ORIGINAL ARTICLE

Depression, Generalized Anxiety Disorder, and Certainty in Pessimistic Predictions about the Future

Regina Miranda · Douglas S. Mennin

Published online: 21 February 2007

© Springer Science+Business Media, Inc. 2007

Abstract This study examined whether symptoms of GAD and depression were differentially associated with predictions individuals made about their future. Sixty-five undergraduates completed the BDI-II and GAD-Q-IV, predicted whether positive and negative events would happen to them in the future, and indicated their level of certainty about these predictions. Both higher GAD and depression symptoms were associated with an increased tendency to anticipate that negative events would happen. However, only depression was associated with the tendency to predict that positive events would not occur, even after adjusting for GAD symptoms. In addition, GAD and depression scores were positively associated with pessimistic certainty about negative events, but only depression was associated with increased certainty about both the occurrence of negative outcomes and a lack of positive outcomes, even after adjusting for GAD symptoms.

Keywords Depression · Generalized anxiety disorder · Future events · Pessimism · Certainty

Introduction

A central component of both depression and anxiety disorders is the anticipation of future outcomes. Unipolar depression and generalized anxiety disorder (GAD)—which are highly comorbid—(Wittchen, Zhao, Kessler, & Eaton, 1994)—are both associated with negative expectations about the future (e.g., Andersen, 1990; Andersen & Limpert, 2001; Dugas et al., 1998b; Roemer, Molina, & Borkovec, 1997). Cognitive models (e.g., Abramson, Metalsky, & Alloy, 1989; Abramson, Seligman, & Teasdale, 1978; Beck,

R. Miranda (⊠)

Department of Psychology, Hunter College of the City University of New York, 695 Park Avenue, Room 611 North, New York, NY 10021, USA e-mail: regina.miranda@hunter.cuny.edu

D. S. Mennin

Department of Psychology, Yale University, New Haven, CT, USA



1967) view depression as characterized by negative anticipations about the likelihood of positive and negative outcomes. Similarly, GAD is characterized by worries about possible negative outcomes in the future (Dugas et al., 1998b). Recent work has begun to distinguish between the types of expectations about the future that might be specific to anxiety versus depression (MacLeod & Byrne, 1996; MacLeod, Tata, Kentish, & Jacobsen, 1997), although only one study of which we are aware (Beck, Wenzel, Riskind, Brown, & Steer, in press) has specifically addressed such differences in individuals with GAD symptoms versus symptoms of depression.

There is evidence that moderately depressed college students, when asked to predict whether a series of events are likely to happen to them in the future, tend to predict that negative events are more likely and that positive events are less likely to happen than do mildly depressed or non-depressed individuals (Andersen, 1990; Andersen, Spielman, & Bargh, 1992). Furthermore, they hold their pessimistic beliefs about the future with certainty, relative to non-depressed individuals (Andersen, 1990). That is, they are characterized by greater depressive predictive certainty—the tendency to be certain of the occurrence of negative outcomes or the non-occurrence of positive outcomes (Andersen, 1990; Andersen & Schwartz, 1992). This evidence is consistent with the hopelessness model of depression (Abramson et al., 1989), which asserts that hopelessness—the belief that highly aversive outcomes will occur or that highly valued outcomes will not to occur, and that one is helpless to change those outcomes—is a proximal cause of depression. More recent work suggests that clinically depressed individuals are more specifically distinguished from non-depressed individuals by a tendency to anticipate that positive events will not occur (Andersen & Limpert, 2001; MacLeod & Salaminiou, 2001).

Individuals with chronic worry—a hallmark of GAD (American Psychiatric Association, 1994)—also report a greater likelihood of negative future events. Analyses of the worry themes present in GAD have found that individuals with GAD worry more about negative events happening in the future than do non-GAD anxious individuals (Dugas et al., 1998b). MacLeod, Williams, and Bekerian (1991) found that high worriers rated negative events to be more probable and also generated more reasons for negative events than low worriers. Following the work of Kendall and Ingram (1987), Vasey and Borkovec (1992) examined the quality of "what if?" questions in chronic worriers. These authors argue that worriers often ask this type of question and answer it with a belief of severe negative consequences. They found that when they asked chronic worriers and non-worriers to generate catastrophic consequences for worry topics, worriers generated significantly more catastrophic steps than non-worriers.

