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Research report

Refining a complex diagnostic construct: Subtyping Dysthymia with the Shedler–Westen Assessment Procedure-II

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ABSTRACT

Objective: We sought to determine whether meaningful subtypes of Dysthymic patients could be identified when grouping them by similar personality profiles.**Method:** A random, national sample of psychiatrists and clinical psychologists ($n=1201$) described a randomly selected current patient with personality pathology using the descriptors in the Shedler–Westen Assessment Procedure-II (SWAP-II), completed assessments of patients' adaptive functioning, and provided DSM-IV Axis I and II diagnoses.**Results:** We applied Q-factor cluster analyses to those patients diagnosed with Dysthymic Disorder. Four clusters were identified—High Functioning, Anxious/Dysphoric, Emotionally Dysregulated, and Narcissistic. These factor scores corresponded with a priori hypotheses regarding diagnostic comorbidity and level of adaptive functioning. We compared these groups to diagnostic constructs described and empirically identified in the past literature.**Conclusions:** The results converge with past and current ideas about the ways in which chronic depression and personality are related and offer an enhanced means by which to understand a heterogeneous diagnostic category that is empirically grounded and clinically useful.

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1. Introduction

The classification approach for chronic low-grade depressivity has been controversial and subject to repeated refinement and re-evaluation. Prior to the installation of a multiaxial diagnostic system, DSM-I (American Psychiatric Association, 1952) and II (American Psychiatric Association, 1968) described a few syndrome-like chronic depressive conditions such as depressive reaction disorder, depressive neurosis, or cyclothymic personality. The formal Dysthymic Disorder diagnosis was introduced with DSM-III (American Psychiatric Association, 1980), though not without criticisms. Though listed on Axis I, some thought this decision was misguided in its emphasis on the behavioral manifestations of the disorder and failure to acknowledge cognitive and relational factors contributing to a chronic depressive orientation (Cooper and Michels, 1981; Frances, 1980; Kernberg, 1984). Despite these criticisms, Dysthymia remained within the DSM system, and as the diagnostic category evolved, an even greater emphasis on somatic vegetative symptoms (including appetite disturbance, sleep disturbance, low energy or fatigue) was included in subsequent editions of the diagnostic manual. This trend

appears likely to continue with the minimally revised Chronic Depressive Disorder category proposed for DSM-5.

This does not mean, however, that personality features have been discounted for their value in understanding the Dysthymic Disorder diagnosis or the classification of chronic depression. Even at the time of DSM-III's publication, Akiskal (1983) provided a classification system for chronic depressions which, while based in family history and medication response data, also incorporated brief descriptions of personality characteristics observed in such groupings. Specifically, he articulated four subtypes of chronic depressive disorders: (1) chronic, primary depression; (2) chronic secondary dysphoria; (3) character spectrum characterological depression; and (4) subaffective dysthymia. All but the second type included some reference to personality characteristics, with the most prominent being the subaffective dysthymia category, which referenced Schneider's (1958) depressive psychopath—a precursor to DSM-IV's (American Psychiatric Association, 1994) proposal for Depressive Personality Disorder. Since then, Akiskal et al. (2005) have described five affective temperaments, which include Dysthymic, Anxious, Cyclothymic, Hyperthymic, and Irritable. In general, Dysthymic scale scores are higher in patients with Major Depressive Disorder or Bipolar Disorder than they are in clinical and non-clinical control groups (Nowakowska et al., 2005).

Others also have evaluated affective symptoms alongside personality features in an attempt to refine the psychiatric diagnostic system.

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Cloninger (1987) and Cloninger et al. (1993) have suggested that personality can be organized along dimensions of temperament and character. Temperament is fundamentally linked to neurotransmitter systems which determine novelty seeking, reward dependence, and harm avoidant behaviors, while character is believed to develop out of early developmental and learning experiences. Cloninger et al. (1997) identified eight temperament combinations (which correspond loosely to the extant DSM-IV personality disorders) and eight character dimensions (which loosely correspond to axes I and II categories and syndromes). Specifically, they described the downcast, or melancholic, character type, which is composed of low levels of cooperativeness, self-transcendence, and self-directedness. Cloninger et al. (1997) further proposed that the interaction of temperament and character variables leads to personality organizations which predict ways in which the effect is experienced and managed. In the case of the melancholic character, Cloninger et al. (1997) found that individuals placed in this category had the highest frequencies of explosive (high novelty seeking) and obsessional temperaments (low novelty seeking). These temperaments correspond with borderline and obsessional personalities, thus helping to explain the characteristic pattern of mood dysregulation and depression found in certain personality styles.

