Syndromes versus symptoms : towards validation of a dimensional approach of depression and anxiety

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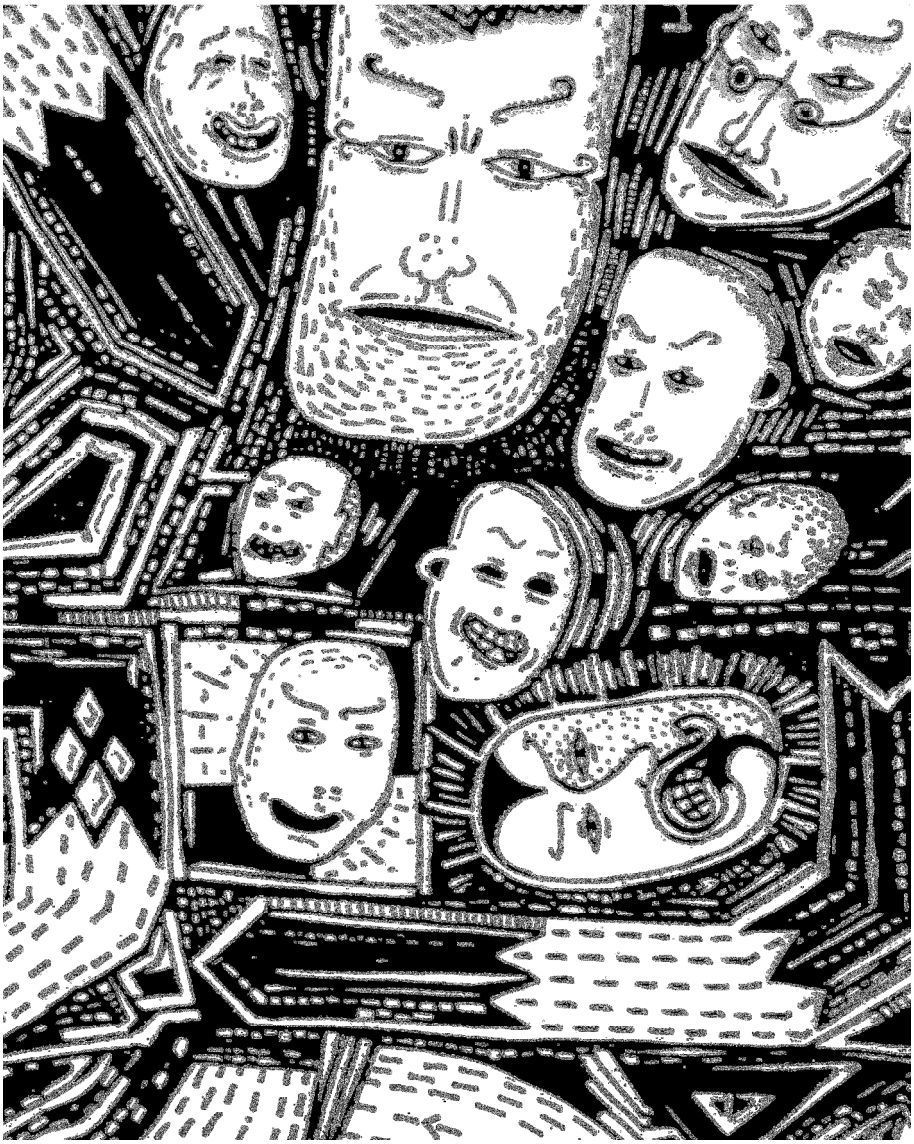
Chapter 8:

Dimensions of the Inventory of Depressive Symptomatology as Predictors of the Course of Depressive and Anxiety Disorders



