Journal of Personality Disorders, 18(3), 286-308, 2004

CLINICIANS' PERSONALITY DESCRIPTIONS OF PROTOTYPIC PERSONALITY DISORDERS

Douglas B. Samuel, BA, and Thomas A. Widiger, PhD

Many studies have indicated close convergence of the DSM-IV personality disorders and the five-factor model (FFM) of personality functioning. However, questions have been raised concerning the ability of clinicians to describe personality disorders in terms of the FFM. This study developed a FFM description by practicing clinicians of each DSM-IV personality disorder. Clinicians rated a prototypic case of each DSM-IV personality disorder in terms of the FFM. These ratings, which achieved excellent reliability, were then averaged to produce a consensus FFM profile for each personality disorder. The consensus ratings showed good agreement with previous research that examined both researchers' and clinicians' application of the FFM to prototypic cases of personality disorders. These results suggest that clinicians can conceptualize and apply the FFM to personality disorders in a consistent way. The results further suggest that the FFM may provide a richer and more comprehensive description of personality difficulties than the current DSM-IV personality disorder categories.

The conceptualization of personality disorders in the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; APA, 2000) "represents the categorical perspective that personality disorders are qualitatively distinct clinical syndromes" (p. 689). Researchers, however, have raised compelling concerns regarding the validity of this categorical model (First et al., 2002) and have offered alternative dimensional models (Clark, 1993; Cloninger, 2000; Livesley, 2003; Widiger & Costa, 1994). One such alternative is the five-factor model (FFM) of general personality functioning (McCrae & Costa, 1999).

The FFM was derived originally from studies of the English language in an effort to identify the domains of general personality functioning that are most important in describing the personality traits of oneself and other people (John & Srivastava, 1999). This lexical research tradition has emphasized five broad domains of personality, identified as (a) extraversion (surgency or positive affectivity), (b) agreeableness, (c) conscientiousness (or constraint), (d) neuroticism (negative affectivity), and (e) openness (intellect

From the Department of Psychology, University of Kentucky.

The authors thank Julie Antrobus for her help with the data collection and analysis, and many clinicians for their contribution, interest, and time.

Address correspondence to Douglas B. Samuel, 115 Kastle Hall, Department of Psychology, University of Kentucky, Lexington, KY 40506-0044; E-mail: dbsamu2@uky.edu.

or unconventionality) (John & Srivastava, 1999). Costa and McCrae (1995) divided each of these five broad domains into six underlying facets based on their research with the NEO Personality Inventory-Revised (NEO PI-R; Costa & McCrae, 1992).

For example, they suggest that the domain of extraversion (vs. introversion) can be usefully differentiated into more specific facets of warmth (vs. coldness, indifference), gregariousness (vs. withdrawal, isolation), assertiveness (vs. unassuming, resignation), activity (vs. passivity, lethargy), excitement seeking (vs. caution), and positive emotions (vs. anhedonia).

Although instructive and informative critiques of the FFM have been provided (Block, 1995; Westen, 1995), empirical support for the construct validity of the FFM is extensive, both at the domain and facet levels. This support includes convergent and discriminant validity across (a) self, peer, and spouse ratings (Costa & McCrae, 1988); (b) temporal stability across 7 to 10 years (Costa, Herbst, McCrae & Siegler, 2000); (c) cross-cultural replication (McCrae & Allik, 2002); (d) heritability (Jang, McCrae, Angleitner, Reimman, & Livesley, 1998; Plomin & Caspi, 1999); and (e) links to a wide variety of important life outcomes, such as mental health (Basic Behavioral Science Task Force, 1996), career success (Judge, Higgins, Thoresen, & Barrick, 1999), and mortality (Friedman et al., 1995).

Wiggins and Pincus (1989) were the first to provide published data concerning the relationship of the FFM to the personality disorder diagnostic nomenclature of the APA (APA, 1980, 1987) but many previous FFM studies had also provided data relevant to the question of whether the FFM includes clinically significant, maladaptive personality traits (McCrae, Costa, & Busch, 1986). Since the original effort of Wiggins and Pincus (1989), over 50 additional published studies have provided empirical support for a relationship between the FFM and personality disorder symptomatology (Widiger & Costa, 2002).

Many of these FFM personality disorder studies have addressed FFM profiles generated by Widiger, Trull, Clarkin, Sanderson, and Costa (1994). Widiger et al. developed these profiles by classifying each DSM-III-R personality disorder diagnostic criterion with respect to a facet of the FFM. For example, they suggested that:

> "from the perspective of the FFM, avoidant personality disorder involves (a) introversion, particularly the facets of low gregariousness (no close friends, avoids significant interpersonal contact, and unwilling to get involved with others; APA, 1987); low excitement-seeking (exaggerates potential dangers, difficulties, or risks in doing anything outside of normal routine); [and] low activity (avoidance of social and occupational activities, and canceling of social plans) . . . and (b) neuroticism, particularly the facets of vulnerability, self-consciousness, and anxiety (e.g., easily hurt by criticism and disapproval, reticent in social situations because of fear of saying something foolish, fears being embarrassed, and afraid of being liked)." (Widiger et al., 1994, p. 49).

Studies have since confirmed these predicted associations (Dyce & O'Connor, 1998; Trull, Widiger & Burr, 2001) and Widiger et al. (2002) up-

dated the hypothetical FFM profiles for the fourth edition of the diagnostic manual (APA, 2000).

There are, however, potential limitations with the FFM descriptions provided by Widiger et al. (1994, 2002). Most importantly, these hypotheses were constrained in part by potential limitations of the DSM-III-R and DSM-IV diagnostic criterion sets. A significant innovation of DSM-III (APA, 1980) was the provision of behaviorally specific diagnostic criterion sets (Spitzer, Williams, & Skodol, 1980), but it soon became apparent that this effort would be problematic for the diagnosis of the personality disorders (Frances, 1980). Complex constellations of maladaptive personality traits may not be effectively reduced to a brief list of behaviorally specific acts (Westen, 1997; Widiger & Trull, 1987). This concern has been illustrated in particular with respect to the diagnosis of antisocial personality disorder (Hare, Hart, & Harpur, 1991). Antisocial is the most reliably diagnosed personality disorder in general clinical practice because its criterion set is the most behaviorally specific (Widiger & Coker, 2002). However, DSM-IV might be failing to include a number of important characteristics of this personality disorder due to its emphasis on behaviorally specific acts. Notably absent from the DSM-IV criterion set, for example, are references to low empathy, callousness, glib charm, arrogance, and low anxiousness (Hare et al., 1991; Lilienfeld, 1994). These traits could be of considerable importance in understanding the phenomenology and pathology of the disorder, but representation of these features were not included in the Widiger et al. (2002) FFM profile because none of the DSM-IV diagnostic criteria referred explicitly to these personality traits. The FFM includes a number of personality traits that go well beyond the DSM-IV personality disorder nomenclature, many of which might be of theoretical and clinical use in the description and conceptualization of personality disorders (Costa & McCrae, 1990). More accurate and comprehensive descriptions of the DSM-IV personality disorders might then be obtained through their conceptualization in terms of the five domains and 30 facets of the FFM.

