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ANXIETY SENSITIVITY AS A PREDICTOR OF THE CLINICAL COURSE OF PANIC DISORDER: A 1-YEAR FOLLOW-UP STUDY

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Abstract

Background—There is evidence that negative affect (NA) and anxiety sensitivity (AS) predict the development of anxiety disorders, particularly panic disorder (PD). The main purpose of this study was to examine whether NA and AS will also predict the clinical course of PD.

Methods—Participants were 136 individuals with a DSM-III-R diagnosis of PD (with or without agoraphobia) enrolled in a naturalistic and longitudinal study of anxiety disorders, the Harvard/Brown Anxiety Research Project (HARP). Participants were administered the Anxiety Sensitivity Index and the Negative Affect Scales of the Positive and Negative Affect Schedule-Expanded Form (PANAS-X-NA) and their percentage of time in PD episode was followed for 1 year after the administration of the measures.

Results—Multiple regression analyses indicated that AS, but not NA, was a significant predictor of percentage of time in PD episode after controlling for previous time in PD episodes, comorbid depression, other anxiety disorders, and exposure to psychopharmacological and behavioral treatments. As expected, the Physical Concerns subscale of the Anxiety Sensitivity Index had a significant independent contribution in predicting the course of the disorder.

Conclusions—Overall, these findings suggest that AS, as a unique construct, may be predictive of the amount of time patients are in episode of PD.

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Keywords

panic disorder; anxiety sensitivity; negative affect; clinical course; anxiety disorders; longitudinal studies; risk factors

INTRODUCTION

Individuals with panic disorder (PD) with or without agoraphobia frequently experience a chronic course of the illness, which is typically associated with a significant impairment.[1] Researchers have proposed that two primary traits, negative affectivity [NA][2] and anxiety sensitivity [AS],[3] contribute to the development of PD. However, little is known about the prognostic value of these traits for the clinical course of PD. This study examines this issue with a sample of the Harvard/Brown anxiety research project (HARP), an ongoing, naturalistic, longitudinal study of anxiety disorders in adults.

NA was proposed to explain the overlapping features of anxiety and depression in the context of the tripartite model.[4] This model defines NA as a general temperamental sensitivity to negative stimuli[5] that is common to anxiety and depression.[4] There is evidence that NA has a strong correlation with several anxiety disorders, including PD.[6–10] Also, NA has been significantly associated with anxiety disorders in patients without comorbid depression[11] suggesting that NA might also explain the development of anxiety disorder itself and not just its comorbidity with depression.

AS is defined as the fear of the experience of anxiety and anxiety related sensations, and seems to be specific to anxiety disorders.[12–14] AS has also been conceptualized as a vulnerability factor for the development of anxiety disorders, especially for PD.[13,15–17] In cross-sectional studies, Norton and colleagues[18,19] demonstrated that NA, as a general vulnerability factor, had a significant association with anxiety (including panic symptoms) and depressive symptoms, whereas AS, as a specific vulnerability factor, was significantly correlated only with panic symptoms. Prospective studies have also shown that AS predicts the onset of anxiety and panic in both non-clinical[16,20,21] and clinical populations.[22] The anxiety sensitivity index (ASI) is the most widely used measure of AS[14] and includes the Physical, Mental, and Social Concerns subscales. The Physical Concerns subscale in particular may be central to the development of PD, as this subscale significantly correlated with the fear response to panic-related situations in patients with anxiety disorders.[23]

Research has emphasized the association between AS and NA with the onset of panic attacks and PD, but there is some evidence that these vulnerability factors may play a role in predicting the *course* of the illness as well. In the Ehler's[22] study, AS was a significant predictor of the occurrence of panic attacks during a 1-year follow-up in patients with a diagnosis of PD, after controlling for prior percentage of time in panic episode, comorbid psychiatric disorders, and trait anxiety. This study was the first to report the predictive value of AS in the occurrence of PD.

To our knowledge, no published study has evaluated with a prospective longitudinal design the contribution of both NA and AS to the clinical course of PD. The main purpose of this study is to examine the predictive value of NA and AS on the clinical course of PD in a subset of participants of HARP. HARP is a longitudinal, naturalistic, and prospective study with a large sample of patients with well-established *DSM-III-R* diagnoses who were followed up using short intervals. The HARP design provides a unique opportunity to evaluate the predictive value of NA and AS for the course of PD. We hypothesize that NA and AS will be independently and significantly associated with the amount of time in PD

episode. We also hypothesize that among the three ASI subscales, the Physical Concerns subscale will be the best predictor of time in PD episode.