Abstract

Objective: For depressive and/or anxiety disorders general course characteristics are known. However, prognosis varies among patients with the same diagnosis. The current study investigated whether the use of the more homogeneous symptom dimensions of mood/cognition and anxiety/arousal, would yield more specific prognoses than overall severity and course-categories. Method: 1053 subjects with a depressive and/or anxiety disorder from the Netherlands Study of Depression and Anxiety (NESDA) were assessed at baseline and at 2-year follow-up. Dimensions of *mood/cognition* and *anxiety/arousal* were extracted from the Self Report Inventory of Depressive Symptomatology (IDS-SR). Diagnoses at baseline and follow-up were assessed with a standardized psychiatric interview. Course trajectories were assessed with a life chart interview. Results: Increased mood/cognition scores predicted single depression (OR=1.80) and comorbid depression-anxiety (OR=2.00) at follow-up and unfavourable course trajectories of depressive symptomatology (OR=1.94-2.08). Increased anxiety/arousal predicted single panic disorder) at follow-up (OR=2.24) and unfavourable course trajectories of anxiety symptomatology (OR=1.38-1.42). All associations remained significant when adjusted for diagnosis and prognostic factors, including baseline diagnosis. Conclusion: The widely used IDS-SR can be used to measure two dimensions, with specific prognostic value on top of other, previously known prognostic factors.

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8.1 Introduction

Depressive and anxiety disorders have an unfavourable course and a prolonged impact on patients' lives. Therefore, it is important to understand the factors that predict the course of these disorders. Major depressive disorder is characterized by periods of remission and recurrence and becomes chronic in about 20% of all patients (Keller & Baker, 1992; Ormel et al., 1993). Anxiety disorders are characterized by more chronicity and more recurrence of the disorders (Keller & Hanks, 1993; Pollack & Otto, 1997; Keller, 2006; Penninx et al., 2011). The course of comorbid depression and anxiety is characterised by even higher chronicity (Penninx et al., 2011; Shankman & Klein, 2002; Merikangas et al., 2003; Fichter et al., 2010; van Beljouw et al., 2010). Additional (replicated) predictors of poor prognosis include young age-of-onset (Penninx et al. 2011; Karlsson et al., 2008), worse severity and long duration of the disorder (Penninx et al., 2011; Conradi et al., 2008).

Although course characteristics have been described for separate disorders, patients with the same diagnosis can have very different courses, which might depend on specific symptom-variations. Potentially, more prognostic specificity is obtained by describing individuals' clinical pictures with *symptom-dimensions*. Symptom dimensions follow a continuum from healthy to severely pathological without assuming a fixed cut-off between ill and non-ill (Goldberg, 2000). Dimensions have the advantages of being specific, sensitive and continuous (MacCallum et al, 2002). In addition, a dimensional approach is not compromised by the problem of comorbidity (Widiger & Samuel, 2005).

Several validated dimensional models with accompanying instruments have been introduced, including the tripartite model, the hierarchical model, and the valence-arousal model (Shankman & Klein, 2003; Watson, 2005). However, it would be pragmatic to use dimensions derived from widely used instruments. Therefore, our group used factor analyses and item response (Rasch) analyses to find the dimensions underlying the Inventory of Depressive Symptomatology Self Report (Rush et al., 1996). These analyses yielded two measurable dimensions: *'mood/cognition'* (e.g. feeling guilty), and *'anxiety/ arousal'* (e.g. sympathetic symptoms) (Wardenaar et al., 2010). This distinction was in line with previously described dimensions of other instruments, such as the Centre for Epidemiological Studies Depression scale (CES-D; Cole et al., 2004) and the Hamilton Depression Rating Scale (HDRS; Bagby et al., 2004). Importantly, Lux and Kendler (2010) showed that cognitive symptoms of depression showed stronger relations with clinically relevant characteristics than did neurovegetative symptoms of depression. This indicated that the distinction between these two symptom domains captured part of the observed heterogeneity amongst depressed patients.

Despite the evidence for their clinical relevance, the specific prognostic value of mood/cognition and anxiety/arousal for the course of depressive and anxiety disorders has scarcely been investigated. Some studies have investigated prognostic abilities of comparable

concepts. A 'depression/mood' dimension was found to predict worse depression severity during follow-up and less improvement of depression over time (Conradi et al., 2008; Joiner & Lonigan, 2000) and a 'somatic/anxiety' dimension was found to predict increased duration of panic disorders (Benitez et al., 2009). However, none of the previous studies investigated the mood/cognition and anxiety/arousal domains together as prognostic factors of the course of depression and anxiety. Moreover, in order to provide additional value, mood/cognition and anxiety/arousal should yield prognostic information on top of what is explained by known predictors, such as *Diagnostic and Statistical Manual* (DSM) diagnosis.