Though Akiskal et al. (2005) model of Dysthymic temperament and Cloninger et al. (1997) model of depressive types have some empirical backing, it is not clear that these two conceptualizations are assessing the same construct. Specifically, in a mixed sample of mood and non-mood disorder patients, Strong et al. (2007) found that the self-directedness, Dysthymia, and Cyclothymia scales all negatively loaded on a factor identified as “Neuroticism/Cyclothymia/Dysthymia” (which included a high positive loading of Neuroticism from the NEO-Personality Inventory-Revised (Costa and McCrae, 1995). Conversely, self-transcendence loaded positively (0.47) and Cooperativeness had a non-significant loading (-0.07) on the same factor. These findings, however, did not include any patients identified as meeting criteria for Dysthymia.

Interest in the relationship between DSM-IV and DSM-IV-TR Dysthymic Disorder categories and personality characteristics has more recently centered on a dimensionalized model of psychopathology that is hierarchically organized along broad-band trait domains that correspond with a wide range of behaviors. Broadly speaking, Krueger (2005) has suggested that the shared features of Dysthymic Disorder and Depressive Personality Disorder, along with the subsequent problems in differentiating the two, demonstrate a need to consider the two diagnostic categories as variants of a common dimension. He states that this appears to have been the sentiment of the mood disorders work group who reviewed criteria for both disorders and suggested revisions of the Dysthymic Disorder criteria in the DSM-IV text revision (American Psychiatric Association, 2001).

Empirically, a considerable amount of attention has been directed toward twin and family studies in order to better identify and understand the latent dimensions underlying psychopathology. One corpus of studies comes from the Norwegian twin registry, a collection of data on over 15,000 twins born between 1967 and 1979. Using Axis I and Axis II clinical interview data, Røysamb et al. (2011) performed an exploratory factor analysis using half of the twin pairs in an effort to investigate the latent structure of Axes I and II disorders. Once identified, confirmatory factor analysis verified this factor structure in an independent sample of the other individuals in the twin pair. Røysamb et al. (2011) found that the Dysthymia score only loaded onto a factor described as anhedonic-introversion, which also was composed of other Axis II disorders, including Depressive, Dependent, Avoidant, and Schizoid Personality Disorders. In another analysis with subjects involved in the same Norwegian study, Kendler et al. (2011) reported that the genetic effects of the Dysthymia symptom

total loaded onto a factor labeled as “Axis II Internalizing,” which included Dysthymia, and social phobia symptom totals, as well as Schizoid, Schizotypal, Avoidant, and Dependent personality totals. However, when considering the environmental effects modeled in the twin pairs, they found that Dysthymia symptoms loaded on an “Axis I Internalizing” factor, which included generalized anxiety disorder, major depression, alcohol abuse/dependence, somatoform, and social phobia totals. Kendler et al. (2011) highlight how a consideration of genetic factors makes Dysthymia appear more similar to a personality disorder than an Axis I disorder.

While these findings are interesting in elucidating the broad-based personality features of Dysthymia and how the diagnosis might be best placed within a dimensional framework, they do not articulate a level of specificity about those features of personality that are most distinctive of Dysthymia, nor do they provide extensive information to clinicians who are interested in a more nuanced understanding of the patient and how to utilize this information within a constructive treatment framework. Furthermore, these studies do not allow one to investigate whether there may be clinically useful and empirically differentiated subtypes of the Dysthymic Disorder, which could be related to clinically meaningful information, such as quality of life, level of functional impairment, quality of interpersonal relationships, and treatment outcomes.

The Shedler–Westen Assessment Procedure (SWAP-II) is a personality assessment instrument well-suited to assist clinicians in creating empirically defined subtypes within known diagnostic or clinically relevant categories (e.g., Cross et al., 2011; Powers and Westen, 2010; Russ et al., 2008). Consisting of a set of 200 items that assess both normative and pathological personality functioning, the instrument is based on the Q-sort method in which raters rank-order the personality-descriptive statements using a fixed distribution (in which relatively few items receive the highest ranks, and progressively more items receive lower ranks, mirroring the natural distributional of psychopathological variables).

Thus, in the present study, we sought to evaluate whether clinically meaningful Dysthymia subtypes could be identified with the SWAP-II. We were also interested in whether these subtypes corresponded with clinically useful information, including diagnostic comorbidity, global, relational, and occupational functioning, quality of interpersonal relationships, and treatment outcomes.