METHODS

INTAKE AND FOLLOW-UP ASSESSMENTS

The present data were derived from structured diagnostic interviews administered at intake and subsequent follow-ups. The initial diagnostic evaluation assessed current and lifetime history of relevant psychiatric conditions using a combination of the Structured Clinical Interview for DSM-III-R Non-Affective Disorders, Patient Version,[24] and the Research Diagnostic Criteria (RDC) Schedule for Affective Disorders-Lifetime (SADS-L).[25] Items on the Structured Clinical Interview for DSM-III-R Non-Affective Disorders, Patient Version and SADS-L were combined to create the SCALUP (SCID+ SADS-L)[26] (available on request), a structured interview used to assess current and past RDC diagnoses for affective disorders and DSM-III-R diagnoses for anxiety and other non-affective disorders at intake. Follow-up interviews in HARP were conducted at 6-month intervals for the first 2 years, annually during years 3–6, and again every 6 months during years 7–12, and annually thereafter. Both the ASI and PANAS-X were first introduced to the HARP assessment battery during 2000 and 2001, 11 years after the start of the baseline assessments. For this study, participants were followed up for 1 year after they completed the ASI and PANAS-X.

Follow-ups were conducted using the Longitudinal Interval Follow-up Evaluation-Upjohn [LIFE-UP].[27] The LIFE-UP is a semi-structured interview that uses a change-point method to (a) assess the weekly course of disorders to indicate syndrome severity; (b) document medication use by specific type and dose on a weekly basis; and (c) measure monthly psychosocial functioning. This change-point method assesses the course of disorders by assigning weekly psychiatric status ratings (PSRs) to indicate syndrome severity. PSRs for PD were assigned on a 6-point scale in which 1 =no symptoms at all and 6 =one or more panic attacks per day. For the current analysis, participants were considered in episode of PD, social phobia, generalized anxiety disorder (GAD), and major depression disorder (MDD) if they had a PSR of 3 or greater. Overall, a PSR of 3 indicates that the patient has less psychopathological impairment than patients who meet the full disorder criteria and no more than moderate impairment in functioning, but show obvious evidence of the disorder. For example, a PSR of 3 for PD indicates that the patient reported limited symptoms/attacks, a PSR of 4 suggests that there is a persistent fear of panic attacks, a PSR of 5 means that there is one panic attack per week, and a PSR of 6 indicates one panic attack or more per day. The dependent variable was the percentage of time participants were in PD episode during the 1 year following the administration of the ASI/PANAS-X. For GAD, a PSR of 3 means that the patient has three to five symptoms associated with GAD and does not experience worry and anxiety on more days than not; and for social phobia, a PSR of 3 indicates that there are fewer symptoms than full (Criteria A: fear is present) with no more than moderate functional impairment. For a full description of PSRs see.[28]

Three studies have been conducted to evaluate the psychometric properties of the LIFE-UP.[29] The LIFE-UP was found to have good-to-excellent interrater and long-term test reliabilities for diagnostic ratings for all index anxiety disorders and MDD. A separate external validity assessment comparing PSRs with other psychosocial measures found good concurrent and discriminant validity.[29]

AS was assessed using the ASI,[14] a 16-item self-report scale that measures anxiety about possible negative consequences of arousal symptoms. Empirical findings suggest that the structure of the ASI is hierarchical in nature with three first-order factors[30,31] and a single,

higher order, general factor.[32] The first-order factors labeled by[31] are Physical Concerns, Mental Incapacitation Concerns, and Social Concerns.[14] reported good test–retest reliability, and that individuals with an anxiety disorder scored significantly higher than those without an anxiety disorder providing evidence for discriminant validity.[14] A previous report from HARP found strong convergent validity of the hierarchical factor structure of the ASI that includes three first-order factors corresponding to the three subscales: Physical Concerns (items 3, 4, 6, 8, 9, 10, 11, and 14), Mental Incapacitation Concerns (2, 12, 15, and 16), and Social Concerns (1,5, 7, and 13),[30] which replicates the results of a previous factor analysis also conducted with outpatients diagnosed with anxiety disorders.[31] Given that this first-order model was previously evaluated in HARP and uses the same structure reported in,[31] we decided to use these three subscales with their corresponding items as well as the total score, which includes all of the items. For this current sample, the α coefficients were .89, .89, .72, and .49 for the Total Scale, Physical Concerns, Mental Concerns, and Social Concerns subscales, respectively. The[30] study also reported excellent test–retest reliability across two administrations for the ASI total and subscale scores, and evidence for the discriminant validity of the ASI subscales across different anxiety disorders.