The current study investigated the ability of the mood/cognition and anxiety/arousal dimensions to predict the 2-year course of depressive disorders, anxiety disorders and comorbid depressive-anxiety disorders. The analyses were conducted with longitudinal data from a large group of participants (n=1053) in the Netherlands Study of Depression and Anxiety (NESDA).

8.2 Method

Participants

Participants came from NESDA, which follows a cohort of 2981 subjects (mean age 41.9, range 18-65; 1002 men and 1979 women), who were recruited from community, primary care and specialized mental health care organizations. Subjects who were not fluent in Dutch or with a diagnosis of psychotic, obsessive-compulsive, bipolar or severe addiction disorder were excluded. Detailed objectives and rationales of NESDA can be found elsewhere (Penninx et al., 2008). The baseline assessment consisted of a standardized psychiatric interview, an assessment of personal and demographic characteristics, self-report questionnaires and a medical screening. The research protocol was approved by the Ethical Review Boards of all participating universities and other institutions. All participants signed informed consent.

After 2 years, the follow-up assessment was conducted with a response of 87.1% (n=2596). Non-responders were younger, lower educated, more often of non-North European ancestry and more often depressed (Penninx et al., 2012; Lamers et al., 2012; Wardenaar et al., 2012). Of the responders, 2441 (94.0%) completed the IDS-SR at baseline and 1139 of these participants (46.7%) were symptomatic in the month prior to baseline. A total of 1053 participants (92.4%) provided all needed follow-up information for the analyses.

Instruments

IDS-SR subdimensions

Two IDS-SR subscales called 'mood/cognition' (11 items; range 0-22) and 'anxiety/arousal' (8 items; range 0-16) were computed. Items were administered on a 4-point scale, but were recoded to a 3-point scale (0, 1, 2) before scale-computation to optimise unidimensionality of the measurement scale according to the Rasch model (Wardenaar et al., 2010). These scales were previously described in detail and shown to have good reliability (person-separation index/alpha=0.88 and 0.81 respectively) (Wardenaar et al, 2010).

Psychiatric diagnoses and course of anxiety and/or depression

The course of psychopathology was assessed in two ways. The presence of DSM-IV depressive disorders (Major Depressive Disorder, Dysthymia) and/or anxiety disorders (Panic disorder, Social Phobia, Generalized Anxiety Disorder, and Agoraphobia) at baseline and follow-up were established using the Composite Interview Diagnostic Instrument (CIDI, WHO version 2.1), using the organic exclusion rules and hierarchy-free diagnoses. For all subjects with a diagnosis on the CIDI, the Life Chart Interview (LCI) was completed. Using a calendar method, life events were recalled to refresh memory, and the presence of depressive and anxiety symptomatology was determined for each month during the follow-up period (Lyketsos et al., 1994). For each month with depressive, anxious or both types of symptoms, the subject rated symptom severity on a 5-point scale (no/minimal severity, mild, moderate, severe, very severe). For computation of the course indicators, symptomatology was only considered present if at least mild severity was reported. Remission was defined as a period of at least 3 months without any reported symptoms.

Based on the CIDI and/or the LCI, course indicators were created: (1) current (6-month) diagnosis at follow-up (no diagnosis, single depressive disorder, single anxiety disorder or comorbid depressive and anxiety disorder) and (2) course trajectory during follow-up, which was divided into 3 categories: (a) no symptoms during follow-up or early sustained remission (<6 months after baseline), (b) late remission (>6 months after baseline) or recurrence following remission, and (c) chronic course (no remission and enduring presence of at least mild symptoms). Course-trajectory variables were computed separately for depressive symptomatology and anxiety symptomatology. Participants with new symptomatology during follow-up (those with pure depression at baseline developing anxiety or vice versa) were also assigned to course trajectory groups; either to group b (when symptoms were not chronically present) or to group c (when symptoms were chronically [24 months] present).

Covariates

Covariates included in the multivariable models were age and several clinical factors that were previously found to predict course in the same study group (Penninx et al., 2012) (1) The baseline CIDI-based DSM-diagnoses were entered as dummies (single depression, single anxiety and comorbid depression-anxiety) (2) The percentage of time with depressive and/or anxiety symptoms in the prior four years was derived from the baseline LCI. (3) The age of onset of the index disorder was assessed in the CIDI interview (the earliest age for comorbid cases). Gender, level of education and antidepressant use were previously shown not to predict the course/outcome of depression and anxiety (Penninx et al., 2012) and were therefore not included as covariates.