Another approach to generating FFM profiles of each personality disorder is to ask knowledgeable experts to provide their FFM descriptions of a prototypic case. These descriptions would not necessarily be constrained by the DSM-IV diagnostic criterion sets. Clinicians could provide relevant expertise through their experience in the treatment of persons with each respective disorder. Ideally, a clinical nomenclature would have a meaningful correspondence to the manner in which the disorders appear in general clinical practice (Westen, 1997), a correspondence that might be lacking for the DSM-IV nomenclature. Studies have indicated that clinicians often fail to adhere to the APA (1980, 2000) diagnostic criterion sets when providing clinical diagnoses (Blashfield & Breen, 1989; Blashfield & Herkov, 1996; Morey, 1988; Morey & Ochoa, 1989; Westen, 1997; Zimmerman & Mattia, 1999). One potential explanation for this finding is that the DSM-IV diagnostic criterion sets are inadequate in their coverage and description (Blashfield & Herkov, 1996; Westen & Arkowitz-Westen, 1998). The FFM has the potential of providing more comprehensive and clinically relevant descriptions of the predominant traits of each personality disorder through

its broader coverage of adaptive and maladaptive personality functioning (Widiger, 1993).

Expert consensus FFM descriptions of each personality disorder would also have additional advantages over the profiles generated by Widiger et al. (2002). Clinicians would not necessarily possess or share a priori theoretical expectations of an FFM personality disorder conceptualization and, indeed, many may not even be familiar with the FFM. It would be of interest to compare their descriptions with the FFM profiles generated by the proponents of the FFM. In addition, aggregating FFM descriptions across multiple raters would also minimize the potential effects of unreliable and idiosyncratic judgments, and it would provide a means of assessing the internal consistency and interrater reliability of the FFM descriptions of each personality disorder.

Lynam and Widiger (2001) generated researchers' FFM profiles of prototypic cases. Participants were identified through the published literature. Each had to have published at least one systematic study concerning a respective personality disorder. A total of 120 researchers provided FFM descriptions of one to three of the personality disorders that they had studied. A total of 56% of the researchers worked in an academic setting; 22% of the researchers worked in a medical center. The number of raters per disorder ranged from a low of 10 for paranoid personality disorder to a high of 24 for borderline personality disorder. Lynam and Widiger (2001) reported that the agreement among the researchers was quite good for all but one of the personality disorders. Average interrater reliability for FFM profiles ranged from a low of .48 (schizotypal) to a high of .66 (obsessive-compulsive), average item-total correlations for profiles ranged from .66 (schizotypal) to .80 (obsessive-compulsive); and average Cronbach's α ranged from .91 (paranoid and schizotypal) to .97 (antisocial, avoidant, and obsessive-compulsive).

Lynam and Widiger (2001) also reported the agreement between the profiles produced by the researchers and those of Widiger et al. (1994). To do this, a system was developed to quantify the latter hypotheses in which facets were coded on a 4 to -4 scale for each of the 10 personality disorders. In this system, facets hypothesized directly from the diagnostic criteria were coded 4 or -4 (depending on whether that facet would be considered high or low for that disorder); facets that referred to core features from the clinical literature were coded 3 or -3; facets hypothesized from associated features in DSM-III-R were given a score of 2 or -2; and facets indicated by associated features from the literature were given a 1 or -1. Facets that were not indicated by any of these sources were given a score of 0. Pearson correlations indicating agreement between ratings obtained by Lynam and Widiger (2001) and the coded FFM profiles from Widiger et al. (1994) were very good for six personality disorders (i.e., paranoid, schizotypal, antisocial, borderline, avoidant, and dependent), with convergent validity coefficients calculated as ranging from .77 (antisocial) to .83 (avoidant). Lower, but still statistically significant correlations were obtained for the remaining four personality disorders, ranging from .54 (narcissistic) to .58 (obsessive-compulsive).

A comparison of the researchers and the DSM-III-R FFM profiles suggested that the differences were often due to the inclusion of additional FFM traits by the researchers. For example, both descriptions of the prototypic narcissist included low modesty, altruism, and tender mindedness, as well high assertiveness and angry hostility. However, the researchers also described the prototypic narcissist as being quite low in trust, straightforwardness, compliance, warmth, excitement seeking, and openness to feelings. Similarly, both the DSM-III-R and researcher descriptions of the prototypic obsessive-compulsive personality disorder included high facets of conscientiousness as well as low warmth, low openness to feelings, and low openness to actions. However, the researchers also described the prototypic obsessive-compulsive as being low in impulsiveness, excitement-seeking, openness to ideas, and openness to values, and high in anxiousness, competence, and self-discipline. In sum, the FFM descriptions of each personality disorder by the researchers were often more rich, thorough, and comprehensive in their coverage of personality functioning than was provided by the DSM-III-R diagnostic criterion sets.

The purpose the current study was to generate FFM profiles by practicing clinicians with personal experience in the treatment of persons with each respective personality disorder. The researchers' descriptions of each personality disorder by Lynam and Widiger (2001) might have been based largely on academic literature and theoretical inferences rather than direct, clinical experience with a respective personality disorder. It would be of clinical and theoretical interest to determine whether clinicians with actual personal experience with each respective personality disorder would describe them in a manner that is consistent with the opinions and beliefs of academic researchers.

Persons skeptical of the clinical relevance of the FFM have at times suggested that clinicians would have difficulty applying the FFM to their patients (Benjamin, 1993; Westen, 1995). Only two previously published FFM personality disorder studies have obtained FFM ratings by clinicians. Blais (1997) obtained FFM ratings by 100 clinicians attending a workshop on the treatment of personality disorders. Each clinician described one of his or her personality disorder patients with respect to the FFM and the DSM-IV diagnostic criterion sets. Blais concluded that "despite the concerns raised by Benjamin [1993], these data suggest that clinicians can meaningfully apply the FFM to their patients and that the FFM of personality has utility for improving our understanding of the DSM personality disorders" (Blais, 1997, p. 392).

The findings of Blais (1997) are encouraging, although somewhat limited as his assessments were conducted with an abbreviated version of an already brief FFM Mini marker adjective checklist (Saucier, 1994). As a result, the FFM descriptions were confined to the five broad domains. No information was obtained with respect to the 30 facets of the FFM, which have been shown to be particularly important for differentiating among the personality disorders (Axelrod, Widiger, Trull, & Corbitt, 1997; Reynolds & Clark, 2001). Finally, Blais (1997) neither provide information on the reliability or internal consistency of the clinicians' FFM descriptions nor was an averaged or aggregated FFM profile of each personality disorder provided.