NA was measured using the Negative Affect Scales of the Expanded Form of the Positive and Negative Affect Schedule [PANAS-X-NA].[33,34] The four Negative Affect Scales—Fear, Sadness, Hostility, and Guilt— consist of words describing different feelings and emotions, such as “blue,” “disgusted,” “afraid,” and “guilty”. The NA scales showed significant convergent validity and adequate discriminant validity.[33] The α coefficient was .91 using the sample for this study. PANAS-X can be used with different time frames.[33,35] In this study, the participants were asked to rate the extent to which they felt those emotions “during the past few weeks,” ranging from “not at all” to “extremely.”

In the HARP study, information regarding pharmacological treatment for each week of the interval was collected based on self-report from the participants every 6–12 months and included the use and dosage of all medications, including benzodiazepines (BZ) and selective serotonin reuptake inhibitors/serotonin-nor-epinephrine reuptake inhibitors. For this study, BZ and selective serotonin reuptake inhibitors/serotonin-nor-epinephrine reuptake inhibitors use was defined as the participant taking them at an adequate dose for at least a week in the year (52 weeks) previous to the ASI/PANAS-X administration. Medication use taken on an as needed basis was not included. To assess whether the participants received cognitive-behavioral therapy (CBT) techniques during the year before the ASI/PANAS-X administration, the Psychosocial Treatment Interview [PTI][36] was used. The PTI is a rater-administered questionnaire that inquires about the frequency with which the individual received any kind of therapy and whether the therapy incorporated a series of specific therapeutic techniques. The PTI has acceptable psychometric properties.[36]

PARTICIPANTS

A total of 711 participants entered the HARP study from over 30 clinicians’ practices at 11 different clinical treatment facilities in the New England area between the years 1989 and 1991. These methods are described in detail elsewhere.[28] After a complete description of the study to the participants, written informed consent was obtained. The inclusion criteria were that the participants must have been at least 18 years of age at intake, having a past or current diagnosis of PD with or without agoraphobia, agoraphobia without PD, social anxiety disorder, or GAD. Insufficient for inclusion but frequently seen as comorbid conditions were diagnoses of simple phobia, posttraumatic stress disorder, obsessive-compulsive disorder, or anxiety disorder not otherwise specified. Exclusion criteria were the

presence of an organic brain syndrome, a history of schizophrenia, or current psychosis within the last 6 months before intake.

Of the 711 baseline participants, 343(48%) remained in the study long enough to complete the ASI and PANAS-X questionnaires. Relative to those who did not complete the ASI/PANAS-X questionnaires, these 343 participants were more likely to be female (71%, $\chi^2_{(1)}=7.09$, $P = 0.008$), married (56%, $\chi^2_{(1)}=4.09$, $P = 0.043$), were less likely to have comorbid MDD at baseline (22%, $\chi^2_{(1)}=6.57$, $P = 0.010$), and had a higher level of functioning as measured by the Global Assessment of Functioning (GAF) score ($M = 61$, $SD = 11.06$ and $M = 57.7$, $SD = 11.55$, respectively; $t_{(707)} = -2.86$, $P = 0.004$). The two groups did not differ with respect to full-time employment, education, or number of current axis I diagnoses at baseline. The analytic sample for this study is comprised of a subset of the 343 subjects (40%, $n = 136$) who reported active panic symptoms (PSR of 3 or greater) for at least one of the four weeks before filling out the questionnaires, and had a full year of data subsequent to the ASI and PANAS-X administration.

ANALYSES

Statistical analyses were conducted using SAS version 9.1. Multiple regression analyses were performed to determine the extent to which PANAS-X-NA and ASI scales predict the percentage of time in PD episode (PSR of 3 or greater) for 1 year after the ASI and PANAS-X-NA scales were completed. A history of panic attacks,[22] and presence of comorbidity, including other anxiety disorders and depression,[37] have been found to play a role in predicting the course of this disorder. Thus our regression models controlled for the current comorbidity of MDD, GAD, and social phobia, as defined by having a PSR of 3 or greater for at least 1 week during the month before the ASI/PANAS-X administration. Regression models also included the previous percentage of time in PD episode, as defined by the percentage of weeks participants are in PD episode (PSR of 3 or greater) since the intake assessment, as a measure of the chronicity of the disorder. Finally, as there is evidence that treatment interventions influence levels of AS in patients with PD,[38–41] we also controlled for whether or not participants received psychopharmacological and/or cognitive behavioral interventions in the year previous to the ASI/PANAS-X administration.