2. Method

2.1. Sample

We contacted a random national sample of 1201 psychiatrists and psychologists with at least 5 years' experience post-training from the membership registers of the American Psychiatric and American Psychological Associations. Because clinicians provided all data and patient identifying information was not disclosed to the investigators, clinicians rather than patients provided informed consent, as approved by the Emory University IRB. Participating clinicians received a \$200 consulting fee.

We asked clinicians to describe “an adult patient you are currently treating or evaluating who has enduring patterns of thoughts, feeling, motivation or behavior—that is, personality patterns—that cause distress or dysfunction.” Patients had to meet the following additional inclusion criteria: ≥ 18 years of age, not currently psychotic, and known well by the clinician (using the guideline of ≥ 6 clinical contact hours but ≤ 2 years). To ensure random selection of patients from clinicians' practices, we instructed clinicians to consult their calendars to select the last patient they saw during the previous week who met study criteria. In a subsequent follow-up, over 95% of clinicians reported

following the procedures as instructed. Each clinician contributed data on one patient. For the purposes of this study, we only selected patients to whom clinicians assigned a Dysthymia diagnosis.

2.2. Measures

2.2.1. Clinical data form (CDF)

The CDF is a questionnaire developed for clinically experienced observers that gathers information on a wide range of demographic, diagnostic, and etiological variables. The CDF has been used in multiple studies (e.g. Westin and Shedler, 1999a) and prior research has found ratings of adaptive functioning to be highly reliable and strongly correlated with ratings made by independent interviewers (Dutra et al., 2004; Westin et al., 1997). Furthermore, clinician-reports on the CDF show high validity and diagnostic efficiency vis-à-vis a patient-report version of the instrument (DeFife et al., 2010). As a part of the CDF, clinicians were asked to make present/absent diagnoses of major Axis I disorders (including Dysthymia).

2.2.2. Shedler–Westin Assessment Procedure-II (SWAP-II)

The SWAP-II is a psychometric instrument designed to provide a comprehensive assessment of personality and personality pathology (Shedler and Westin, 2004a, 2004b, 2007; Westin and Shedler, 1999a, 1999b, 2007; Westin et al., 2012). Unlike most personality assessment instruments, which rely on patient self-reports, the SWAP-II was designed for use by trained mental health professionals in the context of either a thorough examination of a patient using a systemic clinical research interview (DeFife and Westin, 2012; Westin and Muderrisoglu, 2003, 2006) or in a professional assessment or ongoing therapeutic engagement (e.g., longitudinal knowledge of the patient over the course of treatment). The SWAP-II consists of 200 items, which the assessor sorts into eight categories, from not descriptive (0) to most descriptive (7) of the person. Reliability and validity of the instrument is high (Westin and Muderrisoglu, 2003; Westin and Shedler, 2007; Westin and Weinberger, 2004). A web-based version of the instrument can be viewed at www.SWAPassessment.org.

2.2.3. Axis II checklist

To generate both categorical and dimensional DSM-IV PD diagnoses, we presented clinicians with a randomly ordered checklist of the criteria for all Axis II disorders. In prior studies, this method has produced results that mirror findings based on structured interviews such as the SCID-II (Blais and Norman, 1997; Morey, 1988; Westin et al., 2003). To create categorical diagnoses, we applied DSM-IV decision rules to the present/absent data. To generate DSM-IV dimensional diagnoses that mirror those widely used in the PD literature, we summed the number of criteria judged present for each disorder.

3. Results

A total of 556 clinicians provided SWAP-II ratings for patients they diagnosed as having Dysthymic Disorder. Approximately 46% were men and 54% women. Seventy-one percent of these clinicians were psychologists, while the remaining 29% were psychiatrists. The patients assessed were 54% women and 46% men mainly being treated in private practice or an outpatient clinic (93%). Patients were primarily Caucasian (86%), and included 6% African American, 4% Hispanic, and 2% Asian. Patients were described as being married or having a long-term partner (39%), divorced (17%), separated (6%), or single/widowed (39%). The most common co-occurring Axis I

diagnoses assigned by clinician were Major Depressive Disorder (63%) and Generalized Anxiety Disorder (19%).