Sprock (2002) sent 89 licensed psychologists brief descriptions of prototypic and nonprototypic cases of the schizoid, antisocial, and obsessive-compulsive personality disorders (each psychologist received three case vignettes) and asked them to describe the patient in terms of the 30 facets of the FFM. Internal consistency of the FFM descriptions was excellent for each of the personality disorders, and average interrater reliability correlations ranged from a low of .51 for the two schizoid cases to .64 for the obsessive-compulsive and antisocial cases. The descriptions of the prototypic cases converged significantly with the predictions of Widiger et al. (1994), obtaining correlations of .44 for the schizoid, .60 for the antisocial, and .66 for the obsessive-compulsive. The convergence was much better with the more extensive FFM descriptions by the researchers, obtaining correlations of .84, .87, and .86, respectively. Sprock concluded that "although ratings of the prototypic cases more closely corresponded to Lynam and Widiger's [2001] FFM prototypes, most of the core features proposed by Widiger et al. [1994] were supported" (Sprock, 2002, p. 419).

The results of Sprock further "suggest that practicing clinicians can directly apply the dimensions of the FFM to cases of disordered personality with a moderate level of reliability" (Sprock, 2002, p. 417), although her findings are somewhat limited by their confinement to just three of the 10 DSM-IV personality disorders. The purpose of the current study was to extend further the findings of Sprock by obtaining FFM descriptions of all of the DSM-IV personality disorders by practicing clinicians that could (a) be compared directly to the FFM profiles obtained from researchers; and (b) be used themselves in subsequent studies as clinically based FFM profiles.

METHOD

Members of Division 42 (Private Practitioners) of the American Psychological Association were solicited for participation. Members of this division were solicited to maximize the likelihood that participants would be actively engaged in clinical practice. Each clinician was asked to describe prototypic cases of two personality disorders with respect to the 30 facets of the FFM. The two personality disorders to be described by any particular clinician were determined randomly. All 90 possible permutations of two of 10 personality disorders were distributed to address possible contrast effects (e.g., the potential effect of providing an FFM description of dependent personality disorder after having previously provided an FFM description of narcissistic personality disorder).

The clinicians were provided with the identifying label for each of the 30 facets of the FFM, along with two to four adjectives that described each of the poles of each of the 30 facets. The adjective descriptors were obtained from the NEO PI-R test manual (Costa & McCrae, 1992) and from the predominant FFM adjective checklists (Goldberg, 1992; Saucier, 1994). For example, (a) the neuroticism facet of anxiousness was assessed with the descriptors fearful, apprehensive versus relaxed, unconcerned, cool; (b) the order facet of conscientiousness was assessed with the descriptors organized, methodical, ordered versus haphazard, disorganized, sloppy; and (c) the openness facet of ideas was assessed with the adjectives strange, odd,

peculiar, creative versus pragmatic, rigid. The clinicians were asked to use a 1- to 5-point scale, "where 1 is extremely low (i.e., extremely lower than the average person), 2 is low, 3 is neither high nor low (i.e., does not differ from the average person or not enough information to decide), 4 is high, and 5 is extremely high."

The clinicians were provided with one rating form for each of their assigned personality disorders, a demographic questionnaire, and a postage paid envelope in which to return their completed ratings. They were told that their ratings would be combined with other clinicians' ratings and that all individual responses would remain anonymous.

RESULTS

A total of 154 of 625 solicited clinicians (25%) returned completed rating forms (an additional number of solicitations were returned by the post office due to inaccurate addresses). Two of the 154 clinicians did not complete the demographic questionnaire. Of the 152 clinicians who did complete the demographic questionnaire, 70% were male and 84% were Caucasian. Their ages ranged from 24 to 77 years, with a median age of 55. A total of 97% identified their highest degree as a PhD, with the remainder consisting of 2 clinicians with a PsyD, one with an MD, and one with an MA. The clinical experience of the participants ranged from a low of 5 years to a high of 53 years. The mean number of years of clinical experience post-graduation was 24.5, with half of the participants having more than 24 years of clinical experience. A total of 80% of the participants were in private practice, with the remainder employed at medical centers and clinics. The amount of time per week engaged in applied clinical work ranged from a low of 10% to a high of 100%, with half of the participants engaged in direct, clinical work 90% of the time.

A wide range of theoretical orientations was sampled. A majority of the clinicians identified their theoretical orientation as cognitive (65%), but a substantial minority of clinicians also identified their theoretical orientations as psychodynamic (46%), behavioral (34%), interpersonal (34%), and humanistic (18%); the percentages total more than 100% because participants were allowed to identify themselves as endorsing more than one particular theoretical orientation.

All but five of the 154 clinicians (97%) considered themselves to be moderately to very familiar with the DSM-IV (APA, 2000) personality disorder diagnostic categories. In contrast, only 32% of the participants described themselves as being at least moderately familiar with the FFM. The participants were also asked how frequently they have had direct clinical experience across their lifetime with each of the two personality disorders they were asked to describe. The mean number of total cases seen personally in clinical practice ranged from a low of 31 for schizoid personality disorder to a high of 149 for borderline personality disorder (the second highest was antisocial, with a mean number of 132 total cases).

A total of 308 FFM descriptions of prototypic cases were obtained from the 154 participants. The number of completed ratings for each personality disorder ranged from a low of 22 for the narcissistic personality disorder to a