RESULTS

Of the 136 participants included in the current analyses, all were in panic episode and 54% were in episode of agoraphobia at the time of the ASI/PANAS-X administration. Women were predominant in the sample (77%), the vast majority of participants were Caucasians (95.9%), half were married (51%), more than half had at least some college education (68%), and were employed at least part time (70%). There was no gender difference in the dependent variable; men were in PD episode 76% of the time and women 65% of the time. Some participants in this study had at least some symptoms (PSR of 3 or greater) of major depressive disorder (30%), GAD (41%), and social phobia (22%) at the time of the ASI/PANAS-X administration. Eighteen percent of the participants received cognitive-behavioral treatment, and 71% had taken BZ or selective serotonin/norepinephrine reuptake inhibitors during the year previous to the ASI/PANAS-X administration.

REGRESSION ANALYSES

Zero-order correlations among predictor variables and percentage of time in PD episode are depicted in Table 1. As can be seen, the ASI total and subscale scores, as well as the PANAS-X-NA score, were significantly correlated with the percentage of time in PD episode. Of the ASI subscales, the Physical and Mental Concerns components had the

highest correlation with the dependent variable. Previous percentage of time in PD episode, comorbid anxiety and MDD disorders, and psychopharmacological treatment were also significantly correlated with the prospective percentage of time in PD episode.

Following Ehlers's[22] analytic method to evaluate the contribution of hypothesized variables to prospective percentage of time in PD episode, we used multiple linear regression to estimate an initial model that included previous time in episode of PD, comorbid MDD and anxiety disorders, and treatments received (CBT, psychopharmacological) as predictors. A higher previous percentage of time in PD episode and receipt of psychopharmacological treatment in the earlier year were both significantly associated with a greater prospective percentage of time in PD episode after controlling for MDD, comorbid anxiety, and CBT exposure (See Table 2). The amount of variance predicted by the model was 33% ($Adj\ R^2$ = 30%).

In the second model, the ASI total score and the PANAS-X-NA scale score were added. In addition to previous time in PD episode and receipt of psycho-pharmacological treatment, the ASI total score was significantly and positively associated with the prospective time in PD episode after controlling for the other covariates. Contrary to the prediction, the PANAS-X-NA score was not significant. The amount of variance explained in this regression equation was 40% ($Adj\ R^2$ = 36%).

The third regression model examined the individual contribution of the ASI subscales. The ASI-Mental, ASI-Physical, and ASI-Social subscales and the PA-NAS-X-NA scale were added to the predictors included in the first model. As seen in Table 2, the ASI-Physical subscale was significantly positively associated with the prospective time in PD episode after controlling for previous time in PD episode and the other covariates, but the other two subscales were not significant. Psychopharmacological treatment remained significant after introducing the ASI and PANAS-X-NA scores. The total amount of variance of the dependent variable explained by this model was 40% ($Adj\ R^2$ =36%).

DISCUSSION

The ASI total score was a significant predictor of the clinical course of PD one year after the administration of the scale in individuals with DSM III-R diagnoses of PD. The higher the ASI score, the longer the percentage of time in PD episode, even after controlling for previous time in PD episode, major depression, comorbid anxiety disorders, and psychosocial and psychopharmacological treatments. This finding is consistent with previous prospective studies in clinical and non-clinical populations.[16,22,42] In the Ehlers's study,[22] AS predicted the maintenance of PD in untreated panic attacks patients and also predicted spontaneous attacks in people with a history of panic attacks. These findings are also in line with Schmidt et al's study[16,42] that reported that AS predicted spontaneous panic attacks in groups of cadets undertaking rigorous military training. Although the Ehler's study was the first to document the predictive value of AS in PD, the maintenance and course of PD were not clearly defined and the follow-up data of frequency and severity of panic attacks were acquired with a self-report questionnaire. We are not aware of any study that has previously assessed the relationship between AS and the course of the disorder, using short-term follow-up intervals based on interviews. At the theoretical level, this result supports the notion that AS, as a hypothesized specific vulnerability factor, has an important role in the maintenance of anxiety disorders.[12,43] AS should be more carefully considered as a risk factor for the chronicity of the disorder.