Our primary analysis was designed to identify personality types of Dysthymia. We applied Q-factor analysis to analyze the SWAP descriptions of patients with a Dysthymic Disorder diagnosis. Q-factor analysis is computationally equivalent to conventional factor analysis except that it identifies groupings of similar people, whereas conventional factor analysis identifies groupings of similar variables. Using standard exploratory factor analysis with Unweighted Least Squares extraction and an oblique (Promax) rotation, we identified four distinct factors. These factors are presented in Table 1, along with factor scores indicating the importance or centrality of the items in defining each subtype. The Q-factors showed low to moderate intercorrelations with each other ($r = -0.56$ – 0.42), indicating that the subtypes represent distinct groupings.

The first cluster we described as High Functioning, with most of the items reflecting well-adjusted psychological functioning. This included items such as being articulate, conscientious, ethical, having a good sense of humor, and empathic, as well as being liked by others; however, there were some items indicative of self-criticism, fearing rejection or abandonment, feeling anxious, feeling inadequate or inferior, and depressed. The second cluster we described as Anxious/Dysphoric, which included many items composed of negative affect, including feeling inadequate or like a failure, being unhappy and depressed, and feeling ashamed and embarrassed. Also included were items assessing relationship difficulties, lack of interest in enjoyable activities, difficulty making decisions, and self-criticism. The third cluster we labeled as Emotionally Dysregulated. The most frequently endorsed items in this cluster included a description of the person's emotions spiraling out of control, feeling unhappy or depressed, feeling misunderstood or mistreated, being unable to self-soothe or comfort, having extreme reactions to slights or criticism, fearing rejection, and being needy. Other items in this cluster reflected changing emotional states, and cognitive, motivational, and behavioral features commonly observed in Borderline Personality Disorder and other Cluster B personality disorders. The final cluster we labeled as Narcissistic. Items most representative of this cluster included being critical of others, angry or hostile, controlling, holding grudges, being competitive, getting into power struggles, being self-righteous or moralistic, feeling misunderstood, and being oppositional. Other items included feelings of competition and possessing high self-regard.

Given the clusters obtained, we considered a priori hypotheses about associations with Axes I and II comorbidity and clinically relevant criteria. Specifically, we predicted that scores on the High Functioning cluster would be positively associated with overall GAF scores, and occupational and relational functioning. We predicted that scores on the Anxious/Dysphoric cluster would predict a Major Depressive Disorder diagnosis, as well as Avoidant and Dependent PD symptom totals. We also predicted that Emotionally Dysregulated cluster scores would be most predictive of Borderline and Histrionic PD symptom totals, while the Narcissistic cluster scores would be most predictive of Narcissistic PD symptom totals. Results are presented in Tables 2–4. These hypotheses were all supported.

4. Discussion

With the advancement of DSM-5, there exists an increasing interest in the relationship of Axis I and Axis II disorders to their underlying personality structure. The present results shed light on this issue with regard to Dysthymia. Specifically, we found evidence for four clusters of Dysthymic Disorder patients who vary

Table 1.
SWAP items most characteristic of each subtype.