TABLE 1. Five–Factor Model Ratings for Each Personality Disorder

Domain and Facet	Paranoid		Schizoid		Schizotypal		Antisocial		Borderline		Histrionic		Narcissistic		Avoidant		Dependent		Compulsive	
Neuroticism																				
Anxiety	**4.25**	(0.97)	3.06	(1.15)	3.85	(1.12)	*2.00*	(1.07)	**4.25**	(0.62)	**4.07**	(0.96)	2.71	(1.19)	**4.34**	(0.94)	**4.46**	(0.55)	**4.49**	(0.51)
Angry Hostility	**4.39**	(0.69)	2.84	(1.10)	3.42	(0.90)	3.93	(1.11)	**4.56**	(0.50)	3.55	(0.89)	3.90	(0.83)	2.90	(0.90)	2.95	(1.02)	3.24	(0.74)
Depression	3.64	(0.80)	3.42	(0.76)	3.62	(0.57)	2.70	(1.23)	**4.03**	(0.82)	3.27	(0.98)	2.75	(1.12)	3.72	(0.80)	**4.03**	(0.67)	3.76	(0.55)
Self–Consciousness	2.94	(1.09)	3.37	(1.27)	3.69	(1.16)	*1.63*	(0.74)	2.94	(1.05)	2.45	(1.31)	*1.67*	(1.06)	**4.45**	(0.83)	**4.42**	(0.64)	3.86	(0.69)
Impulsiveness	3.17	(1.00)	2.03	(0.87)	3.16	(1.14)	**4.22**	(1.05)	**4.38**	(0.83)	**4.16**	(1.24)	3.57	(1.36)	2.14	(0.95)	2.49	(0.94)	2.18	(1.27)
Vulnerability	3.36	(1.10)	2.97	(1.05)	3.96	(0.84)	2.07	(0.96)	**4.03**	(0.78)	3.90	(0.92)	2.76	(1.04)	3.90	(0.82)	**4.64**	(0.49)	3.49	(0.89)
Extraversion																				
Warmth	*1.61*	(0.60)	*1.19*	(0.40)	*1.58*	(0.76)	*2.00*	(0.83)	2.69	(0.90)	3.50	(1.01)	2.05	(0.97)	2.45	(0.99)	3.49	(0.76)	2.24	(0.74)
Gregariousness	*1.89*	(0.75)	*1.06*	(0.25)	*1.62*	(0.80)	3.48	(0.94)	3.28	(0.81)	**4.32**	(0.65)	3.95	(0.86)	*1.45*	(0.74)	2.54	(0.88)	2.40	(0.74)
Assertiveness	3.25	(1.05)	*1.90*	(0.70)	2.04	(0.98)	**4.07**	(0.83)	3.69	(1.06)	3.39	(1.02)	**4.00**	(1.05)	*1.52*	(0.57)	*1.46*	(0.55)	3.03	(0.92)
Activity	3.19	(0.71)	*2.00*	(0.73)	2.23	(0.82)	**4.00**	(0.78)	3.56	(0.84)	3.94	(0.89)	**4.14**	(0.65)	2.07	(0.88)	*2.00*	(0.70)	3.31	(0.80)
Excitement Seeking	2.42	(1.00)	*1.71*	(0.94)	2.12	(1.03)	**4.30**	(0.95)	**4.06**	(0.89)	**4.13**	(0.73)	**4.10**	(0.70)	*1.55*	(0.83)	*1.69*	(0.73)	*1.88*	(0.95)
Positive Emotions	2.08	(0.87)	*1.55*	(0.68)	*1.65*	(0.63)	3.52	(0.85)	3.16	(0.81)	3.80	(0.81)	3.52	(0.93)	*1.79*	(0.62)	2.03	(0.67)	2.29	(0.80)
Openness																				
Fantasy	3.14	(1.15)	2.81	(1.17)	**4.00**	(0.98)	3.48	(1.01)	**4.00**	(0.98)	**4.13**	(0.63)	3.82	(1.14)	3.07	(1.03)	2.95	(0.98)	2.52	(1.03)
Aesthetics	2.54	(0.85)	2.42	(1.06)	3.31	(1.16)	2.78	(0.80)	3.19	(0.82)	3.60	(0.86)	3.32	(0.95)	2.69	(0.85)	2.58	(0.64)	2.56	(0.84)
Feelings	2.46	(1.17)	*1.52*	(0.81)	2.31	(1.16)	2.41	(0.93)	3.84	(1.08)	**4.13**	(0.82)	2.68	(1.21)	3.07	(1.33)	3.45	(1.13)	2.22	(0.87)
Actions	2.37	(1.14)	2.13	(0.96)	2.81	(1.23)	**4.07**	(0.73)	3.78	(0.83)	3.70	(0.92)	3.36	(1.14)	*1.83*	(0.71)	*1.79*	(0.57)	*1.76*	(1.09)
Ideas	3.29	(1.51)	3.45	(1.12)	**4.38**	(0.90)	3.26	(0.86)	3.69	(0.86)	3.30	(0.92)	3.09	(1.11)	2.69	(1.14)	2.26	(0.64)	2.48	(1.23)
Values	*1.69*	(0.83)	2.42	(0.92)	2.81	(0.90)	3.48	(1.16)	3.00	(0.98)	3.50	(0.82)	2.68	(1.25)	2.34	(0.67)	2.05	(0.70)	*1.82*	(0.77)
Agreeableness																				
Trust	*1.19*	(0.71)	*1.68*	(0.70)	2.04	(0.96)	*1.70*	(0.72)	*1.69*	(0.59)	3.39	(1.12)	*1.86*	(0.89)	2.39	(0.88)	3.95	(1.07)	2.20	(0.76)
Straightforwardness	*1.89*	(1.01)	2.42	(0.81)	2.46	(1.03)	*1.41*	(0.57)	*1.94*	(0.91)	2.29	(0.90)	*1.91*	(0.87)	2.82	(0.72)	2.90	(0.97)	3.06	(0.73)
Altruism	*1.86*	(0.83)	2.29	(0.82)	2.50	(0.99)	*1.41*	(0.57)	2.31	(0.78)	2.52	(0.93)	*1.73*	(0.77)	2.93	(0.66)	3.85	(0.96)	2.63	(0.94)
Compliance	*1.92*	(0.81)	2.77	(0.99)	2.65	(1.09)	*1.81*	(0.74)	*1.81*	(0.64)	2.90	(0.94)	*1.77*	(0.53)	3.21	(0.83)	**4.50**	(0.60)	2.82	(0.90)
Modesty	2.53	(0.91)	3.48	(0.85)	3.27	(1.00)	*1.70*	(0.72)	2.56	(0.95)	2.20	(1.00)	*1.23*	(0.53)	3.68	(0.77)	**4.23**	(0.81)	3.17	(0.86)
Tender mindedness	2.14	(0.87)	2.58	(0.81)	2.88	(0.95)	*1.52*	(0.58)	2.47	(1.05)	3.00	(0.79)	*1.77*	(0.69)	3.43	(0.74)	3.79	(0.70)	2.76	(0.78)
Conscientiousness																				
Competence	3.53	(0.88)	3.00	(0.73)	2.85	(1.01)	2.52	(0.89)	2.78	(1.01)	2.68	(1.01)	3.00	(1.15)	3.45	(0.91)	3.28	(0.92)	**4.41**	(0.74)
Order	3.56	(0.97)	3.19	(0.83)	2.58	(0.95)	2.74	(0.76)	2.31	(0.90)	2.30	(0.99)	3.00	(1.02)	3.48	(0.83)	3.21	(0.89)	**4.59**	(0.61)
Dutifulness	3.39	(0.84)	3.16	(0.93)	2.77	(0.91)	*1.52*	(0.70)	2.22	(0.75)	2.32	(0.75)	2.50	(0.96)	3.45	(0.83)	3.79	(0.80)	**4.20**	(0.76)
Achievement Striving	3.08	(0.87)	2.68	(0.70)	2.35	(0.98)	2.33	(0.78)	2.72	(0.81)	2.60	(0.67)	3.18	(1.18)	2.90	(0.82)	2.97	(0.93)	**4.03**	(0.72)
Self–Discipline	3.19	(0.95)	3.10	(0.70)	2.77	(0.86)	*1.85*	(0.72)	2.34	(0.87)	2.13	(0.76)	2.23	(1.02)	3.07	(0.88)	3.31	(1.03)	**4.06**	(0.65)
Deliberation	3.56	(1.23)	3.71	(0.69)	3.73	(1.12)	*1.96*	(0.81)	2.09	(0.69)	*1.94*	(0.89)	2.45	(1.18)	3.62	(1.05)	3.36	(0.81)	**4.37**	(0.73)

Note. Standard deviations appear in parentheses. Characteristic items defined as less than or equal to 2, or greater than or equal to 4, appear as underlined (low) or boldface (high) values.

high of 39 for the dependent personality disorder. The number of ratings per personality disorder obtained in the current study was appreciably higher than obtained by Lynam and Widiger (2001), whose participation rate ranged from a low of 10 for paranoid personality disorder to a high of 24 for borderline personality disorder. Table 1 provides the means and standard deviations for each of the 30 facets of the FFM for each of the 10 DSM-IV personality disorders. Following the lead of Lynam and Widiger, we placed in bold scores 4.0 or higher and underlined scores 2.0 or lower to facilitate a verbal FFM description of each personality disorder. However, it should be noted that these cut-off scores of 2.0 and 4.0 are arbitrary (e.g., it would be reasonable to describe the prototypic antisocial person as being high in angry hostility despite a score of "only" 3.93 for this FFM facet).