As expected, from the three ASI subscales, the Physical Concerns subscale was a significant predictor of percentage of time in PD episode. Consistent with these results, a previous

study examining the hierarchical structure of the ASI in PD patients found that the Physical Concerns subscale of the ASI had the strongest association with fear responses to hyperventilation and CO_2 inhalation.[23] Another study showed that PD patients had the highest scores on this subscale in comparison with patients with other anxiety disorders, suggesting the relevance of this subscale for PD.[31] However, these studies examined the relationships of ASI subscales with the presence or absence of the diagnosis, whereas ours considers the course of the disorder. Although the other two ASI subscales (Mental and Social Concerns) were not hypothesized to be independent significant predictors, it should be noted that this lack of significant findings might be due to the psychometric limitations of these ASI subscales. The ASI has been criticized for being too abbreviated (only 16 items) to evaluate several dimensions of the AS [e.g. somatic, cognitive, and social domains],[44,45] and for containing several items, most of them from the Social Concerns subscale, with problematic psychometric properties, including very low item-to-scale-correlations and failure to differentiate diagnostic groups.[46] An expanded 36-item version of the ASI-Revised[45] has been proposed to reliably evaluate the different dimensions of AS.[44] A recent study using another expanded 29-items version of the ASI[47] found that ASI-Mental was a uniquely significant predictor of panic onset in college students. Further studies may consider exploring the predictive value of AS in the clinical course of anxiety disorders using newer expanded versions of the measure.

Although the current findings merit replication, they suggest that the course of PD can be predicted by both a propensity to a generalized fear of anxiety or anxiety-related symptoms and by a specific fear of physical sensations (or symptoms) of anxiety. The fact that AS significantly predicted the clinical course of PD after controlling for previous time in PD episode suggests that the ASI total score may have a prognostic value as an indicator of risk for the chronicity of PD. Although the amount of additional variance added by the ASI score was fairly small, it is important to note that the vast majority of HARP participants had a chronic course of the illness before the administration of the AS and NA measures, which makes the findings clinically meaningful.

Contrary to the hypothesis, NA as a general vulnerability dimension was not independently associated with the amount of time in PD episode. A plausible explanation for the lack of significant predictive value of NA is that in the regression analyses we controlled for comorbid MDD, which had a high correlation with the PANAS-X-NA (.40), and has been strongly linked with NA in previous studies. To examine this possibility, we conducted the analyses without the MDD variable, but still NA was not significant. Although the bivariate association between PANAS-X-NA and percentage of time in PD episode was significant, it was not a strong relationship (.31). The lack of predictability of NA in our study is inconsistent with a recent 6-year follow-up report[48] in older adults that found that NA was a significant predictor of persistence of anxiety disorders, including PD, after controlling for demographic factors and chronic medical disease. However, in Schuurmans et al's study, the majority of the sample had a GAD diagnosis (70%) and only 23 participants (21%) were diagnosed with PD. Previous research suggests that the strength of the association of NA with anxiety disorders varies across disorders,[2,6] with GAD having the strongest correlation.[6] NA seems to be a general vulnerability factor that is more indicative of a comorbidity of anxiety and depression, and less predictive of specific anxiety disorders[7,49] such as PD. Although there has been an advancement in the understanding of the relationship between personality traits and psychiatric conditions,[11] empirical evidence of the role of NA on the course of anxiety disorders is scarce. In the case of PD, NA may be a personality trait variable better predicting the development or onset of panic symptoms[18] rather than their course. It is also possible that NA plays a better role in predicting the course in the early stages of the disorder. The AS and NA measures were introduced into the study 11 years after the initial intake, so most individuals in this study had received their first PD

diagnosis over a decade earlier. More research is needed to better understand the role of NA in specific anxiety disorders and in different stages of the course of the illness.

We also found that neither comorbid disorders (GAD, social phobia, and MDD) nor psychosocial treatments were significantly associated with the course of PD when controlling for the other covariates. Treatment studies have reported that both the CBT technique and psychopharmacological treatment have an impact not only on symptom reduction, but also on ASI levels.[40,41,50,51] However, many of these studies are controlled treatment trials designed to directly test the relationship between treatment and outcomes, whereas our study is observational by design and the treatment variables included only the participants' self-report of treatment that they had received in the past. These important differences should be considered to understand our results in the context of previous empirical evidence.