Statistical analyses

The IDS-SR scales were standardized (z-values) to enable comparison of effect-sizes between scales. Multinomial regression analysis was used to investigate the associations of the IDS-SR total scale score and of the IDS-SR dimensions with diagnosis at follow-up (categories: no diagnosis [reference], single depression, single anxiety and comorbid depression and anxiety). The crude model was run first, followed by multivariable models with covariates. In *model 1*, the DSM-IV diagnoses were added as covariates. In *model 2*, demographic and disease characteristics were added as covariates (see above). The analyses were rerun for the separate anxiety disorders at follow-up (social phobia, GAD, panic disorder and agoraphobia) to evaluate the specific prognostic ability of the dimensions for different anxiety disorders; the used variables were categorized as follows: healthy at follow-up (reference), the investigated anxiety disorder, another anxiety disorder, or other disorder (i.e. depressive disorder). Multinomial regression was also used to investigate the associations of the IDS-SR total scale score and the IDS-SR dimensions with course trajectories of depressive symptomatology and anxiety symptomatology (early sustained remission [reference], late remission or remission with recurrence, and chronic course). These analyses were adjusted for comorbidity of depression and anxiety at baseline in Model 1 and for disease characteristics in Model 2. To evaluate differences in effect-size between scales, overlap between 95% confidence intervals (CI) was taken to indicate no significant difference in odds ratio (OR). Two-sided p-values <0.05 were considered significant. All analyses were conducted with SPSS 17.

8.3 Results

Baseline characteristics

The characteristics of the study-group (n=1053) are shown in Table 1. Of the sample, 65.7% was female and the mean age was 42.2 (SD=12.1). Of the subjects, 243 (23.1%) had a single depressive disorder, 396 (37.6%) had only an anxiety disorder, and 414 (39.3%) had a comorbid depressive and anxiety disorders. Mean age of onset was 37.2 years (SD=11.9) and the mean percentage of symptomatic months during the 4 years prior to baseline was 32.0% (SD=20.0). The mood/cognition and anxiety/arousal dimensions were moderately correlated (ρ=0.54), indicating a reasonable level of differentiation.

Diagnosis at follow-up

Of the 1053 subjects at baseline, 484 (46.0%) had no disorder at follow-up, 124 (11.8%) had a single depressive disorder, 237 (22.5%) had a single anxiety disorder, and 208 (19.8%) had a comorbid depressive and anxiety disorder. Results of the analyses are shown in Table 2. Increased scores on the IDS-SR total scale were associated with increased odds ratios for single depression (OR=1.95), single anxiety (OR=1.58) and comorbid depression and anxiety (OR=3.09).

Increased mood/cognition was associated with increased odds ratios for a single depressive disorder at follow-up (OR=2.11) and for comorbid depression and anxiety at follow-up (OR=2.12). The predictive effects of mood/cognition were similar to those of the IDS-SR total scale (overlapping CI's). Increased anxiety/arousal was associated with increased odds ratios for single anxiety at follow-up (OR=1.69) and for comorbid depression and anxiety at follow-up (OR=1.79). When single anxiety at follow-up was split up into different disorders (social phobia, GAD, panic disorder and agoraphobia), the results showed that panic disorders at follow-up were most strongly associated with anxiety/arousal at baseline (OR=2.24 [1.59-3.14]). The association of the IDS-SR total scale with panic at follow-up was similar (OR=2.41 [1.80-3.22]). Interestingly, both mood/cognition and anxiety/arousal at baseline were associated with social phobia (respectively: OR=2.39, $p<0.001$ and OR=1.36, p=0.05) and generalized anxiety disorder (respectively: OR=1.60; p=0.01 and OR=1.55, p=0.02). Neither of the dimensions at baseline was associated with agoraphobia at follow-up. All presented associations remained significant when additionally adjusted for DSM-IV diagnosis (Model 1) and for other predictive factors (Model 2). Thus, the IDS-SR dimensions independently added prognostic information on top of known predictors.