Table 2 provides several measures of agreement. The average standard deviation in facet descriptions was always less than 1.0, consistent with the results of Lynam and Widiger (2001). Average interrater reliability correlations within each profile description were generally good and were consistently higher than was obtained by Lynam and Widiger, ranging from .64 for the schizotypal personality disorder to .78 for the dependent. Average interrater reliability correlations among the researchers ranged from .48 for schizotypal personality disorder to .66 for obsessive-compulsive. Agreement of individual clinician's FFM profile with the composite profile is indicated by the average correlation between an individual's profile with the composite after deleting his or her contribution to the composite. These corrected item-total correlations were all generally high, ranging in value of .60 for the schizotypal to .76 for the dependent. Finally, reliability of the composite profile using Cronbach's α (raters serving as variables and facets serving as cases) was excellent, ranging from .94 for the schizotypal and narcissistic personality disorders to .98 for the dependent.

Table 2 also provides the extent of agreement of the FFM profiles between the practicing clinicians in the current study and the personality disorder researchers surveyed by Lynam and Widiger (2001). It is evident from the Pearson correlations contained in Table 2 that there is substantial consistency in the FFM profiles of prototypic cases generated by the clinicians and the researchers. None of the convergent validity coefficients were less than .90.

Agreement with the FFM profiles developed by Widiger et al. (2002) on the basis of the DSM-IV diagnostic criterion sets were all statistically significant, but were also appreciably lower than the convergence with the FFM profiles provided by the researchers. However, it should be noted that the correlations reported by Lynam and Widiger (2001) were with DSM-III-R descriptions offered by Widiger et al. (1994), whereas this current study used an updated set of DSM-IV descriptions of Widiger et al. (2002). These latter descriptions do not contain as much complexity (e.g., associated features were excluded) and thus facets hypothesized as present were scored as 1 or -1, whereas those hypothesized as absent were scored as 0. Convergent validity in FFM profiles was evident for many of the personality disorders, notably for the avoidant, dependent, schizotypal, borderline, antisocial, and schizoid personality disorders. Statistically significant convergence was still obtained for the paranoid, obsessive-compulsive, narcissistic, and histri-

TABLE 2. Measures of Agreement Among Experts for the 10 Personality Disorders

Disorder	No. of Raters	Average SD[a]	Average Interrater *r*[b]	Average Corrected Item Total[c]	α for Composite[d]	*r* with Lynam & Widiger (2001)[e]	*r* with Widiger et al. (2002)[f]
Paranoid	36	0.94	0.67	0.68	0.97	.95	.58
Schizoid	31	0.85	0.66	0.64	0.96	.91	.66
Schizotypal	26	0.96	0.64	0.60	0.94	.91	.74
Antisocial	27	0.85	0.75	0.74	0.97	.97	.67
Borderline	32	0.85	0.72	0.70	0.97	.93	.69
Histrionic	31	0.90	0.65	0.62	0.95	.95	.40
Narcissistic	22	0.98	0.67	0.64	0.94	.94	.42
Avoidant	29	0.85	0.73	0.72	0.97	.96	.78
Dependent	39	0.79	0.78	0.76	0.98	.90	.75
Compulsive	35	0.82	0.74	0.71	0.97	.94	.53

Note. [a]Average SD = the mean of the standard deviations. [b]Average interrater *r* = the average of the correlations between clinicians' ratings in which clinicians were treated as variables and facets as cases. [c]Average corrected item–total *r* = the average of the correlations between each clinician's profile and the composite profile computed without that rating. [d]α for composite = coefficient alpha for the composite profile in which experts are treated as variables and facets as cases; it does depend in part on the number of raters. [e]*r* with Lynam & Widiger (2001) = correlation between the composite profile developed in this study[comma here] with that developed by researchers in Lynam & Widiger (2001). [f]*r* with Widiger et al. (2002) = correlation with a quantification of the hypotheses put forward by Widiger et al. (2002). Facets hypothesized as present received a score of 1 (high pole) or –1 (low pole)[comma here] whereas those facets with no hypothesized presencewere scored as 0.

onic personality disorders but the correlations for these disorders ranged from a low of .40 (histrionic, $p < .05$) to a high of .58 (paranoid, $p < .01$).

Table 3 provides the similarity among the FFM personality disorder profiles as measured by simple Pearson correlations. The correlations between profiles ranged from -. 82 for the antisocial and dependent personality disorders, suggesting substantial dissimilarity, to .89, for the antisocial and narcissistic personality disorders, indicating substantial overlap in their FFM profiles. Figure 1 illustrates graphically the similarity in the clinicians' FFM profiles for two of the personality disorders (histrionic and borderline) and their dissimilarity to the obsessive-compulsive. The histrionic and borderline FFM profiles correlated .75, with both characterized by similarly high levels on respective facets of neuroticism, extraversion, and openness, and mild to moderately low levels on respective facets of agreeableness and conscientiousness. Nevertheless, there were a few notable differences in their FFM profiles. For example, the prototypic histrionic patient was described by the clinicians as having higher levels of warmth and gregariousness, whereas the borderline patient was described as having higher levels of angry hostility and lower levels of trust. The prototypic obsessive-compulsive patient was in marked contrast to the histrionic and borderline patient, having very low levels of impulsiveness, low excitement seeking, low openness, and high conscientiousness, although sharing with the histrionic and borderline a high level of anxiousness.

DISCUSSION

The results of this study indicated that practicing clinicians were able to conceptualize the DSM-IV personality disorders in terms of the FFM with good to excellent reliability. The 154 clinicians surveyed in this study, 80% of whom were in private practice, had extensive clinical experience with each of the personality disorders. They were familiar with the DSM-IV nomenclature but were, for the most part, largely unfamiliar with the FFM. Nevertheless, their FFM descriptions of the DSM-IV personality disorders agreed quite well in each instance with previously obtained descriptions by academic researchers.

Clinicians' and researchers' FFM perceptions of the personality disorders do appear to be quite consistent with one another. The lowest convergent validity correlation was .90 for the FFM descriptions of dependent personality disorder. The researchers and clinicians agreed that the prototypic case of DSM-IV dependent personality disorder would be someone who is high in the agreeableness facets of modesty, tender mindedness, trust, compliance, and altruism; high in the neuroticism facets of anxiousness, self-consciousness, and vulnerability; low in the conscientiousness facet of dutifulness; and low in the extraversion facets of assertiveness and activity; and low in the openness facet of actions. The only substantive difference in the researchers' and clinicians' description of this personality disorder is that the clinicians also described the dependent person as being very low in the extraversion facet of excitement seeking and somewhat low in positive emotions.

