

## BRIEF REPORT

# Should Uncontrollable Worry Be Removed From the Definition of GAD? A Test of Incremental Validity

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In its current instantiation in *DSM-IV*, a diagnosis of generalized anxiety disorder (GAD) requires the presence of excessive and uncontrollable worry. It has been proposed that the uncontrollability criterion be removed from future editions of the *DSM*, primarily on the basis of empirical and conceptual overlap between excessiveness and uncontrollability and a relative lack of research on uncontrollability. However, no research has directly investigated the incremental validity of the uncontrollability criterion—that is, the extent to which uncontrollability predicts important clinical information over and above excessiveness. This question was examined in a community sample of 126 adults diagnosed with GAD. After controlling for excessiveness, uncontrollability explained a significant proportion of additional variance in a variety of relevant clinical measures, including GAD severity, clinician-rated anxiety, number and severity of comorbid disorders, and use of psychotropic medication and psychotherapy. The results remained statistically significant even when other features of GAD were controlled. By contrast, excessiveness did not significantly predict any clinical measure over and above uncontrollability. These findings suggest that uncontrollability contributes to the validity of the GAD diagnosis and should be retained as a core feature of pathological worry.

*Keywords:* generalized anxiety disorder, worry, uncontrollability, excessiveness, *DSM-5*

Over the last several decades, generalized anxiety disorder (GAD) has evolved from a “wastebasket” diagnosis to a robust and clinically meaningful construct that can be diagnosed as reliably as most other Axis I disorders (Brown, DiNardo, Lehman, & Campbell, 2001). In its current instantiation in *DSM-IV* (American Psychiatric Association, 1994), GAD is centrally defined by the presence of excessive and uncontrollable worry that persists for 6 months or longer. To warrant a diagnosis, individuals must also experience at least three of six associated symptoms (one associated symptom in children) and clinically significant distress or impairment. In the run-up to *DSM-5*, several revisions to these criteria were proposed. Arguably the most controversial of these was the proposed removal of the “uncontrollability” criterion (Criterion B), which requires that the individual finds the worry difficult to control. Although GAD will remain largely unchanged in *DSM-5*, the suggestion that this criterion be eliminated has highlighted questions about the role that uncontrollability should play in defining pathological worry.

The uncontrollability criterion was added in *DSM-IV* as part of a larger effort to refine the definition of GAD and improve the

reliability and discriminant validity of the diagnosis (Brown, Barlow, & Liebowitz, 1994). The recommendation to include this criterion was based primarily on research suggesting that “uncontrollability (or the difficulty of dismissal) seems to be the most central feature of worry” (Borkovec, Shadick, & Hopkins, 1991, p. 31) and that the ability to control worry distinguishes individuals high and low in trait worry (Borkovec, Robinson, Pruzinsky, & DePree, 1983) and individuals with and without *DSM-III-R* GAD (Abel & Borkovec, 1995; Borkovec, 1994; Craske, Rapee, Jackel, & Barlow, 1989). The requirement that worry be perceived as difficult to control was also considered an improvement over the *DSM-III-R* requirement that worries be unrealistic, which was discarded because it was unreliable, subjective, and difficult to operationalize (Borkovec et al., 1991), concerns that have since been raised about the excessiveness requirement as well (Ruscio et al., 2005).

Since the inclusion of the uncontrollability criterion in *DSM-IV*, empirical and theoretical interest in control over worry—and in cognitive control more broadly—has grown. Difficulty controlling anxious thoughts has been linked to heightened anxiety and depression (Peterson, Klein, Donnelly, & Renk, 2009) and has been proposed to play a key role in the onset and maintenance of several anxiety disorders (e.g., Rachman, 1997; Wells, 1995). These findings are consistent with leading theoretical accounts that implicate perceptions of uncontrollability, broadly construed, in the etiology of anxiety disorders (Mineka & Zinbarg, 2006). Negative beliefs about control over worry have been found to be especially relevant for GAD, discriminating individuals with GAD not only from healthy controls (Cartwright-Hatton & Wells, 1997; Hoyer,

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This work was supported in part by a University Research Foundation grant from the University of Pennsylvania to Ayelet Meron Ruscio.