<i>High Functioning Dysthymic Subtype</i>	
Is articulate; can express oneself well in words.	3.19
Tends to be conscientious and responsible.	2.98
Has moral and ethical standards and strives to live up to them.	2.69
Tends to feel guilty (e.g., may blame self or feel responsible for bad things that happen).	2.51
Has a good sense of humor.	2.44
Is empathic; is sensitive and responsive to other peoples' needs and feelings.	2.39
Tends to be liked by other people.	2.33
Is psychologically insightful; is able to understand self and others in subtle and sophisticated ways.	2.19
Is able to use his/her talents, abilities, and energy effectively and productively.	2.14
Is self-critical; sets unrealistically high standards for self and is intolerant of own human defects.	2.13
Has the capacity to recognize alternative viewpoints, even in matters that stir up strong feelings.	2.11
Enjoys challenges; takes pleasure in accomplishing things.	2.09
Is capable of hearing information that is emotionally threatening (i.e., that challenges cherished beliefs, perceptions, and self-perceptions) and can use and benefit from it.	2.04
Tends to fear she/he will be rejected or abandoned.	1.90
Is creative; is able to see things or approach problems in novel ways.	1.90
Finds meaning and fulfillment in guiding, mentoring, or nurturing others.	1.82
Is capable of sustaining meaningful relationships characterized by genuine intimacy and caring.	1.82
Finds meaning and satisfaction in the pursuit of long-term goals and ambitions.	1.82
Tends to feel anxious.	1.74
Tends to feel she/he is inadequate, inferior, or a failure.	1.72
Is able to assert him/herself effectively and appropriately when necessary.	1.59
Has trouble acknowledging or expressing anger toward others, and instead becomes depressed, self-critical, self-punitive, etc. (i.e., turns anger against self).	1.56
Tends to feel unhappy, depressed, or despondent.	1.52
<i>Anxious/Dysphoric Dysthymic Subtype</i>	
Tends to feel she/he is inadequate, inferior, or a failure.	2.76
Tends to feel unhappy, depressed, or despondent.	2.72
Tends to be shy or self-conscious in social situations.	2.71
Tends to be passive and unassertive.	2.65
Tends to avoid social situations because of fear of embarrassment or humiliation.	2.38
Tends to feel ashamed or embarrassed.	2.37
Tends to feel helpless, powerless, or at the mercy of forces outside his/her control.	2.22
Tends to feel like an outcast or outsider.	2.22
Tends to feel anxious.	2.19
Appears to find little or no pleasure, satisfaction, or enjoyment in life's activities.	2.17
Tends to feel listless, fatigued, or lacking in energy.	2.15
Tends to feel guilty (e.g., may blame self or feel responsible for bad things that happen).	2.04
Tends to be inhibited or constricted; has difficulty allowing self to acknowledge or express wishes and impulses.	2.00
Has trouble acknowledging or expressing anger toward others, and instead becomes depressed, self-critical, self-punitive, etc. (i.e., turns anger against self).	1.99
Tends to ruminate; may dwell on problems, replay conversations in his/her mind, become preoccupied with thoughts about what could have been, etc.	1.92
Lacks close friendships and relationships.	1.88
Is prone to painful feelings of emptiness (e.g., may feel lost, bereft, abjectly alone even in the presence of others, etc.).	1.76
Has trouble making decisions; tends to be indecisive or to vacillate when faced with choices.	1.69
Tends to fear she/he will be rejected or abandoned.	1.61
Tends to be insufficiently concerned with meeting own needs; appears not to feel entitled to get or ask for things she/he deserves.	1.57
Has difficulty acknowledging or expressing anger.	1.55
Tends to be needy or dependent.	1.53
<i>Emotionally Dysregulated Dysthymic Subtype</i>	
Emotions tend to spiral out of control, leading to extremes of anxiety, sadness, rage, etc.	3.32

Table 1. (continued)

Tends to feel unhappy, depressed, or despondent.	2.45
Tends to feel misunderstood, mistreated, or victimized.	2.42
Is unable to soothe or comfort him/herself without the help of another person (i.e., has difficulty regulating own emotions).	2.38
Tends to have extreme reactions to perceived slights or criticism (e.g., may react with rage, humiliation, etc.).	2.37
Tends to fear she/he will be rejected or abandoned.	2.36
Tends to be needy or dependent.	2.32
When upset, has trouble perceiving both positive and negative qualities in the same person at the same time (e.g., may see others in black or white terms, shift suddenly from seeing someone as caring to seeing him/her as malevolent and intentionally hurtful, etc.).	2.29
Tends to act impulsively (e.g., acts without forethought or concern for consequences).	2.28
Tends to become irrational when strong emotions are stirred up; may show a significant decline from customary level of functioning.	2.14
Is prone to painful feelings of emptiness (e.g., may feel lost, bereft, abjectly alone even in the presence of others, etc.).	2.14
Is prone to intense anger, out of proportion to the situation at hand (e.g., has rage episodes).	2.05
Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	1.90
Tends to be angry or hostile (whether consciously or unconsciously).	1.88
Emotions tend to change rapidly and unpredictably.	1.82
Tends to become attached quickly or intensely; develops feelings, expectations, etc. that are not warranted by the history or context of the relationship.	1.80
Relationships tend to be unstable, chaotic, and rapidly changing.	1.74
Lacks a stable sense of who she/he is (e.g., attitudes, values, goals, and feelings about self seem unstable or ever-changing).	1.60
Expresses emotion in exaggerated and theatrical ways.	1.57
Tends to get into power struggles.	1.52
Tends to be manipulative.	1.49
Tends to "catastrophize"; is prone to see problems as disastrous, unsolvable, etc.	1.46
Tends to feel anxious.	1.40
<i>Narcissistic Dysthymic Subtype</i>	
Tends to be critical of others.	3.56
Tends to be angry or hostile (whether consciously or unconsciously).	2.77
Tends to be controlling.	2.59
Tends to hold grudges; may dwell on insults or slights for long periods.	2.52
Tends to be competitive with others (whether consciously or unconsciously).	2.47
Tends to get into power struggles.	2.33
Tends to be self-righteous or moralistic.	2.21
Tends to feel misunderstood, mistreated, or victimized.	2.14
Tends to be oppositional, contrary, or quick to disagree.	2.06
Lacks close friendships and relationships.	2.03
Tends to be conscientious and responsible.	1.83
Has little empathy; seems unable or unwilling to understand or respond to others' needs or feelings.	1.79
Tends to be conflicted about authority (e.g., may feel she/he must submit, rebel against, win over, defeat, etc.).	1.77
Attempts to avoid feeling helpless or depressed by becoming angry instead.	1.77
Has moral and ethical standards and strives to live up to them.	1.72
Tends to be dismissive, haughty, or arrogant.	1.66
Tends to blame own failures or shortcomings on other people or circumstances; attributes his/her difficulties to external factors rather than accepting responsibility for own conduct or choices.	1.64
Tends to see self- as logical and rational, uninfluenced by emotion; prefers to operate as if emotions were irrelevant or inconsequential.	1.56
Has an exaggerated sense of self-importance (e.g., feels special, superior, grand, or envied).	1.52

