS Attention to Emotions	3.72 (0.57)	3.72 (0.62)	-0.08	0.01
ACS Anxiety Subscale	3.26 (0.77)	4.10 (0.72)	-6.10***	0.71
ACS Depression Subscale	3.04 (0.97)	3.96 (1.02)	-5.21***	0.61
ACS Anger Subscale	3.52 (0.81)	3.95 (0.83)	-2.99**	0.35
ACS Positive Emotion Subscale	3.01 (0.76)	3.35 (0.89)	-2.44*	0.29
<i>Maladaptive Management of Emotions</i>				
TMMS Repair a Bad Mood	3.58 (0.74)	3.38 (0.59)	1.54	0.18

Note. *p < .05, **p < .01, ***p < .001; Bonferroni correction used for emotion dysregulation measures, (.05/ number of subscales); d = Cohen's (1988) d effect size; small effect = .20; medium effect = .50; large effect = .80.

Table 2. Overview hierarchical linear regression analyses predicting emotion dysregulation from GAD status, worry, and experiential avoidance (N=296)

Dependent Variable	Independent Variable		Model 2 R ²
	Worry	Experiential Avoidance	
	β	β	
<i>Heightened Intensity of Emotions</i>			
BEQ Impulse Strength	0.36***	-0.02	0.12
BEQ Negativity Expressivity	0.19**	0.05	0.40
BEQ Positive Expressivity	0.05*	-0.18*	0.36
<i>Poor Understanding of Emotions</i>			
TMMS Clarity of Emotions	-0.17*	-0.34***	0.21
TAS Difficulty Identifying Emotions	0.10	0.39***	0.23
TAS Difficulty Describing Emotions	0.08	0.90***	0.14
<i>Negative Reactivity to Emotions</i>			
TMMS Attention to Emotions	0.22**	-0.29***	0.08
ACS Anxiety Subscale	0.21***	0.25***	0.38
ACS Depression Subscale	0.11	0.47***	0.31
ACS Anger Subscale	0.03	0.44***	0.21
ACS Positive Emotion Subscale	-0.55	0.45***	0.20
<i>Maladaptive Management of Emotions</i>			
TMMS Repair a Bad Mood	-0.01	0.40***	0.16

*p < 0.05, **p < 0.01, ***p < 0.001