TABLE 3. Correlations Among Five–Factor Model Expert Prototypes

Disorder	1	2	3	4	5	6	7	8	9	10
1. Paranoid	—	—	—	—	—	—	—	—	—	—
2. Schizoid	.62	—	—	—	—	—	—	—	—	—
3. Schizotypal	.60	.80	—	—	—	—	—	—	—	—
4. Antisocial	.19	–.37	–.11	—	—	—	—	—	—	—
5. Borderline	.49	–.12	.32	.70	—	—	—	—	—	—
6. Histrionic	–.07	–.61	–.10	.65	.75	—	—	—	—	—
7. Narcissistic	.36	–.34	–.10	.89	.68	.64	—	—	—	—
8. Avoidant	.44	.78	.65	–.69	–.17	–.48	–.59	—	—	—
9. Dependent	.08	.46	.34	–.82	–.33	–.37	–.74	.84	—	—
10. Compulsive	.69	.69	.33	–.43	–.21	–.59	–.18	.69	.47	—

Note. These correlations were obtained through an analysis that treated facets as cases and personality disorders as variables.

The clinicians' descriptions also agreed well with those developed by Widiger et al. (2002) on the basis of the DSM-IV diagnostic criterion sets. Convergent validity correlations for six of the personality disorders ranged in value from .66 for the schizoid to .78 for the avoidant. The convergent validity coefficients for the histrionic, narcissistic, obsessive-compulsive, and paranoid personality disorders were statistically significant, but were still low enough to suggest the presence of important substantive differences. Lynam and Widiger (2001) had also obtained relatively lower agreement between the researchers and the DSM-III-R FFM profiles for the obsessive-compulsive, narcissistic, and histrionic personality disorders.

COMPREHENSIVENESS OF PERSONALITY DESCRIPTIONS

The differences between the clinicians and DSM-IV FFM descriptions appear to be due largely to the inclusion by the clinicians of substantially more FFM facets. For example, the clinicians' description of a prototypic obsessive-compulsive patient correlated .53 ($p < .001$) with the DSM-IV-based description of this personality disorder by Widiger et al. Both the clinicians and Widiger et al. (2002) described the prototypic obsessive-compulsive as being very high in the dutifulness, order, competence, and achievement-striving facets of conscientiousness, and low in openness to values. What was appreciably different in the two descriptions is that the clinicians also described the prototypic obsessive-compulsive as being high in the conscientiousness facets of self-discipline and deliberation; high in depressiveness and self-consciousness; low in the neuroticism facet of impulsiveness; low in openness to feelings and actions; low in the agreeableness facet of trust; and low in warmth and excitement seeking. Widiger et al. (2002)would not necessarily disagree with these additional traits of a prototypic obsessive-compulsive. The reason they were excluded is that there did not appear to be any DSM-IV diagnostic criteria that suggested the presence of these facets of the FFM. The clinicians' FFM descriptions might then be providing a more comprehensive and rich description of this personality disorder.

The clinicians' description of a prototypic paranoid patient correlated .58 ($p < .001$) with the DSM-IV-based description of this personality disorder. Both FFM profiles described the paranoid person as being very low in the agreeableness facets of trust, straightforwardness, and compliance, and high in the neuroticism facet of angry hostility. However, a common criticism of the DSM-IV diagnostic criteria for paranoid personality disorder has been its narrow conceptualization (Millon & Davis, 1996). As expressed by Westen and Shedler (1999), the DSM-IV paranoid "criteria are essentially seven indices of a single trait, chronic mistrust" (p. 274). We would suggest that the DSM-IV diagnostic criteria also include references to angry hostility, deception, and oppositionalism, in addition to mistrust, but the findings of this study do suggest that clinicians' FFM description of this disorder is much broader and richer than is suggested by the DSM-IV criterion set. The clinicians' FFM description of paranoid personality disorder went beyond

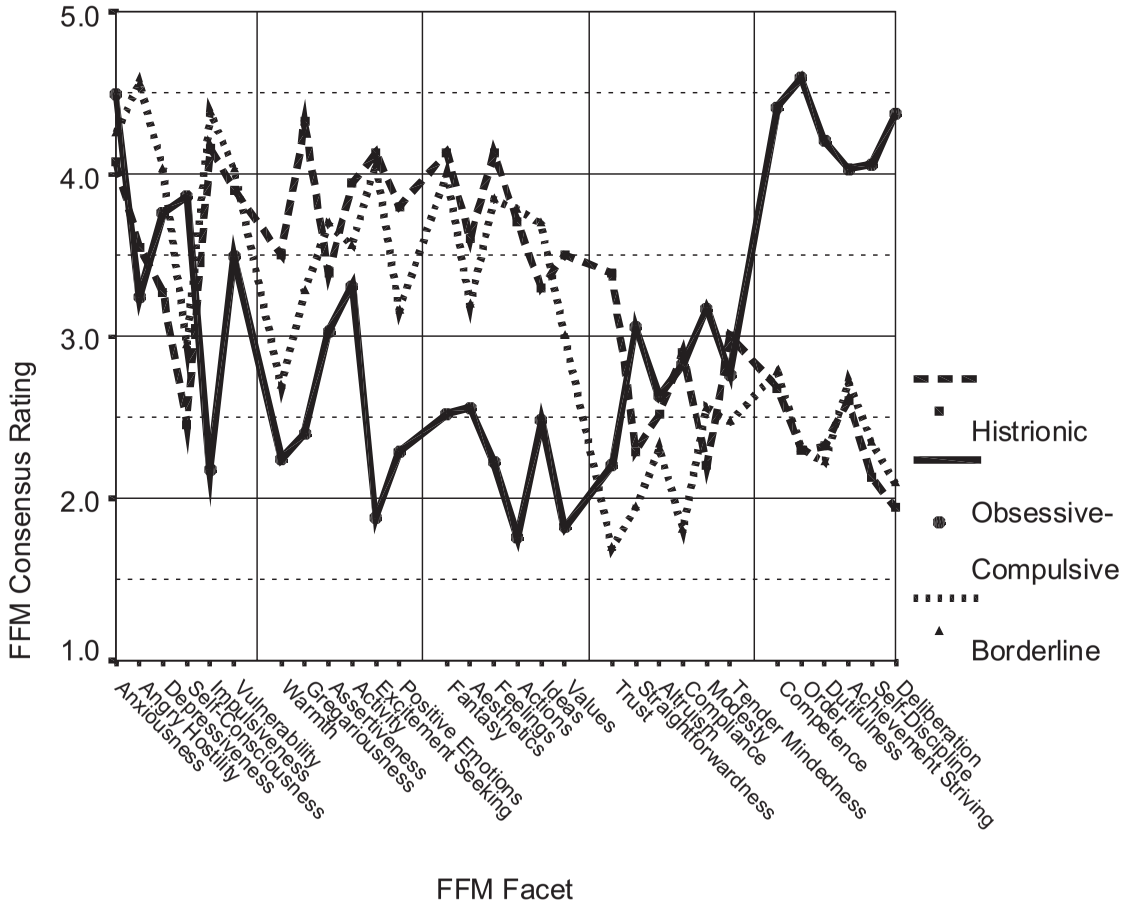

FIGURE 1. Clinician's FFM Ratings for Three Personality Disorders.

the DSM-IV description to include low positive emotionality, low openness to values, high anxiousness, low warmth, low gregariousness, low altruism, and low tender mindedness.