This study has several limitations. The results are not necessarily generalizable to non-clinical samples considering that all participants in the study were primarily referred by mental health professionals and thus, the majority of the participants were in treatment at the time of the intake. The participants in HARP may have been more severely impaired by their disorders than those with the disorder who do not seek treatment. In addition, the current sample was recruited in the late 1980s and early 1990s, and thus was diagnosed using DSM III-R criteria, which are not directly comparable to patients diagnosed following DSM-IV guidelines for PD. Another issue that might threaten the generalizability of the findings is that the study sample was selected from the subset of participants who were active in the study for at least 11 years and returned their ASI/PANAS-X questionnaires. The fact that this subset differed from the baseline sample on a few demographic variables should be considered when interpreting the results.

This study broadens our understanding of trait-like factors that may underlie anxiety disorders and the role they may play in predicting the course and outcome of these disorders. The predictive value of AS might have a clinical significance in the early identification of those patients with a high level of AS to receive interventions aimed at reducing recurrence of PD episodes. The value of AS in predicting the probability of recovery and recurrence of episodes of anxiety disorders, especially in PD patients, should be examined in future studies. It will also be interesting to see whether AS is able to predict the course of PD for a longer period of time, and whether AS changes over time (seen after repeated ASI administration) correspond with the changes in the course of PD.

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TABLE 1

Correlations among independent and dependent variables

Variables	1	2	3	4	5	6	7	8	9	10
1 Percentage of time in panic episode	–									
2 ASI-Total	.36***									
3 ASI-Physical	.32**	.91***								
4 ASI-Mental	.29**	.81***	.56***							
5 ASI-Social	.27**	.71***	.47***	.52***						
6 PANAS-X-NA	.31**	.41***	.29**	.44***	.33***					
7 Comorbid anxiety	.19*	.26**	.09	.31***	.38***	.26***				
8 MDD	.28**	.20*	.10	.20*	.29**	.39***	.21*			
9 Previous percentage of time in panic episode	.53***	.14	.10	.10	.17	.20*	.19*	.30***		
10 CBT	.12	.09	.02	.14	.13	.198	.06	.14*	.12	
11 BZ/SSRIs treatment	.23*	.09	.05	.16*	.05	.23**	.13	.11	.07	.26***

The correlation coefficient is Pearson's *r*.

*** *P*<.001,

** *P*<.01,

* *P*<.05. *N*=146.

ASI-Total, Anxiety Sensitivity Index; ASI-Physical, Physical Concern subscale of the ASI; ASI-Mental, Mental Incapacitation Concerns subscale of the ASI; ASI-Social, Social Concern subscale of the ASI; PANAS-X-NA, Negative Affect Scales of the Positive and Negative Affect Schedule, Expanded Form; MDD, major depression disorder; CBT, cognitive behavior therapy; BZ, benzodiazepines; SSRIs, selective serotonin reuptake inhibitors.

TABLE 2

Linear regression associating ASI and PANAS-X-NA scores with percentage of time in PD

Variable	β	*t*	*P*
First model			
Percentage of time in panic			
Previous time in panic	0.64	6.19	<.0001
MDD	8.70	1.41	0.1608
Comorbid anxiety	3.73	0.68	.4990
CBT	−0.23	−0.03	.9739
BZ/SSRI treatment	15.05	2.48	.0145
Second model			
Percentage of time in panic			
ASI-Total	0.77	3.22	.0016
PANAS-X-NA	0.26	0.73	.4685
Previous time in panic	0.62	6.24	<.0001
MDD	4.56	0.73	.4640
Comorbid anxiety	−0.89	−0.16	.8698
CBT	−1.66	−0.24	.8099
BZ/SSRI treatment	13.49	2.29	.0238
Third model			
Percentage of time in panic			
ASI-Physical	1.03	2.21	.0287
ASI-Mental	0.43	0.49	.6220
ASI-Social	0.39	0.35	.7278
PANAS-X-NA	0.28	0.78	.4347
Previous time in panic	0.62	6.15	<.0001
MDD	5.02	0.79	.4292
Comorbid anxiety	0.34	0.06	.9527
CBT	−1.13	−1.16	.8717
BZ/SSRI treatment	13.45	2.25	.0259

PD, panic disorder; MDD, major depression disorder; CBT, cognitive behavior therapy; BZ, benzodiazepines; SSRI, selective serotonin reuptake inhibitors; ASI-Total, Anxiety Sensitivity Index; ASI-Physical, Physical Concern subscale of the ASI; ASI-Mental, Mental Incapacitation Concerns subscale of the ASI; ASI-Social, Social Concern subscale of the ASI; PANAS-X-NA, Negative Affect Scales of the Positive and Negative Affect Schedule, Expanded Form.