Depression has been distinguished from anxiety by the experience of loss of pleasure, thoughts of personal loss and failure, and dysphoric mood (Clark, Beck, & Beck, 1994), while anxiety has been distinguished by threat-related thoughts, subjective anxiety, worry, and tension (Clark et al., 1994). Beck's (1967) cognitive theory posits that emotional disorders can be distinguished by specific cognitive content reflecting maladaptive schemas (Clark & Beck, 1989). Tests of this notion of content-specificity have attempted to distinguish the types of cognitions that may be uniquely associated with symptoms of depression versus anxiety (see R. Beck & Perkins, 2001). Research examining differences reflecting the content of future-event schemas in depression and anxiety suggests that the anticipation of fewer positive outcomes appears to be one characteristic that may distinguish depression from anxiety, while predicting greater negative outcomes may be characteristic of both anxiety and depression (MacLeod & Byrne, 1996). Indeed, in the realm of social cognition, mood changes along the



cheerfulness-dejection spectrum tend to be associated with anticipating positive outcomes, while mood changes in the agitation-quiescence spectrum have been associated with possible negative outcomes (Idson, Liberman, & Higgins, 2000; Shah & Higgins, 2001).

MacLeod and colleagues studied differences in how depressed and anxious individuals anticipate the future (MacLeod & Byrne, 1996; MacLeod, Byrne, & Valentine, 1996; MacLeod & Salaminiou, 2001; MacLeod et al., 1997). Their findings indicate that individuals with major depression anticipate fewer positive experiences than do individuals with an anxiety disorder (MacLeod et al. 1997) and than do non-depressed persons (MacLeod & Salaminiou, 2001). In addition, MacLeod and Byrne (1996) have found that when anxious and depressed individuals are asked to generate positive and negative experiences that might happen to them in the future, anxious individuals show an increased anticipation of negative outcomes, while depression is associated with the anticipation of both increased negative and decreased positive expectations. In a related vein, a recent study (Beck et al., in press) that examined cognitive content-specificity among individuals with a diagnosis of Major Depressive Disorder versus those with a diagnosis of GAD found that depressed individuals rated worst outcomes to specific life problems as being more likely to occur and best outcomes to life problems as being less likely to occur, compared to individuals with GAD and also compared to psychiatric controls. Thus, what distinguishes depression from anxiety seems to be an increased tendency to expect both negative outcomes and the absence of positive outcomes.

The present study

This study sought to shed further light on the relationship between GAD symptoms, depression symptoms¹, and the types of predictions individuals make about the future, along with their differing levels of certainty in their anticipations of future outcomes. In particular, it was believed that higher GAD symptoms would be associated with an increased expectation of negative outcomes but not a decreased expectation of positive outcomes. In comparison, higher symptoms of depression would be associated with both an increased expectation of negative outcomes and a decreased anticipation of positive outcomes (consistent with prior work comparing depression and anxiety).

Furthermore, it was expected that higher symptoms of depression would be associated with more often being certain about one's pessimistic future-event predictions, more so than would GAD symptoms. We consider a pessimistic response one in which individuals predict either that a negative event will occur or one in which they anticipate that a positive event will not occur. Certainty in a pessimistic response was conceptualized dichotomously to reflect prior conceptions of hopelessness as the judgment that the occurrence of negative events or the non-occurrence of positive outcomes is inevitable (see Abramson et al., 1989; Andersen, 1990). These hypotheses were tested using a sample of college students who completed self-report symptom inventories of GAD and depression. Individuals who completed a measure of GAD symptoms and a measure of depression symptoms also completed a measure in which they made predictions about whether a set of positive or negative events were likely to happen to them in the future and in which they also indicated how certain they were of their predictions.

¹ We use the term depression to refer to symptoms of unipolar depression. However, given that these symptoms were assessed by one self-report measure, we are unable to distinguish participants whose symptoms might fall in the bipolar spectrum.