It has long been recognized that it is difficult to represent the complex personality traits that comprise a personality disorder in terms of a small set of behaviorally specific diagnostic criteria (Hare et al., 1991; Livesley, 1985; Westen, 1997; Widiger & Frances, 1985). The existing criterion sets are currently an inconsistent mixture of behaviorally specific acts and general personality traits (Clark, 1992; Shea, 1992). A more comprehensive and consistent personologic description of each personality disorder is provided by the FFM descriptions generated by the clinicians surveyed in this study. For example, included within the clinicians' FFM description of a prototypic case of antisocial personality disorder were the low self-consciousness, low modesty, and low anxiousness that are present within the traditional conceptualizations of psychopathy (Lilienfeld, 1994) but have been excluded from the DSM-IV criterion set for antisocial personality disorder (Hare et al., 1991).

Inconsistency between the clinicians' FFM descriptions and those provided by Widiger et al. (2002), however, were not confined entirely to instances in which the clinicians included facets of the FFM not included within the DSM-IV criterion sets. The clinicians' description of a prototypic narcissistic patient correlated only .40 ($p < .001$) with the DSM-IV-based description of this personality disorder by Widiger et al. Both the clinicians and Widiger et al. described the prototypic narcissist as being very low in the agreeableness facets of modesty, tender mindedness, and altruism, high in the neuroticism facet of angry hostility, and high in openness to fantasy. The clinicians went beyond the DSM-IV criterion set and described the prototypic narcissist as also being very high in the extraversion facets of activity, gregariousness, excitement seeking, and assertiveness and low in the agreeableness facets of compliance, straightforwardness, and trust. However, one additional notable disagreement is that Widiger et al. described the prototypic narcissist as being very high in self-consciousness (representing the DSM-IV criterion of requiring excessive admiration and feelings of envy), whereas the clinicians described the prototypic narcissist as being very low in self-consciousness.

The disagreement over the FFM facet of self-consciousness is perhaps consistent with the difficulty that the authors of each edition of the diagnostic manual have had with this diagnostic criterion. A relevant DSM-III diagnostic criterion for this aspect of narcissism was "cool indifference or marked feelings of rage, inferiority, shame, humiliation, or emptiness in response to criticism, indifference of others, or defeat" (APA, 1980, p. 317). This criterion was excluded from DSM-III-R because it covered essentially all possible reactions to criticism (Widiger, Frances, Spitzer, & Williams, 1988). It was revised in DSM-III-R to "feelings of rage, shame, or humiliation (even if not expressed)" (APA, 1987, p. 351) but this version was rejected for DSM-IV because it encouraged a clinician to attribute the presence of a hypersensitivity to others even when there were no overt signs present. In any case, it appears from the results of the current study that clinicians opt for

the cool indifference to the opinions of others as the characteristic feature of the prototypic narcissistic rather than self-conscious shame or humiliation.

PROTOTYPIC, NONPROTOTYPIC, AND ACTUAL CASES

The clinicians' descriptions of a prototypic case of schizoid, antisocial, and obsessive-compulsive personality disorder also agreed quite well with the FFM descriptions of three case vignettes of prototypic cases of these personality disorders reported previously by Sprock (2002). The clinicians' FFM description of the prototypic schizoid correlated .91 with Sprock's FFM description of a schizoid case vignette. The respective convergent validity correlation coefficients were .91 for the antisocial and .83 for the obsessive-compulsive case. These convergent validity coefficients are quite high, despite the methodological differences between the two studies. The clinicians in the study by Sprock (2002) and the current study agreed that the prototypic case of obsessive-compulsive personality disorder would be a person who is extremely high in all of the facets of conscientiousness (e.g., self-discipline, deliberation, dutifulness, order, competence, and achievement striving), high in the neuroticism facet of anxiousness, low in the neuroticism facet of impulsivity, and low in openness to values and actions. The reason that the convergent validity coefficient for this personality disorder was not above .90 is that Sprock's clinicians described her prototypic case as also being quite low in all of the facets of agreeableness (e.g., trust, straightforwardness, compliance, modesty, and tender mindedness). Neither the clinicians in the current study nor the researchers in Lynam and Widiger (2001) described obsessive-compulsive persons as being appreciably high or low in facets of agreeableness (although the clinicians did describe the obsessive-compulsive as being somewhat low in trust). It is possible that this particular inconsistency with the findings of Sprock might reflect an idiosyncratic component of the case vignette that was provided to the clinicians.

It is important to recognize that the clinicians in this study were describing a prototypic case. One would not expect actual cases to obtain the FFM profile of a prototypic case. One of the reasons for preferring a dimensional model of personality description relative to a categorical one is that dimensional models can provide more precise, individualized descriptions. Rather than lumping 25 patients together within one diagnostic category (e.g., antisocial) as if they share all of the features of that diagnostic category, one could instead indicate more precisely the extent to which these "antisocial" patients are either low in particular facets of conscientiousness (e.g., deliberation, discipline, or dutifulness), low in particular facets of antagonism (e.g., tender mindedness, straightforwardness, compliance, modesty, or altruism), high in particular facets of extraversion (e.g., excitement seeking or assertiveness), and high or low in particular facets of neuroticism (e.g., high in impulsivity or angry hostility, low in self-consciousness, vulnerability, or anxiousness). Persons who meet the DSM-IV criteria for antisocial personality disorder may also have elevations on facets of the FFM that are not included in the FFM profile of a prototypic case (e.g., high or low in the extraversion facet of positive emotionality).

The findings of the current study are in contrast to Morey et al. (2002), who obtained essentially the same FFM profile for each of the four DSM-IV personality disorders included in the study. One of the potential conclusions from their study is that the FFM fails to provide a meaningful description of the DSM-IV personality disorders because each of "the disorders displayed a similar configuration of FFM traits" (Morey et al., 2002, p. 229). As suggested by Table 3 and Figure 1, some of the DSM-IV personality disorders are expected to have quite similar FFM profiles (e.g., narcissistic and antisocial, dependent and avoidant, and borderline and histrionic). Lynam and Widiger (2001) demonstrated that much of the diagnostic co-occurrence among the personality disorders can be explained by the similarity in FFM profiles. Nevertheless, the correlations in FFM profiles reported in Table 3 would also suggest that actual cases of histrionic personality disorder, for example, should not be particularly similar to actual cases of obsessive-compulsive personality disorder, and cases of dependent personality disorder should, in fact, be quite dissimilar to cases of narcissistic personality disorder.