in their personality structure when assessed with a clinician-guided assessment tool. These clusters are associated with predictable and clinically meaningful patterns with other Axes I and II disorders, as well as ratings of their level of functioning. We discuss these clusters in turn.

The High Functioning cluster appears to be the most well-adapted and treatment-responsive group. They are less likely to

Table 2
Logistic regression analysis (forward) of Dysthymia Q-factor scales variables predicting comorbid Axis I disorder diagnosis and reported suicide history.

	<i>b</i>	<i>SE b</i>	Wald	Exp(<i>B</i>)	–2 Log Likelihood	Nagelkerke <i>R</i> ²
Major depressive disorder diagnosis					685.22	0.11
Anxious/Dysphoric	0.40	0.10	15.82***	1.50		
Dysregulated	0.51	0.10	25.34***	1.66		
Hostile/critical	–0.22	0.11	3.85*	0.81		
Generalized anxiety disorder diagnosis					537.30	0.01
Anxious/Dysphoric	0.21	0.10	4.32*	1.24		
Suicide history					577.46	0.19
Dysregulated	0.51	0.12	16.75***	1.66		
High Functioning	–0.41	0.11	13.19***	0.66		
Hostile/critical	–0.58	0.12	22.53***	0.56		

n = 556.

** *p* ≤ 0.01.

* *p* ≤ 0.05.

*** *p* ≤ 0.001.

Table 3
Stepwise linear regressions predicting PD symptoms from Dysthymia Q-factor scales.

	<i>β</i>	<i>df</i>	<i>F</i>	Adjusted <i>R</i> ²
Borderline PD symptoms		4549	127.65***	0.48
Dysregulated	0.51***			
Narcissistic	–0.26***			
High Functioning	–0.23***			
Anxious/Dysphoric	–0.14***			
Histrionic PD symptoms		4549	57.23**	0.29
Dysregulated	0.26***			
Anxious/Dysphoric	–0.30***			
Narcissistic	–0.24***			
High Functioning	–0.20***			
Narcissistic PD symptoms		3550	118.73***	0.39
Narcissistic	0.33***			
High Functioning	–0.27***			
Anxious/Dysphoric	–0.23***			
Avoidant PD symptoms		3550	106.99***	0.37
Anxious/Dysphoric	0.64***			
High Functioning	–0.30***			
Dysregulated	–0.09*			
Dependent PD symptoms		4549	37.77***	0.21
Narcissistic	–0.28***			
High Functioning	–0.30***			
Anxious/Dysphoric	0.25***			
Dysregulated	0.11*			
Obsessive-Compulsive PD symptoms		4549	35.49***	0.20
Narcissistic	0.43***			
Dysregulated	–0.28***			
Anxious/Dysphoric	0.18***			
High Functioning	–0.17***			

* *p* ≤ 0.05.

** *p* ≤ 0.001.

Table 4
Stepwise linear regressions predicting adaptive functioning indices from Dysthymia Q-factor scales.