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Becker, & Roth, 2001) but from high worriers without GAD (Hoyer, Becker, & Margraf, 2002; Ruscio & Borkovec, 2004) and from individuals with other anxiety disorders (Cartwright-Hatton & Wells, 1997; Hoyer et al., 2001, 2002) and major depressive disorder (MDD; Barahmand, 2009).

Despite growing evidence for uncontrollability as an important feature of anxiety and GAD, some researchers have questioned its necessity as a diagnostic criterion, citing the conceptual similarity and strong association of uncontrollability with excessiveness (e.g.,  $r = .91$ ; Brown et al., 2001) as indications of redundancy (Andrews et al., 2010). This concern has been underscored by research demonstrating that removing the uncontrollability criterion while retaining the excessiveness criterion would have a small impact on the lifetime prevalence and identified cases of GAD (Andrews & Hobbs, 2010; Beesdo-Baum et al., 2011). If excessiveness and uncontrollability are redundant, discarding one of these criteria could result in improved diagnostic efficiency without compromising validity and clinical utility. Indeed, the recommendation to remove uncontrollability from DSM-5 was based mainly on the premise that this criterion does not contribute unique clinical information to the GAD diagnosis over and above excessiveness. To date, however, no research has tested this assumption directly. This important gap should be addressed before the uncontrollability criterion is discarded.

To that end, the present study evaluated the incremental validity of the uncontrollability criterion. Specifically, we tested the hypothesis that uncontrollability of worry accounts for unique variance in important concurrently assessed clinical measures among GAD cases, over and above information contributed by excessiveness of worry. Whereas a demonstration of incremental validity would suggest that uncontrollability should be retained in the definition of GAD, evidence of redundancy with excessiveness would argue against the need for both criteria.

## Method

### Participants

Participants were 126 adults with *DSM-IV* GAD recruited from the Philadelphia community ( $n = 112$ ) and from a private northeastern university ( $n = 14$ ; see Table 1). Participants were recruited via electronic and posted advertisements for a research study on anxiety and depression and received \$10 per hour for their time. GAD was the principal (most severe) diagnosis in two thirds ( $n = 83$ ) of these cases. The remainder had principal MDD and were included to enhance ecological validity, given the frequent comorbidity of GAD with MDD (Kessler et al., 2008). Participants were excluded if they had a principal diagnosis other than GAD or MDD, were acutely psychotic or suicidal, or had a current substance use disorder.

To evaluate the reliability of these diagnoses, an independent clinical interviewer rated the recorded interviews of 42 cases, including 25 GAD cases randomly selected from the current sample (20%) plus an additional 17 cases without GAD randomly selected from the larger study in which these measures were administered. Interrater agreement was high for the presence of *DSM-IV* GAD ( $\kappa = 1.00$ ). In the subsample with GAD, interrater agreement was acceptable for GAD and MDD clinical severity

(ICC = 0.73 and 0.90, respectively) and for the presence of comorbid MDD ( $\kappa = 0.92$ ).

## Measures

### Predictor variables.

**Uncontrollability and excessiveness.** Uncontrollability and excessiveness were assessed using the GAD module of the Anxiety Disorders Interview Schedule for *DSM-IV* (ADIS-IV; Brown, DiNardo, & Barlow, 1994). In accordance with ADIS-IV administration standards, interviewers rated the uncontrollability of worry reported by participants for each of eight life domains (minor matters, work/school, family, finances, social/interpersonal, health of self, health of significant others, community/world affairs) on a scale of 0 (*worry is never difficult to control*) to 8 (*worry is extremely difficult to control*). Interviewers separately rated the excessiveness of worry for the same eight domains on a scale of 0 (*no worry/tension*) to 8 (*constantly worried/extreme tension*). Interrater agreement was good for each of the eight domains of uncontrollability (mean ICC = .84; range = .70–.96) and excessiveness (mean ICC = .87; range = .80–.94). Ratings were averaged across domains to create a global uncontrollability score and a global excessiveness score. These uncontrollability and excessiveness composite scores were comparable in terms of range (4.75 and 4.38, respectively) and internal consistency (Cronbach's alpha = .62 and .60, respectively).