Method

Participants

Ninety-four participants (65 female, 29 male) volunteered to take part in this study as part of a screening to assess eligibility to participate in a second study during their summer introductory psychology course at a private, northeastern university. Fifteen were ineligible for inclusion because they were under 18 years of age (and no parent was available to give consent for participation). Fourteen additional participants were excluded due to missing data (e.g., skipping an entire page of a measure; endorsing certainty ratings in future-event predictions without making a yes/no response). Sixty-five individuals (45 female, 20 male) were included in the final analyses. Participants ranged in age from 18 to 38 (M = 21.1, SD = 3.5). Participants were primarily Caucasian (55%; n = 36) and Asian (29%; n = 19), with a smaller percentage either Black (5%; n = 3), Hispanic (2%; n = 1), or of other ethnicities (8%; n = 5). One participant did not indicate ethnicity. There were no statistically significant gender or ethnic differences between participants who were included versus excluded in the analyses (Ps > .5). In addition, there was no significance age difference between participants who were excluded from the analyses for reasons other than their age and those who were included (t < 1).

Measures

GAD-Q-IV

The GAD-Q-IV (Newman et al., 2002) is a 9-item self-report questionnaire that is designed to reflect criteria for GAD as delineated in the DSM-IV (APA, 1994). Items assess the degree to which individuals worry, and whether this worry is excessive and uncontrollable (e.g., Is your worry excessive in intensity, frequency, or amount of distress it causes? and Do you find it difficult to control the worry (or stop worrying) once it starts?), along with related physical symptoms (e.g., restlessness, fatigue, muscle tension) that individuals may have experienced in the past 6 months² The GAD-Q-IV has been found to have high sensitivity and specificity in classifying individuals as having GAD that was assessed by a diagnostic interview (Newman et al., 2002). The GAD-Q-IV was scored using a sum total, according to criteria established by Newman and colleagues (2002). Scores can range from 0 to 13 using this system. Individuals who score above 5.7 are considered to have clinically significant symptoms of GAD (see Newman et al., 2002).

BDI

The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) is an instrument used to assess symptoms of depression. It consists of 21 questions for which individuals are asked to choose statements that indicate how they have been feeling in the past two weeks. Items reflect symptoms such as sadness, loss of pleasure, and changes in energy, sleep, and appetite. Each item is scored on a scale of 0 (e.g., *I do not feel sad*) to 3 (*I feel so sad or unhappy that I can't stand it*). Total scores can range from 0 to 63, with a score of 20 or above being indicative of clinical depression (Beck et al., 1996).

² Due to an error, item 1 of the version of the GAD-Q-IV used in this study read, "Do you experience worry," rather than "Do you experience excessive worry?" (as in Newman et al., 2002). While this might have led to an over-estimation of GAD symptoms, such over-estimation was expected to be small.



Future events task

The Future Events Task consisted of a questionnaire containing a list of 34 future events (see Appendix A), half of which were positive (e.g., Have a successful career, Have lots of good times with friends) and half negative (e.g., Be unable to cope with responsibilities, Have family disapprove of life choices). These events were adapted from prior studies of future-event predictions, including the work of Andersen and colleagues (Andersen, 1990; Andersen & Limpert, 2001; Andersen et al., 1992; Miranda & Andersen, 2006) and MacLeod and colleagues (MacLeod et al., 1996; MacLeod et al., 1991). Items were selected, based on face validity, so that they varied in likelihood of occurrence. Most of the items had been rated in previous studies to have a moderate likelihood of occurrence to the average person (Andersen et al., 1992; Miranda & Andersen, 2006), and all had been previously classified as positive or negative items (Andersen & Limpert, 2001; Andersen et al., 1992; MacLeod et al., 1996; Miranda & Andersen, 2006). For each item, individuals were asked to answer the question, "Is this likely to happen to you at some time in the future" and to circle yes or no. This was accompanied by a 5-point Likert scale in which participants were asked to indicate how certain they were of each response. The scale ranged from 1 ("Not at all certain") to 5 ("As certain as one can be"). This questionnaire is similar in format to a scale used in a prior study (Miranda & Andersen, 2006).