	<i>β</i>	<i>df</i>	<i>F</i>	Adjusted <i>R</i> ²
GAF score		4551	29.87***	0.17
Dysregulated	–0.29***			
Anxious/Dysphoric	–0.18***			
High Functioning	0.20***			
Narcissistic	0.15***			
Global adaptive functioning composite		3552	125.04***	0.40
High Functioning	0.58***			
Anxious/Dysphoric	–0.28***			
Dysregulated	–0.16***			
Occupational functioning		3552	72.10***	0.28
High Functioning	0.55***			
Anxious/Dysphoric	–0.30***			
Narcissistic	–0.11**			
Relational functioning		2550	102.98***	0.27
High Functioning	0.40***			
Dysregulated	–0.17***			
Psychotherapy progress/response		3506	35.95***	0.17
High Functioning	0.41***			
Anxious/Dysphoric	–0.26***			
Narcissistic	–0.13**			
Antidepressant response		1386	24.74***	0.06
High Functioning	0.25***			
Physical health composite		3551	14.46***	0.07
High Functioning	0.21***			
Anxious/Dysphoric	–0.18***			
Dysregulated	–0.11*			

* *p* ≤ 0.05.

** *p* ≤ 0.01.

*** *p* ≤ 0.001.

attempt suicide and have the lowest association with six PDs, four of which are slated to remain in the DSM-5 (i.e., Avoidant, Borderline, Narcissistic, and Obsessive-Compulsive). They also have increased levels of functioning on overall, occupational, and relational measures of functioning and tend to respond best to psychotherapy and antidepressant therapies. This group is composed of individuals who have proclivities toward self-criticism, anxiety, depression, and inferiority and abandonment feelings. Despite being labeled as “High Functioning,” these individuals nevertheless seek and maintain their treatment. Historically, it is possible that this group may be composed of individuals identified by some psychoanalytic clinicians as a “depressive-masochistic” personality (e.g., Caligor et al., 2007; Kernberg, 1970, 1984; PDM Task Force, 2006), or as those in treatment outcomes studies (e.g., both psychotherapy and

pharmacotherapy) who are most likely to favorably respond to their treatment.

The Anxious/Dysphoric group is clearly more predisposed toward Major Depressive Disorder and Generalized Anxiety Disorder diagnoses, along with cluster C Axis II disorders. They tend to have poor overall adaptive functioning in multiple domains and clearly have a characterological component to their mood disruption. It is possible this group that this group is similar to Akiskal et al. (2005) Dysthymic temperament group; furthermore, this group may be similar to what has been the DSM-IV proposal for Depressive Personality Disorder. For instance, McDermut et al. (2003) reported that Depressive Personality Disorder was comorbid with Major Depressive Disorder, Generalized Anxiety Disorder, and Avoidant and Obsessive-Compulsive PDs. They also had poorer

treatment response and more impaired interpersonal functioning. This group also may be most inclined to have high levels of Negative Emotionality (Clark and Watson, 2008).

The Emotionally Dysregulated group also associated with a Major Depressive Disorder diagnosis and history of suicide attempts. Individuals in this group also had higher scores on measures of Borderline, Histrionic, and Dependent PDs. It appears this group also has a clear characterological component to their mood disruption, which is common in many patients with Borderline, Histrionic, and Dependent PDs (e.g., Grant et al., 2007; Russell et al., 2007; Trull et al., 2008), not to mention clear problems in multiple levels of adaptive functioning.

Finally, the Narcissistic group was composed of individuals with a distinctive set of impairments. Interestingly, they appear in many ways to be opposites of the Emotionally Dysregulated group, in that scores on this cluster were significantly and negatively related to a Major Depressive Disorder diagnosis, and to Borderline, Histrionic, or Dependent PD symptoms. Individuals in this group are likely to have Narcissistic and Obsessive-Compulsive PD symptoms, as well as higher GAF ratings by their clinicians, yet also have trouble in their occupations and respond poorly to psychotherapy. It would appear this group of individuals possess high levels of pathological narcissism (Pincus and Lukowitsky, 2010), composed mainly of vulnerable manifestations. From a slightly different framework, this group also seems most like the fragile narcissistic group described by Russ et al. (2008), who found that 54% had a Dysthymia diagnosis assigned by their treating clinician. Particularly notable is the positive association with Obsessive-Compulsive PD symptoms, which may account for the need to exercise control that is part of narcissistic dynamics (Ronningsam, 2005).