**Other features of GAD.** Diagnostic features of GAD other than worry were assessed using the ADIS-IV. A Criterion C composite was created by averaging the severity ratings (0–8) for the six associated symptoms of GAD. A clinical significance composite was created by averaging self-reported distress and interference attributed to GAD symptoms (0–8). Interrater agreement was good for these composites (ICC = 0.92 and 0.80, respectively).

### Anxiety-related measures.

**Global anxiety severity.** Interviewers rated participants' anxiety symptoms on the 14-item Hamilton Anxiety Rating Scale

Table 1  
*Sample Characteristics*

Variable	%
Sex (% female)	64
Ethnicity	
Caucasian	67
African American	15
Asian/Asian American	9
Other/Unspecified	10
Level of education	
High school or less	14
Some college	31
Completed college	43
Advanced degree	13
Marital status	
Single/Never married	68
Married/Cohabiting	25
Divorced/Separated/Widowed	7
Occupational status	
Employed	51
Unemployed	33
Student	17
Age: <i>M</i> ( <i>SD</i> )	31.93 (11.70)

(HAM-A; Hamilton, 1959), a widely used clinician-administered scale (Shear et al., 2001).

**GAD and worry severity.** Interviewers rated GAD clinical severity (0–8) for all participants. Additionally, participants estimated the percent of an average day that they spent worrying (0–100%) on the ADIS-IV, and self-reported their typical (trait) levels of worry on the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990). These measures were used as measures of the day-to-day impact of GAD on participants' lives.

#### Comorbidity-related measures.

**Comorbid disorders.** The number and severity of comorbid mental disorders were assessed using the ADIS-IV. We focused on anxiety disorders (panic disorder with and without agoraphobia, social anxiety disorder, obsessive–compulsive disorder, posttraumatic stress disorder, acute stress disorder, specific phobia) and mood disorders (MDD, dysthymic disorder, bipolar disorders), given their common co-occurrence with GAD (Ruscio et al., 2005). Each disorder was assessed for diagnostic status (present/absent) and assigned a clinical severity rating (0–8). Number of comorbid disorders was determined by summing the number of disorders other than GAD for which *DSM-IV* diagnostic criteria were met. Severity of comorbid disorders was determined by averaging the clinical severity of all disorders other than GAD for which diagnostic criteria were met.

**Global depression severity.** Interviewers rated participants' depression symptoms on the 17-item Hamilton Rating Scale for Depression (HAM-D; Hamilton, 1960), a widely used global measure of depression severity (López-Pina, Sánchez-Meca, & Rosa-Alcázar, 2009).

#### Treatment-related measures.

**Treatment history.** Dichotomous variables representing current use of psychotropic medication, current use of psychotherapy, and lifetime history of psychiatric hospitalization were drawn from the Medical History module of the ADIS-IV.

## Procedure

Interviews were administered by Master's- and Bachelor's-level interviewers who received extensive training and demonstrated high interrater reliability with the supervising licensed psychologist. Final diagnostic status and clinical severity ratings were determined in weekly team consensus meetings. Interviewers and supervisors were blind to study hypotheses.