Table 1: Baseline characteristics of the study group

Baseline variable	Study Group
N	1053
% female	692 (65.7%)
Mean years of age (SD)	42.2 (12.1)
Age range	18-65
Level of education (years), mean (SD)	11.8 (3.3)
IDS-SR Subdimensions: mean (SD)	
Mood/Cognition, *mean (SD)*	9.3 (3.7)
Mood/Cognition, *range*	0-21
Anxiety/Arousal, *mean (SD)*	6.4 (2.2)
Anxiety/Arousal, range	0-16
Psychiatric Characteristics	
Only depressive disorder: n (%)	243 (23.1%)
Only anxiety disorder: n (%)	396 (37.6%)
Panic Disorder	367 (34.9)
Social Anxiety	405 (38.5%)
Generalized Anxiety Disorder	276 (26.2%)
Agoraphobia (without panic)	103 (9.8%)
Comorbid depression and anxiety: n (%)	414 (39.3%)
Antidepressant use at baseline: n (%)	379 (36.0%)
Months with symptoms in past 4 years, mean % (SD)	32.0 (20.0)
Age of onset of index episode: mean (SD)	37.2 (11.9)
Care setting n (%)	
Primary care	456 (43.3%)
Specialized mental health care	510 (48.4%)
General population	87 (8.3%)

SD=standard deviation; MASQ-D30= Mood and Anxiety Symptoms Questionnaire Dutch short adaptation; IDS-SR=Inventory of Depressive Symptomatology Self Report; BAI=Beck anxiety inventory;

Table 2: Symptom dimensions as predictors of DSM-IV diagnosis at 2 year follow-up in 1053 subjects with a depressive and/or anxiety disorder at baseline.

		Current (6-month) diagnosis at 2-year follow-up			
	model	healthy at follow-up (n=484)	Depression (n=124)	Anxiety (n=237)	Depression and anxiety (n=208)
		Reference	OR (95% CI)	OR (95% CI)	OR (95% CI)
IDS-SR Total	Crude	-	1.95 (1.52-2.51)***	1.58 (1.29-1.92)***	3.09 (2.47-3.85)***
	1	-	1.58 (1.19-2.10)**	1.89 (1.50-1.39)***	2.86 (2.22-3.67)***
	2	-	1.57 (1.18-2.10)**	1.81 (1.43-2.30)***	2.73 (2.11-3.52)***
IDS-SR Mood/ Cognition	crude	-	2.11 (1.54-2.89)***	1.05 (0.83-1.35)	2.12 (1.61-2.80)***
	1	-	1.70 (1.21-2.38)**	1.27 (0.97-1.67)	2.00 (1.49-2.68)***
	2	-	1.80 (1.28-2.54)**	1.25 (0.95-1.64)	2.00 (1.48-2.69)***
IDS-SR Anxiety/ Arousal	crude	-	0.98 (0.71-1.35)	1.69 (1.31-2.19)***	1.79 (1.36-2.35)***
	1	-	0.97 (0.70-1.34)	1.61 (1.22-2.11)**	1.63 (1.23-2.15)**
	2	-	0.92 (0.66-1.27)	1.57 (1.19-2.07)**	1.55 (1.16-2.06)**

Results of multinomial regression analyses: OR (Odds Ratio's) are given for 1 SD increments on each dimension. IDS-SR= Inventory of Depressive Symptomatology Self Report. Crude: dimensions adjusted for each other; Model 1: adjusted for DSM-IV diagnosis; Model 2: additionally adjusted for age, duration of disorder at baseline, age of onset of the disorder at baseline.
*) $p<0.05$; **) $p<0.01$; ***) $p<0.001$

Course trajectories of depressive symptomatology

The associations between on the one hand the IDS-SR total score and the two dimensions and on the other hand the course trajectories of depressive symptomatology during follow-up on are shown in Table 3. Of the participants, 434 (41.2%) had no symptoms or early remission, 335 (31.8%) had late remission/ remission and recurrence, and 284 (27.0%) had a chronic course.