Two totals were calculated to indicate how often participants' responses reflected certainty about a pessimistic prediction—to be consistent with the way in which depressive predictive certainty is operationalized by Andersen and colleagues (Andersen, 1990; Andersen & Schwartz, 1992; Miranda & Andersen, 2006) as a dichotomous construct. Participants were assigned a score of "1" for an item if they indicated they were "as certain as one can be" about a pessimistic prediction (i.e., anticipating that a negative event would happen or that a positive event would not happen to them), and they were assigned a score of "0" for the item, otherwise. Totals were computed separately for certainty in yes responses made to negative events and in no responses to positive events. Scores for each scale could thus potentially range from 0 to 17.

Procedure

Participants completed a packet of questionnaires at the beginning of one of their classroom periods. Each packet contained a consent form, which participants signed prior to completing the remaining questionnaires. Participants then completed a cover page inquiring about demographic information, along with the future-events questionnaire, GAD-Q-IV, and BDI. Participants' responses to the BDI-II and GAD-Q-IV were used to pre-screen them for participation in a second study.

Results

Sample characteristics

Average scores on the BDI-II and GAD-Q-IV were 12.0 (SD = 8.9; range = 0 to 40) and 6.5 (SD = 2.9; range = 1.3–12.8), respectively. There were no statistically significant gender differences in scores on the BDI and GAD-Q-IV, although females had slightly higher BDI scores (M = 12.3, SD = 9.8) than males (M = 11.3, SD = 6.7). Total BDI



and GAD-Q-IV scores were significantly and positively correlated, r(63) = 0.59, P < .001.

The future-events measure showed adequate internal consistency with regard to yes/no responses (Cronbach's alpha = .66) and ratings of certainty (Cronbach's alpha = .87). On average, participants responded *yes* to negative events (M = 8.3, SD = 3.5; range = 0–17) more than they responded *no* to positive events (M = 2.6, SD = 2.5; range = 0–12), t(64) = 11.87, P < .001, and they had higher depressive predictive certainty scores for *yes* responses to negative events (M = 3.2, SD = 2.6; range = 0–11) than for *no* responses to positive events (M = 0.8, SD = 1.3; range = 0–6), t(64) = 7.68, P < .001.

Relationship between symptom measures and responses to positive and negative items

Correlations were examined between symptom measures and total *yes* responses to negative items and *no* responses to positive items, respectively. It was hypothesized that both symptoms of depression and anxiety would be positively associated with total *yes* responses to negative events but that only depression would be positively associated with total *no* responses to positive items. The results confirmed these predictions. Both total GAD score and total BDI score were equally and positively related to responding "yes" to negative items, r_{GAD} (63) = .34, P < .01; r_{BDI} (63) = .33, P < .01, but only BDI score was positively associated with responding "no" to positive items, r(63) = .37, P < .01. GAD score was not significantly associated with *no* responses to positive events, r(63) = .11, P = ns.

A linear regression analysis was conducted to determine whether BDI scores would predict no responses to positive events when adjusting for symptoms of anxiety. In fact, this was the case. Even after adjusting for GAD symptoms, BDI score remained a statistically significant predictor of no responses to positive events, β = .47, P < .01. However, neither GAD score nor BDI score was a significant predictor of total yes responses to negative events when both were entered simultaneously into a regression equation (see Table 1).

Relationship between symptom measures and certainty in predictions made about positive and negative events

It was hypothesized that higher symptoms of depression would be associated with a greater number of times individuals indicated being certain about *yes* responses made to negative events and *no* responses made to positive events, while higher GAD symptoms would be associated with increased certainty about *yes* responses made to negative events but not in *no* responses made to positive events. Correlations between each of the diagnostic measures and total predictive certainty for *yes* responses to negative and *no* responses to positive events confirmed these predictions. As expected, both BDI-II score and GAD-Q-IV total were significantly and positively correlated with certainty about negative events, r(63) = .42, P < .01, and r(63) = .38, P < .001, respectively. That is, the more symptoms of depression and GAD participants reported, the more they indicated being "as certain as one can be" when predicting that negative events would happen to them. With regard to being certain about responses *no* to positive future events, only BDI score was significantly and positively associated with predictive