## Statistical Analyses

Hierarchical multiple and logistic regression analyses were performed to examine the incremental validity of uncontrollability over and above excessiveness. In each analysis, excessiveness was entered on the first step and uncontrollability was entered on the second step. Additionally, outliers that scored  $\geq 2.5$  *SD* above or below the mean for that variable or which exerted an unduly large influence on the model (defined using Cook's distance) were removed, resulting in the exclusion of 0 to 3 data points (less than 3% of available data) per analysis. Three clinical measures (number and severity of comorbid disorders and MDD severity among depressed participants) had non-normal distributions and consequently were log10 transformed prior to analysis. Variance inflation factors (VIF) were below 4, suggesting that multicollinearity was not a problem in these analyses.

## Results

Descriptive statistics for all measures appear in Table 2. As expected, excessiveness and uncontrollability were highly correlated ( $r = .83$ ).

Despite this correlation, uncontrollability predicted anxiety-related measures over and above excessiveness (see Table 3). Effect sizes were small to moderate, with uncontrollability

Table 2  
*Descriptive Statistics for Clinical Measures*

Variable	<i>M</i>	<i>SD</i>	Min–Max	%
Uncontrollability of worry	4.64	1.10	2.25–7.00	
Excessiveness of worry	5.07	0.96	2.75–7.13	
Anxiety-related measures				
Percent of day spent worrying	62.44	20.93	6–100	—
GAD clinical severity	5.26	0.76	4–7	—
Global anxiety severity (HAM-A total score)	16.21	5.94	0–31	—
Trait worry (PSWQ total score)	69.22	6.47	45–80	
Comorbidity-related measures				
Number of comorbid disorders	2.21	1.67	0–7	—
Severity of comorbid disorders	4.09	1.70	0–6	—
Global depression severity (HAM-D total score)	15.42	5.31	1–28	—
Comorbid MDD diagnosis	—	—	—	60
MDD severity among depressed participants	5.23	0.68	4–6.5	—
Treatment-related measures				
Currently using psychoactive medication	—	—	—	25
Currently using psychotherapy	—	—	—	25
Previous psychiatric hospitalization	—	—	—	19

*Note.* Unless otherwise specified, measures were assessed using the Anxiety Disorders Interview Schedule. GAD = generalized anxiety disorder; HAM-A = Hamilton Anxiety Rating Scale; HAM-D = Hamilton Rating Scale for Depression; MDD = major depressive disorder.

Table 3  
Incremental Validity of Uncontrollability for Predicting Anxiety-Related Measures

Model and predictor variables	<i>B</i>	<i>SE (B)</i>	95% <i>CI</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
Percent of the day spent worrying						
Model 1					.13	.13***
Excessiveness	7.72***	1.86	4.05–11.39	.35		
Model 2					.24	.11***
Excessiveness	−3.37	3.14	−9.58–2.83	−.15		
Uncontrollability	11.61***	2.73	6.20–17.01	.61		
GAD clinical severity						
Model 1					.26	.26***
Excessiveness	0.41***	0.06	0.28–0.53	.52		
Model 2					.31	.05**
Excessiveness	0.18 <sup>†</sup>	0.11	−0.04–0.39	.23		
Uncontrollability	0.25*	0.09	0.06–0.43	.35		
Global anxiety severity (HAM-A)						
Model 1					.11	.11***
Excessiveness	1.92***	0.50	0.93–2.92	.33		
Model 2					.13	.02 <sup>†</sup>
Excessiveness	0.46	0.95	−1.42–2.34	.08		
Uncontrollability	1.51 <sup>†</sup>	0.84	−0.14–3.16	.29		
Trait worry (PSWQ)						
Model 1					.06	.06**
Excessiveness	1.64**	0.62	0.73–3.30	.24		
Model 2					.11	.05*
Excessiveness	−0.46	1.07	−2.25–2.34	−.07		
Uncontrollability	2.23*	0.94	0.07–4.10	.38		

Note. Unless otherwise specified, measures were assessed using the Anxiety Disorders Interview Schedule. GAD = generalized anxiety disorder; HAM-A = Hamilton Anxiety Rating Scale; PSWQ = Penn State Worry Questionnaire.