Table 3: Associations between specific symptom dimensions and course-trajectories of depressive symptomatology during follow-up

		No symptoms or early sustained remission (n=434)	Late remission or recurrence after remission (n=335)	Chronic Course (n=284)
N=1053	model	Reference	OR (95% CI)	OR (95% CI)
IDS-SR Total score	crude	-	2.29 (1.88-2.80)***	3.81 (3.08-4.80)***
	1	-	2.05 (1.66-2.54)***	2.47 (1.94-3.15)***
	2	-	2.03 (1.63-2.52)***	2.39 (1.87-3.05)***
IDS-SR Mood/ Cognition	crude	-	2.32 (1.83-2.95)***	2.92 (2.24-3.81)***
	1	-	2.07 (1.61-2.66)***	1.93 (1.45-2.56)***
	2	-	2.08 (1.61-2.68)***	1.94 (1.45-2.58)***
IDS-SR Anxiety/ Arousal	crude	-	1.06 (0.82-1.33)	1.51 (1.16-1.93)**
	1	-	1.07 (0.84-1.36)	1.36 (1.04-1.79)*
	2	-	1.05 (0.82-1.34)	1.30 (0.98-1.71)

Results of multinomial regression analyses with standardized scales (z-values): OR (Odds Ratio's) are given for 1 SD increments on each dimension. IDS-SR=Inventory of Depressive Symptomatology Self Report. Crude: dimensions adjusted for each other; Model 1: adjusted for presence of a single depressive disorder, single anxiety disorder or comorbid depressive and anxiety disorders at baseline; Model 2: additionally adjusted for age, duration of disorder at baseline, age of onset of the disorder at baseline.
*) $p<0.05$; **) $p<0.01$; ***) $p<0.001$

Increased mood/cognition was associated with late remission/remission and recurrence (OR=2.08) and with a chronic course (OR=1.94) after adjustment in model 1 and 2. The anxiety/arousal dimension was not associated with the trajectories of depressive symptomatology after adjustment. An increased IDS-SR total score was associated with late remission/remission and recurrence (OR=2.03) and a chronic course (OR=2.39), after adjustment in model 1 and 2. The CI's of the effects of the mood/cognition dimension and the IDS-SR total scale showed overlap, which indicated similar predictive effects. These

results indicate that the mood/cognition dimension yields specific information about the course of depressive symptomatology on top of other prognostic factors.

Course trajectories of anxiety symptomatology

The associations between on the one hand the IDS-SR total score and the two dimensions and on the other hand the course trajectories of anxiety symptomatology during follow-up are shown in Table 4. Of the participants, 411 (39.0%) had no symptoms during follow-up or early remission, 221 (21.0%) had late remission/remission and recurrence, and 421 (40.0%) had a chronic course.

The mood/cognition dimension was not associated with late remission/ recurrence after remission (OR=1.20). However, after adjustment it was associated with chronic course (OR=1.38) of anxiety symptomatology. Increased anxiety/arousal was associated with an increased risk of both late remission/remission and recurrence (OR=1.38) and with a chronic course (OR=1.42), after adjustment in model 1 and 2. An increased IDS-SR total score was associated with late remission/remission and recurrence (OR=1.49) and with a chronic course (OR=1.84), after adjustment in model 1 and 2. The CI's of the effects of the anxiety/arousal dimension and the IDS-SR total scale showed overlap, which indicated similar predictive effects.

These results indicate that the anxiety/arousal dimension, and to a lesser extent, the mood/cognition dimension yield specific information about the course of anxiety symptomatology on top of other prognostic factors.

8.4 Discussion

The present study investigated the added value of two IDS-SR dimensions as specific predictors of the course and outcome of depressive or anxiety disorders. The results showed that increased 'mood/cognition' at baseline predicted increased risk of single depression at follow-up and an unfavourable course of depressive symptomatology. Increased 'anxiety/arousal' at baseline predicted increased risk of single anxiety (mainly panic disorder) at follow-up and an unfavourable course of anxiety symptomatology. These specific predictive effects occurred irrespective of baseline diagnosis and other prognostic factors. The IDS-SR total score was associated with all three diagnoses at follow-up an overall unfavourable course, which indicated that it had a more generic prognostic effect. The results indicated that using the IDS-SR dimensions in addition to the IDS-SR total scale increased specificity of prognosis across all patients.