	Pessimism					
	Yes to Negative			No to Positive		
	β	Partial r	t(62)	β	Partial r	t
GAD-Q-IV	.23	.19	1.55	17	15	-1.19
BDI	.20	.17	1.39	.47	.36	3.29**
	Predictive certainty					
GAD-Q-IV	.20	.17	1.39	12	10	t < 1
BDI	.31	.27	2.21*	.46	.37	3.17**

Table 1 Linear regressions statistically predicting pessimism and predictive certainty from GAD and depression symptoms

certainty, r(63) = .39, P < .01, whereas GAD score was not significantly related to this measure (r = .15, P = ns). The difference between these latter two correlations was statistically significant, based on a Z test of correlated correlation coefficients (see Meng, Rosenthal, & Rubin, 1992), Z = 2.33, P < .05. In sum, both higher BDI and GAD scores were associated with being certain more often about the occurrence of negative events, while only higher BDI scores appeared to be associated with more often being certain about a lack of positive events.

A linear regression analysis was conducted to determine whether BDI scores would predict depressive certainty in *no* responses to positive events when adjusting for symptoms of depression. In fact, this was the case. Even after adjusting for GAD symptoms, BDI score remained a statistically significant predictor of *no* responses to positive events, $\beta = .46$, P < .01. In addition, only BDI score was a significant predictor of depressive certainty in *yes* responses to negative events when both were entered simultaneously into a regression equation. GAD score was no longer a significant predictor when adjusting for BDI score (see Table 1).

Discussion

This study extends prior research examining content-specificity in depression and anxiety with regard to forecasts made about the future. It was predicted that while depression and GAD scores would both be associated with a higher tendency to predict the occurrence of negative events in the future, only higher depression scores would be associated with a higher tendency to predict that positive events would not happen in the future. Furthermore, it was expected that while both anxiety and depression would be positively associated with certainty about the occurrence of negative outcomes, only depression would be positively associated with certainty about the non-occurrence of positive outcomes. The results supported these primary hypotheses.

This study replicates prior work (e.g., MacLeod & Byrne, 1996) supporting the notion that anxiety is associated with increased negative-outcome expectations and that depression is characterized by *both* increased expectations that negative events will occur *and* decreased expectations that positive outcomes will occur. However, what this work also demonstrates is that depression is also associated with increased *certainty* about



^{*}P < .05

^{**}P < .01

negative outcomes occurring and positive outcomes not occurring, while GAD is only associated with certainty in the occurrence of negative outcomes. More specifically, depression significantly and statistically predicts more often being certain when predicting both the occurrence of negative outcomes and a lack of positive outcomes, even after adjusting for GAD symptoms, while GAD was not a significant statistical predictor of certainty after adjusting for depression symptoms. This is consistent with the view of depressed individuals as being characterized by higher *depressive predictive certainty* than non-depressed persons (Andersen, 1990) and lends further support to the hopelessness theory of depression (Abramson et al., 1989).

These findings might also be consistent with the intolerance of uncertainty model of GAD developed by Dugas, Ladouceur and colleagues (see Dugas, Buhr, & Ladouceur, 1994, for a review). A series of studies have demonstrated that individuals with GAD are more characterized by an intolerance of uncertainty, defined as difficulty tolerating or accepting the ambiguity of the outcome of future events, than are individuals with other anxiety disorders or control individuals (e.g., Dugas, Gagnon, Ladouceur, & Freeston, 1998a; Ladouceur et al., 1999). The intolerance of uncertainty model suggests that individuals with GAD may be more likely to predict negative outcomes because they are uncomfortable with the ambiguity of possibly threatening events in the future. The present data might be interpreted as consistent with this assertion and might also possibly suggest that depression may be associated with the need to remove any hope for positive events, possibly also to decrease uncertainty. This idea would be consistent with prior findings suggesting that intolerance of ambiguity may be a vulnerability factor for the development of depressive predictive certainty and depression (Andersen & Schwartz, 1992). The ability to lower expectations for positive events and raise expectations for negative events may provide individuals with depression and anxiety, respectively, an increased belief of control, thereby reducing the aversive nature of these emotional states. Stated differently, individuals with depression and anxiety may be particularly sensitive to the impact of negative outcomes and thus need to overly correct for the impact of these outcomes through certainty about their occurrence. In turn, this pessimistic certainty may lead to such difficulties as a failure to learn that one's overestimation of the impact that a particular event might have on one's affect (i.e., affective forecasting error) is, in fact, incorrect (see Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998). Given, however, that no measure of uncertainty intolerance was included in this study, this suggestion must remain speculative.