<sup>†</sup>  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

explaining an additional 2–11% of the variance over and above excessiveness. These effects were statistically significant for measures of GAD and worry (GAD clinical severity, percent of the day spent worrying, trait worry) and marginally significant for global anxiety severity. Notably, excessiveness was no longer a significant predictor of any measure once uncontrollability was entered into the models.

Uncontrollability also significantly predicted both the number and severity of comorbid emotional disorders over and above excessiveness, explaining an additional 4% of the variance in each analysis (see Table 4). Excessiveness no longer

predicted either measure once uncontrollability was included in the model.

Given the particularly close relationship of GAD to MDD, we performed additional analyses focusing specifically on depression-related measures. Uncontrollability incrementally predicted greater global depression severity in this GAD sample, explaining an additional 4% of the variance and rendering excessiveness nonsignificant (see Table 5). Uncontrollability did not predict the presence of comorbid MDD (see Table 6), but marginally predicted the severity of the current depressive episode among participants diagnosed with MDD (see Table 5).

Table 4  
Incremental Validity of Uncontrollability for Predicting the Number and Severity of Comorbid Emotional Disorders

Model and predictor variables	<i>B</i>	<i>SE (B)</i>	95% <i>CI</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
Number of comorbid disorders						
Model 1					.14	.14***
Excessiveness	0.09***	0.02	0.05–0.14	.37		
Model 2					.18	.04*
Excessiveness	0.01	0.04	−0.06–0.91	.05		
Uncontrollability	0.08*	0.03	0.01–0.15	.37		
Severity of comorbid disorders						
Model 1					.01	.01
Excessiveness	0.004	0.01	−0.01–0.01	.07		
Model 2					.04	.04*
Excessiveness	−0.01	0.01	−0.03–0.01	−.25		
Uncontrollability	0.02*	0.01	0.001–0.04	.37		

Note. Measures were assessed using the Anxiety Disorders Interview Schedule.

\*  $p < .05$ . \*\*\*  $p < .001$ .

Table 5  
Incremental Validity of Uncontrollability for Predicting Depression Severity

Model and predictor variables	B	SE (B)	95% CI	β	R <sup>2</sup>	ΔR <sup>2</sup>
Global depression severity (HAM-D)						
Model 1					.06	.06**
Excessiveness	1.27**	0.47	0.34–2.20	.24		
Model 2					.09	.04*
Excessiveness	−0.30	0.84	−1.95–1.35	−.06		
Uncontrollability	1.64*	0.73	0.20–3.09	.35		
Depressive episode severity						
Model 1					.03	.03
Excessiveness	0.11	0.01	−0.003–0.03	.18		
Model 2					.08	.04†
Excessiveness	−0.10	0.14	−0.04–0.02	−.16		
Uncontrollability	0.02†	0.01	−0.002–0.05	.40		

Note. Unless otherwise specified, measures were assessed using the Anxiety Disorders Interview Schedule. HAM-D = Hamilton Rating Scale for Depression.

† *p* < .10. \* *p* < .05. \*\* *p* < .01.

Finally, uncontrollability was incrementally associated with treatment-seeking (see Table 7). The pattern differed for pharmacotherapy versus psychotherapy. Higher uncontrollability was associated with elevated odds of psychotropic medication use (odds ratio [OR] = 2.52) but with reduced odds of psychotherapy use (OR = 0.50). Once uncontrollability was included in the model, excessiveness was no longer a significant predictor of psychotherapy, but became a significant predictor of medication use. Lastly, higher uncontrollability more than doubled the odds of past psychiatric hospitalization (OR = 2.95).