The current results had several interesting implications. Mood/cognition predicted the risk of depression (with or without comorbid anxiety) after 2 years and also predicted the risk of an unfavourable course of depressive symptomatology, independently of anxiety/arousal and all other included prognostic factors. These results showed the particular prognostic importance

of the mood/cognition-domain for depression, in line with previous work (Lux & Kendler., 2010)

Table 4: Associations between specific symptom dimensions and course-trajectories of anxiety symptomatology during follow-up

		No symptoms or early sustained remission	Late remission or recurrence after remission	Chronic Course
		(n=411)	(n=221)	(n=421)
N=1053	model	Reference	OR (95% CI)	OR (95% CI)
IDS-SR	crude	-	1.23 (1.00-1.50)*	1.70 (1.43-2.01)***
Total score	1	-	1.53 (1.20-1.95)**	1.96 (1.59-2.42)***
	2	-	1.49 (1.17-1.90)**	1.84 (1.48-2.28)***
IDS-SR	crude	-	0.94 (0.73-1.20)	1.18 (0.95-1.46)
Mood/	1	-	1.23 (0.93-1.63)	1.44 (1.12-1.83)**
Cognition	2	-	1.20 (0.90-1.59)	1.38 (1.07-1.77)*
IDS-SR	crude	-	1.50 (1.15-1.95)**	1.66 (1.32-2.08)***
Anxiety/	1	-	1.38 (1.04-1.83)*	1.44 (1.12-1.83)**
Arousal	2	-	1.38 (1.03-1.84)*	1.42 (1.11-1.83)*

Results of multinomial regression analyses with standardized scales (z-values): OR (Odds Ratio's) are given for 1 SD increments on each dimension. IDS-SR= Inventory of Depressive Symptomatology Self Report. Crude: dimensions adjusted for each other; Model 1: adjusted for presence of a single depressive disorder, single anxiety disorder or comorbid depressive and anxiety disorders at baseline; Model 2: additionally adjusted for age, duration of disorder at baseline, age of onset of the disorder at baseline.
*) $p<0.05$; **) $p<0.01$; ***) $p<0.001$

Anxiety-arousal was shown to have added value as a predictor of panic disorder at follow-up. GAD and Social Phobia were predicted by anxiety/arousal, but also by mood/cognition. This observation was in line with previous work, which has shown that anxiety disorders are

heterogeneous and determined by multiple dimensions (Mineka et al., 1998). The predictive role of mood/cognition in GAD and Social Phobia was in line with the oft-observed overlap between GAD/Social Phobia and depressive disorders (Van Ameringen et al., 1991). In addition, anxiety/arousal predicted course trajectories of anxiety symptomatology. Here also, mood/cognition had a predictive effect. This was likely due to the same reasons as discussed above.

We compared the standardized predictive effects of the two dimensions with the effects of the IDS-SR total score. The prediction of diagnoses after two years became more specific if the IDS-SR was broken up into mood/cognition and anxiety/arousal. Also, mood/cognition dimension was an equally effective predictor of the course of depressive symptomatology as the IDS-SR total scale and the anxiety/arousal dimension was an equally effective predictor of the course of anxiety symptomatology as the IDS-SR total scale. These observations indicate that more specific information can be gained from the IDS-SR than only the total scale score. Both in clinical and scientific settings the subscale scores can be easily computed and be used to decrease the heterogeneity of the IDS-SR severity estimations and prognoses.

The predictive associations of the dimensions persisted after multivariable adjustment. This indicates that even among individuals with similar DSM-IV diagnoses, the dimensions provide prognostic information. This is in line with previous work by our group, where we showed the added value of the dimensions of the tripartite model (Clark & Watson, 1991; General Distress, Anhedonic Depression and Anxious Arousal) in predicting the course and outcome of depression and anxiety (Wardenaar et al., 2012) In addition, our findings were in line with the interpretation by Lux and Kendler (2010) that different symptom-domains within one diagnosis (i.e. depression) are related to different clinical variables.

The current study had several strengths, including a large sample size, thorough assessment of course and diagnoses, and consideration of several covariates. However, some limitations should also be considered. The study included prevalent DSM-IV outpatients, and the results are not directly generalizable to incident cases and inpatients with more severe disorders. Also, the follow-up period was only 2-years; predictions about the course beyond this duration could not be evaluated. Future research could investigate the predictive ability of the IDS-SR dimensions over longer periods of time and their ability to predict incident cases of depression or anxiety.

In conclusion, the current results showed that the IDS-SR dimensions had clear added prognostic value. In comparison to the IDS-SR total scale, they increased the specificity of prognoses. As they are easy to apply, they are very useful for clinical and research applications. These results can also be seen as an encouragement to decrease the

heterogeneity of diagnostic instruments and to include more specific dimensional aspects in future diagnostic classifications.