Finally, these results might be interpreted in light of the helplessness-hopelessness perspective proposed by Alloy and colleagues (Alloy, Kelly, Mineka, & Clements, 1990) to explain differences between anxiety and depression. This model considers the possibility that anxious and depressive states lie on a continuum, in which anxiety disorders might be triggered by uncertainty about one's ability to cope with aversive outcomes, while mixed anxiety–depression syndromes arise when one becomes certain about one's helplessness. Furthermore, states of "pure" depression arise once this helplessness becomes hopelessness about the future (see Alloy et al., 1990). In this study, both anxiety and depression were associated with increased pessimistic predictions in the form of the expectation that negative events would occur in one's future. However, only depression was associated with pessimism in the form of expecting a lack of positive events in one's future, and with predictive certainty about both negative events occurring and positive events not occurring—even after adjusting for GAD



symptoms. These findings might suggest that an individual progresses from anxiety to more "pure" depression at the point at which he or she believes that aversive outcomes are certain to occur and that desirable outcomes are certain *not* to occur (see Andersen, 1990). The findings also suggest, as does previous literature (e.g., R. Beck & Perkins, 2001), that it may be depressive—rather than anxious—cognitive content that distinguishes depression from anxiety symptoms but do not suggest specific types of cognitions that may distinguish anxiety from depression.

Some study limitations should be noted. First, symptoms of GAD and depression were assessed using self-report measures, rather than clinical interviews, and continuous scores were analyzed. Thus, the results may not generalize to a clinical sample in which depression and GAD are assessed via clinical interviews. The study warrants replication with a sample of individuals pre-selected to meet diagnostic criteria for depression and GAD, so that differences between these groups may be examined.

Another limitation is that this study contained only one basic outcome measure and thus did not benefit from a multi-method format of assessment. Given the implications of these findings for the hopelessness model of depression and for intolerance of uncertainty in GAD, the study would have benefited from inclusion of both a hopelessness scale and an intolerance of uncertainty measure. One would expect that certainty about a lack of positive outcomes would be most positively associated with hopelessness, while certainty about the occurrence of negative outcomes might also be positively associated with intolerance of uncertainty. This limitation should be addressed in future work.

Finally, it should be noted that the sample size in this study was fairly small (i.e., only 65 of the 94 participants sampled were included in the final analyses). In addition to limiting statistical power to detect significant effects, the size of the sample may limit the generalizability of the findings. While depression and GAD symptoms did not significantly (statistically) predict responses *yes* to the occurrence of negative outcomes when both were included in a regression model, it is possible that the regression coefficients in the model were not statistically significant due to low power.³

Despite such limitations, these findings provide evidence for the notion that symptoms of GAD and depression are both associated with increased certainty about the occurrence of negative future events. However, certainty in the absence of a positive future appears to be specific to depression, and only depression is associated with certainty after adjusting for both GAD and depression symptoms. This may have implications for diagnosis and treatment of GAD and depressive disorders, given the high comorbidity between GAD and depression (Wittchen et al., 1994). The expectation that one will fail to experience positive events in the future may be key in distinguishing between GAD and depression. These results also have implications for differential targets for treatment of anxiety versus comorbid depression and anxiety. While one aspect of treatment for GAD might focus on changing cognitive distortions regarding the possibility of negative events occurring, treatment for symptoms of depression might also focus on changing expectations about the occurrence of positive outcomes. This might entail increasing uncertainty tolerance and thus decreasing certainty in particular outcome expectancies. Further studies utilizing clinical samples and a multi-method format of assessment would shed light on this work and help in drawing more definitive conclusions.