**Sensitivity Analyses**

Sensitivity analyses were performed to examine whether the incremental value of uncontrollability held even when controlling for additional features of GAD, including the associated symptoms (Criterion C) and clinical significance (distress and interference) criteria, along with excessiveness. In analyses controlling for all of these features simultaneously, uncontrollability remained a significant predictor of GAD severity (explaining an additional 2% of the variance), percent of the day spent worrying (10%), and trait worry (4%), but was no longer a significant predictor of global anxiety severity (1%). Uncontrollability remained a significant predictor of the number and severity of comorbid disorders (3% in

each analysis) and was a marginally significant predictor of global depression severity (2%) in the total sample and depressive episode severity (4%) in the subsample with comorbid MDD. Uncontrollability continued to be positively associated with pharmacotherapy (OR = 2.43) and negatively associated with psychotherapy (OR = 0.47) and was marginally elevated among those with a history of psychiatric hospitalization (OR = 2.29).

Table 7  
Incremental Validity of Uncontrollability for Predicting Treatment-Related Measures

Model	B	SE (B)	Wald's χ <sup>2</sup>	OR	95% CI
Current use of psychotropic medication					
Block 1					
Excessiveness	−0.27	.23	1.46	0.76	0.49–1.18
Constant	−1.20***	.22	30.73	—	—
Block 2					
Excessiveness	−1.17*	.48	5.96	0.31	0.12–0.79
Uncontrollability	0.92*	.43	4.62	2.52	1.08–5.83
Constant	−1.23***	.23	30.98	—	—
Current use of psychotherapy					
Block 1					
Excessiveness	−0.46*	.23	4.12	0.63	0.40–0.98
Constant	−1.20***	.22	30.37	—	—
Block 2					
Excessiveness	0.16	.38	0.16	1.17	0.55–2.48
Uncontrollability	−0.69*	.35	3.91	0.50	0.25–0.99
Constant	−1.26***	.23	30.45	—	—
Previous psychiatric hospitalization					
Block 1					
Excessiveness	0.30	.25	1.44	1.35	0.83–2.22
Constant	−1.51***	.24	40.59	—	—
Block 2					
Excessiveness	−0.73	.51	2.04	0.48	0.18–1.31
Uncontrollability	1.08*	.26	5.34	2.95	1.18–7.36
Constant	−1.62***	.26	38.93	—	—

Note. All measures were assessed using the Anxiety Disorders Interview Schedule.

† *p* < .10. \* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.

Table 6  
Incremental Validity of Uncontrollability for Predicting the Presence of Comorbid MDD

	B	SE (B)	Wald's χ <sup>2</sup>	OR	95% CI
Block 1					
Excessiveness	0.39*	.18	4.55	1.48	0.94–2.02
Constant	0.32	.20	2.75	—	—
Block 2					
Excessiveness	0.03	.34	0.01	1.03	0.52–2.01
Uncontrollability	0.32	.30	1.10	1.37	0.76–2.39
Constant	0.40*	.19	4.64	—	—

Note. Measures were assessed using the Anxiety Disorders Interview Schedule. OR = odds ratio; MDD = major depressive disorder.

\* *p* < .05.



## Discussion

The present findings should be interpreted in light of several limitations. First, our sample was restricted to individuals diagnosed with GAD. This precluded a test of the utility of uncontrollability for identifying cases of GAD. Additionally, different results might have been obtained from a sample in which subclinical symptoms were represented. Nevertheless, the predictive power of uncontrollability among these clinically significant cases, observed in spite of the restricted range of uncontrollability scores, argues for the clinical relevance of this criterion. A second limitation was the adult-only sample. Because of their lower metacognitive awareness, children may have difficulty articulating the extent to which their worry is uncontrollable or may not attempt to control their worry (Beesdo-Baum et al., 2011). The generalizability of the present findings to children remains to be determined. Third, we studied clinical measures related to disorder severity and treatment-seeking, with a particular focus on measures of anxiety and depression. Although these measures are well suited for studying the validity of GAD, other important variables such as illness course and treatment outcome were not represented and await future investigation.