One point to emphasize is how the types we identified correspond to the affective temperaments reported by Akiskal et al. (2005). Specifically, the Dysthymic and Anxious temperaments seem comparable to the Anxious/Dysphoric group, the Cyclothymic and temperament with the Emotionally Dysregulated group, and the Irritable type with the Narcissistic type. On the one hand, it is unusual to find this degree of correspondence among clinician-ratings and self-report ratings that are operationalized from very different theoretical frameworks (see Ganellen (2007) for a discussion of this issue). On the other hand, this degree of convergence is particularly gratifying when considering how temperament or personality dimensions (e.g., Negative Effect or Emotionality) can be integrated with personality types known to clinicians (Westen et al., 2012).

4.1. Limitations

A single informant (the treating clinician) provided all the data for each case, raising questions of diagnostic validity and the potential interdependence of SWAP-II ratings and their correlates. This limitation is actually the norm in psychiatric research, in which a single informant (usually the patient) provides all or most of the data (either by self-report or structured interviews that rely primarily on self-report). The reliance on self-report data is particularly pervasive in personality research (Bornstein, 2003; Robins et al., 2007; Schwarz, 1999), where publication surveys of major personality research journals indicate that 95–98% of the articles published are based on data obtained from self-report measurements of personality, with over 70% of cases where self-report instruments were the only measure used (Kagan, 2007; Vazire, 2006). However, several considerations reduce concerns about the potential effects of clinicians' biases. The SWAP-II instrument has been widely used in prior research and demonstrates high reliability across raters and narrative data sources (Westen and Muderrisoglu, 2003; Westen and Shedler, 2007;

Westen and Weinberger, 2004). The research suggests that clinicians can make highly reliable and valid judgments about patient adaptive functioning if given psychometric instruments such as the one used in this study to quantify their observations and inferences (DeFife et al., 2010; Hilsenroth et al., 2000; Westen and Weinberger, 2004). Finally, while both self- and informant reports of personality problems are meaningfully related to concurrent measurements adaptive functioning and symptomatology, informant reports of personality pathology are typically found to be more useful predictors of future social and occupational impairments (e.g., Oltmanns and Turkheimer, 2009). Still, future research should attempt to replicate and extend these findings using samples of Dysthymic patients studied by interview, where one interviewer assesses personality and the patient and other interviewers assess Axis I symptoms, adaptive functioning, and other criterion variables such as molecular genetics that might differentiate the subgroups.

4.2. Implications

These findings demonstrate that a very commonly assigned diagnosis is composed of at least four groups of individuals with very different personality characteristics. These characteristics may be indicative of various reasons why such persons are prone to becoming chronically depressed and being diagnosed with Dysthymia. For instance, there are some high-functioning individuals who seem to be chronically vulnerable to excessive self-criticism and guilt to the point that they seek out treatment for their unhappiness. By contrast there are others that tend to struggle considerably with chronically negative mood states, low self-esteem, and a paucity of meaningful relationships, while others might become chronically depressed due to hypersensitivity to criticism, and power struggles. Given modern interests in developing uniform and systematic treatment methods for patients who have a particular diagnosis, these findings demonstrate that individuals who receive a Dysthymia diagnosis differ in meaningful ways which could have differing implications for how to best treat the individual. For instance, only the High Functioning group emerged as a significant predictor of a positive response to pharmacotherapy and psychotherapy, while other groups were not. Though it could be argued that higher functioning individuals generally do better in any type of treatment, it would be useful to determine if clinicians were able to accurately detect those personality characteristics most strongly associated with each subtype, and if so, whether their treatment plans focused upon addressing those characteristics as part of their treatment. Such a question is one important manner by which the clinical utility of these subtypes could be evaluated.

Another implication of these findings is that a slightly enhanced understanding of comorbidity and integrated assessment can be identified. For instance, Borderline, Histrionic, and Dependent Personality Disorder symptoms appear to be most associated with the Dysregulated subtype, which consequently possesses those personality characteristics most associated with these disorders. By contrast, the Narcissistic subtype predicts those personality disorders that share the most common personality characteristics—Narcissistic and Obsessive-Compulsive—while the Anxious/Dysphoric subtype predicts all of the Cluster C personality disorder symptoms, especially Avoidant. With the somewhat artificial demarcation of Axes I and II pathologies that occurred with the multiaxial system that began in DSM-III, these findings demonstrate that Axes I and II cannot be divorced from each other when attempting to comprehensively assess a patient, and that what appears to be a more complicated diagnostic picture—due to the presence of comorbid conditions—may actually be a more complete picture of the individual seeking treatment.

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Conflict of interest

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