³ Indeed, it should be noted that the standardized regression coefficients for the model were in the .20–.23-range and thus not zero.



Appendix A: Future-events task

The following is a list of future events used in the study, in the order presented on the questionnaire. Positive items are in italics (but were not italicized on the questionnaire).

```
1. Be socially inadequate?<sup>++</sup>
 2. Have an inspiring conversation?<sup>++</sup>
 3. Be admired by people?"
 4. Have an important promise broken?++
 5. Regret a major life decision?
 6. Feel misunderstood by people?**
 7. Have a successful career?
 8. Have hard work acknowledged in class?**
 9. Get the blame for things going wrong?
10. Achieve all the things that set out to do?**

 Suffer a great financial loss?

12. Be rejected by a significant other?**
13. Have things not work out as hoped?***
14. Be stuck in an unfulfilling job?
15. Experience a moment of great insight?<sup>++</sup>
16. Be honored for a major achievement?<sup>++</sup>
17. Have lots of good times with friends?*
18. Be able to cope easily with pressure?**
19. Be thought of as a failure by people?*
20. Have confidence in facing the world?<sup>++</sup>
21. Have many long-lasting friendships?
22. Be excluded by friends?
23. Have a serious disagreement with a good friend?**
24. Have the respect of colleagues?<sup>+</sup>
25. Fall badly behind in work?
26. Be unable to confide in anyone?**
27. Experience life as fulfilling?+
28. Be unable to cope with responsibilities?*
29. Succeed in a complicated negotiation?+-
30. Be very lonely when old?
31. Often have work go smoothly?**
32. Have family disapprove of life choices?<sup>++</sup>
```

33. Experience regular career advancement?⁺⁺
34. Be considered an excellent listener?⁺⁺

References

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review*, *96*, 358–372.

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978) Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49–74.

Alloy, L. B., Kelly, K. A., Mineka, S., & Clements, C. M. (1990). Comorbidity of anxiety and depressive disorders: A helplessness-hopelessness perspective. In J. D. Maser & C. R. Cloninger (Eds.), Comorbidity of mood and anxiety disorders (pp. 499–543). Washington, DC: American Psychiatric Association.



⁺Indicates an item adapted from Andersen et al. (1992) or Andersen and Limpert, (2001)

^{*}Indicates an item adapted from MacLeod et al. (1991)

^{**}Indicates an item adapted from MacLeod et al. (1996)

⁺⁺Indicates an item from Miranda & Andersen (2006)

- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Andersen, S. M. (1990). The inevitability of future suffering: The role of depressive predictive certainty in depression. *Social Cognition*, 8, 203–228.
- Andersen, S. M., & Limpert, C. (2001). Future-event schemas: Automaticity and rumination in Major Depression. Cognitive Therapy and Research, 25, 311–333.
- Andersen, S. M., Spielman, L. A., & Bargh, J. A. (1992). Future-event schemas and certainty about the future: Automaticity in depressives' future-event predictions. *Journal of Personality and Social Psychology*, 63, 711–723.
- Andersen, S. M., & Schwartz, A. H. (1992). Intolerance of ambiguity and depression: A cognitive vulnerability factor linked to hopelessness. Social Cognition, 10, 271–298.
- Beck, A. T. (1967). Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press.
- Beck, R., & Perkins, T. S. (2001). Cognitive content-specificity for anxiety and depression: A metaanalysis. *Cognitive Therapy and Research*, 25, 651–663.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory—II*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., Wenzel, A., Riskind, J. H., Brown, G. P., & Steer, R. A. (in press). Specificity of hopelessness about resolving life problems: Another test of the cognitive model of depression. *Cognitive Therapy and Research*.
- Clark, D. A., & Beck, A. T. (1989). Cognitive theory and therapy for anxiety and depression. In P. C. Kendall & D. Watson (Eds.), Anxiety and depression: Distinctive and overlapping features (pp. 379–411). San Diego: Academic Press.
- Clark, D. A., Beck, A. T., & Beck, J. S. (1994). Symptoms differences in Major Depression, Dysthymia, Panic Disorder, and Generalized Anxiety Disorder. The American Journal of Psychiatry, 151, 205–209.
- Dugas, M. J., Buhr, K., & Ladouceur, R. (1994). The role of intolerance of uncertainty in etiology and maintenance. In R. G. Heimberg, C. L. Turk, & D. S. Mennin, (Eds.), Generalized anxiety disorder: Advances in research and practice. New York: Guilford.
- Dugas, M. J., Gagnon, F., Ladouceur, R., & Freeston, M. H. (1998a). Generalized anxiety disorder: A preliminary test of a conceptual model. *Behaviour Research and Therapy*, 36, 215–226.
- Dugas, M. J., Freeston, M. H., Ladouceur, R., Rheaume, J., Provencher, M., & Boisvert, J. M. (1998b).
 Worry themes in primary GAD, secondary GAD, and other anxiety disorders. *Journal of Anxiety Disorders*, 12, 253–261.
- Gilbert, D. T., Pinel, E. C., Wilson, T. D., Blumberg, S. J., & Wheatley, T. P. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 75, 617–638.
- Idson, L. C., Liberman, N., & Higgins, E. T. (2000). Distinguishing gains from nonlosses and losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology*, 36, 252–274.
- Kendall, P. C., & Ingram, R. (1987). The future for cognitive assessment of anxiety: Let's get specific. In L. Michelson & L. M. Ascher (Eds.), Anxiety and stress disorders: Cognitive-behavioral assessment and treatment (pp. 89–104). New York: Guilford Press.
- Ladouceur, R., Dugas, M. J., Freeston, M. H., Rheaume, J., Blais, F., Boisvert, J. M., & Thibodeau, N. (1999). Specificity of generalized anxiety disorder symptoms and processes. *Behavior Therapy*, 30, 191–208.
- MacLeod, A. K., & Byrne, A. (1996). Anxiety, depression, and the anticipation of future positive and negative experiences. *Journal of Abnormal Psychology*, 105, 286–289.
- MacLeod, A. K., Byrne, A., & Valentine, J. D. (1996). Affect, emotional disorder, and future-directed thinking. Cognition and Emotion, 10, 69–86.
- MacLeod, A. K., & Salaminou, E. (2001). Reduced positive future-thinking in depression: Cognitive and affective factors. *Cognition and Emotion*, 15, 99–107.
- MacLeod, A. K., Tata, P., Kentish, J., & Jacobsen, H. (1997). Retrospective and prospective cognitions in anxiety and depression. *Cognition and Emotion*, 11, 467–479.
- MacLeod, A. K., Williams, J. M. G., & Bekerian, D. A. (1991). Worry is reasonable: The role of explanations in pessimism about future personal events. *Journal of Abnormal Psychology*, 100, 478–486.
- Meng, X. L., Rosenthal, R., & Rubin, D. B. (1992). Comparing correlated correlation coefficients. Psychological Bulletin, 111, 172–175.
- Miranda, R., & Andersen, S. M. (2006). Induced processing efficiency in making pessimistic versus optimistic future-event predictions: Implications for depressive schemas, Submitted.



- Newman, M. G., Zuellig, A. R., Kachin, K. E., Constantino, M. J., Przeworski, A., Erickson, T., & Cashman-McGrath, L. (2002). Preliminary reliability and validity of the Generalized Anxiety Disorder Questionnaire-IV: A revised self-report diagnostic measure of Generalized Anxiety Disorder. Behavior Therapy, 33, 215–233.
- Roemer, L., Molina, S., & Borkovec, T. (1997). An investigation of worry content among generally anxious individuals. *Journal of Nervous and Mental Disease*, 185, 314–319.
- Shah, J., & Higgins, E. T. (2001). Regulatory concerns and appraisal efficiency: The general impact of promotion and prevention. *Journal of Personality and Social Psychology*, 80, 693–705.
- Vasey, M. W., & Borkovec, T. D. (1992). A catastrophizing assessment of worrisome thoughts. Cognitive Therapy and Research, 16, 505–520.
- Wittchen, H. U., Zhao, S., Kessler, R. C., & Eaton, W. W. (1994). DSM-III-R Generalized Anxiety Disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 51, 355–364.