With these limitations in mind, our findings challenge the assumption that uncontrollability contributes little clinical information beyond that provided by excessiveness. After controlling for excessiveness, uncontrollability incrementally predicted a wide range of important clinical measures, including measures specific to GAD and more general measures pertaining to clinical severity, comorbidity, and treatment-seeking. In the majority of analyses, excessiveness was no longer a significant predictor after uncontrollability entered the model. These results remained significant or marginally significant for all but one measure in conservative sensitivity analyses wherein other features of GAD were also controlled. There were no analyses in which excessiveness was a stronger predictor than uncontrollability.

Whether the incremental value of uncontrollability demonstrated by these findings is sufficient to retain this criterion in the GAD diagnosis is a matter of judgment. The relatively small effects observed here are consistent with previous research reporting substantial overlap between excessiveness and uncontrollability (Andrews & Hobbs, 2010). However, the present findings also suggest that excluding the criterion may result in a less valid and clinically informative diagnosis. For GAD, whose diagnostic validity has long been a significant concern, this risk should not be taken lightly.

Removing the uncontrollability criterion may also lead to a missed opportunity to link work on GAD to the exciting and rapidly growing cognitive control literature. There is increasing recognition of the important role played by cognitive dyscontrol in psychopathology in general and in GAD in particular. Impaired cognitive control has been linked to higher trait worry (Crowe, Matthews, & Walkenhorst, 2007), difficulty dismissing unwanted thoughts (Brewin & Smart, 2005), and poorer treatment outcome in older adults receiving cognitive-behavioral therapy for GAD (Mohlman & Gorman, 2005). Continued research into the cognitive processes that underlie normal control over thoughts, and how these processes may be disrupted in individuals with GAD, has the potential to advance understanding of this critical yet poorly understood component of anxiety. Such research may, in turn, help

lead to the development of novel treatments for uncontrollable anxious thought—a possibility especially important for GAD, which has the lowest treatment success rate of all anxiety disorders (Siev & Chambless, 2007).

The association between uncontrollability and treatment-seeking described here highlights the value of continued research into uncontrollability. We found that individuals reporting higher uncontrollability generally were more severe clinical cases. However, rather than exhibiting an undifferentiated pattern of negative outcomes, these individuals reported less use of psychotherapy and more use of pharmacotherapy than their counterparts with lower levels of uncontrollability. While several explanations may account for this finding, one possibility is that persons who perceive worry as far outside their control may feel less able to reduce worry themselves by applying strategies learned in psychotherapy and consequently may seek medication treatment instead. Although preliminary, our treatment-related findings suggest that additional research into uncontrollability and related metacognitive phenomena may help advance understanding of the factors that influence treatment utilization in GAD.

In light of these considerations, it may be asked whether excessiveness, rather than uncontrollability, should be discarded if the overlap between them is judged too high to retain both criteria in the definition of GAD. Our results hint that this may be the more defensible choice, as we did not find evidence for the incremental validity of excessiveness over uncontrollability for any of the clinical measures considered here. Other shortcomings of the excessiveness criterion have been noted previously, including its definitional ambiguity, its negative impact on diagnostic reliability, and its exclusion of milder but still clinically significant cases from the GAD diagnosis (see Ruscio et al., 2005, for a review). Indeed, the recommendation to retain the excessiveness criterion rather than the uncontrollability criterion seems to have been based more on the limited number of studies that have examined uncontrollability than on the strength of the evidence for excessiveness (Andrews et al., 2010). Nevertheless, given the paucity of research available for excessiveness as well as uncontrollability, it may be premature to recommend the removal of either criterion. Future research investigating the relationship of these criteria to important variables not investigated here (e.g., clinical course, treatment response, family history of GAD), in children as well as adults, will aid in determining whether uncontrollability, excessiveness, or both should remain in future iterations of the *DSM*. Until this research is conducted, however, we believe the present findings warrant further consideration of uncontrollability as an important but neglected feature of GAD and, perhaps, of pathological worry more generally.

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Received July 9, 2012

Revision received December 19, 2012

Accepted December 20, 2012 ■