Actual cases, however, will fail to match the profiles of prototypic cases for two reasons (Blashfield, Sprock, Hodgins, & Pinkston, 1985). First, actual cases will fail to have all of the traits of a prototypic case. It was for this reason that DSM-III-R switched from monothetic diagnostic criterion sets (all of the diagnostic criteria are required) to polythetic diagnostic criterion sets (only a subset of the diagnostic are required) (Widiger et al., 1988). For example, not all of the persons who meet the DSM-IV criteria for antisocial personality disorder will have psychopathic glib charm, and these persons would not be expected to be low in self-consciousness (Widiger, 1998). Similarly, not all persons who are above the minimal threshold for a narcissistic personality disorder diagnosis will be interpersonally exploitative and might not then be low in the agreeableness facets of straightforwardness or altruism.

Second, actual people who meet the DSM-IV diagnostic criteria for one personality disorder will often meet diagnostic criteria for one, two, three, or even more personality disorders (Bornstein, 1998; Lilienfeld, Waldman, & Israel, 1994; Livesley, 2003), and personality disorder diagnostic co-occurrence will have a substantial effect on the FFM profile that is obtained. For example, people with an obsessive-compulsive personality disorder who also meet the criteria for borderline personality disorder would be expected to have higher elevations on facets of neuroticism and openness than a prototypic case of obsessive-compulsive personality disorder (see Fig. 1). Patients with an obsessive-compulsive personality disorder who also met criteria for antisocial personality disorder would be expected to have relatively lower scores on conscientiousness than obsessive-compulsive persons who lack antisocial personality traits. The precise effect of this diagnostic co-occurrence on the FFM profile of individual patients would be difficult to anticipate, as it would depend on which personality disorders are comorbid and which particular features of the comorbid personality disorders are present.

Morey et al. (2002) obtained FFM scores of 86 patients diagnosed with schizotypal, 175 with borderline, 157 with avoidant, and 153 with obses-

sive-compulsive personality disorders. A discriminant function analysis indicated that the four personality disorders were differentiated significantly in terms of the 30 facets of the FFM, "demonstrating that variation in patient diagnoses could be explained in part by personality trait combinations" (p. 221). Nevertheless, it was also apparent from a visual inspection of the profiles that "all four of the disorders displayed a similar configuration of FFM traits" (Morey et al., 2002, p. 229). As suggested by Table 3 and Figure 1, some of this similarity would be expected (e.g., the FFM profiles for prototypic cases of avoidant and schizotypal personality disorder correlated .65 in the current study and the profiles for prototypic cases of avoidant and obsessive-compulsive correlated .69). Morey et al. (2002), however, repeated the analyses using a subsample of 24 schizotypals, 72 borderlines, 103 avoidants, and 105 obsessive-compulsives who did not meet criteria for one of the three other respective personality disorders. "The elimination of patients with comorbid study diagnoses did appear to sharpen the distinction between the personality disorder groups, whereas only 18 facets revealed substantive differences (i.e., effect sizes larger than .50) among the cell-assigned personality disorder diagnoses, 31 facets achieved this threshold using the noncomorbid groups" (Morey et al., 2002, pp. 224-225). The differentiation among the personality disorders might further increase in Morey et al. if the additional diagnostic co-occurrence with the six other personality disorders was also excluded. For example, patients diagnosed with obsessive-compulsive cases also met DSM-IV criteria for antisocial personality disorder, a diagnostic co-occurrence that would likely decrease scores in conscientiousness.

Other studies have reported more successful differential diagnosis. For example, Wilberg, Urnes, Friis, Pederson, and Karterud (1999) administered the NEO PI-R (Costa & McCrae, 1992) to 63 patients participating in a day hospital, group psychotherapy program for poorly functioning outpatients with personality disorders. A total of 29 the patients met the DSM-IV criteria for borderline personality disorder; 34 patients met the criteria for avoidant personality disorder, and 12 patients met the criteria for both. Wilberg et al. confirmed all of the facet level predictions of Widiger et al. (1994) for the avoidant personality disorder, and 8 of the 12 predictions for borderline personality disorder, when the 12 comorbid cases were excluded. The two personality disorders differentiated well with respect to the domains and facets of agreeableness (predicted to be lower for borderlines) and extraversion (predicted to be lower for avoidants). The two personality disorders were not differentiated with respect to either neuroticism (both of which were predicted to be high in neuroticism), openness, or conscientiousness (for which only a few, marginal predictions were made). In a cluster analysis, 53 of 63 patients (84%) were correctly identified on the basis of the extraversion and agreeableness scales alone. Wilberg et al. (1999) concluded that "the FFM had good discriminating ability regarding a diagnosis of avoidant personality disorder versus borderline personality disorder in a sample of poorly functioning patients" (p. 239).

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

A limitation of the current study is that the assessment was confined to clinicians' descriptions of prototypic cases. It would be of interest in future research to determine the extent to which clinicians' FFM descriptions of actual patients are consistent with the patients' self-descriptions. Agreement between self-report and clinician descriptions of DSM personality disorder symptomatology has been quite poor (Widiger & Coker, 2002), and it is possible that better agreement would be obtained with the more straightforward language of the FFM.

An additional issue that should be addressed in future research is whether adequate differentiation among actual patients can be achieved using the FFM, despite the high level of similarity among some of the FFM profiles for prototypic cases. For example, the prototypic histrionic and borderline were distinguished only with respect to the facets of angry hostility, trust, warmth and gregariousness. Few histrionic and borderline cases will have the prototypic profile, and it might be unrealistic to expect adequate differentiation using just four facets. However, an advantage of the dimensional model (relative to the categorical) is the recognition that actual patients will vary across all 30 facets of the FFM. For this reason the FFM is more likely to differentiate among cases than a categorical model (e.g., the DSM-IV can differentiate among histrionic cases only with respect to the presence of additional comorbid personality disorder diagnoses).

It is also possible that additional specificity and differentiation will occur when each of the facets is defined further by more specific behavioral variants. The Schedule for Nonadaptive and Adaptive Personality (SNAP; Clark, 1993) and the Dimensional Assessment of Personality Pathology-Basic Questionnaire (DAPP-BQ; Livesley, 2003) will at times provide more exact descriptions of personality disorder symptomatology than the NEO PI-R (Costa & McCrae, 1992). However, as indicated by Reynolds and Clark (2001), this did not appear to be due to the coverage of maladaptive personality traits that lie outside of the FFM. It appears to be due instead to the more specific level of functioning assessed by the SNAP and DAPP-BQ.

Future research should explore the properties and validity of the FFM adjective checklist used in the current study. The intention of the checklist was to illustrate the maladaptive and adaptive aspects of each of the 60 poles of the 30 facets in a one-page format (Coker, Samuel & Widiger, 2002). This checklist might provide a succinct means through which clinicians could become familiar with and characterize their patients in terms of the FFM. For the purposes of this study, explicit references to personality disorder symptomatology were avoided, but a version that contained DSM-IV personality disorder diagnostic criteria would facilitate clinicians' effort to understand how the DSM-IV personality disorders could be understood in terms of the FFM.

CONCLUSIONS

The results of this study indicated that clinicians within private practice are able to provide reliable descriptions of personality disorders in terms of the

facets of the FFM and these descriptions agree quite well with those provided by more academic researchers. In addition, the findings of the current study suggest that the clinicians' FFM descriptions of prototypic cases of each personality disorder go well beyond the DSM-IV diagnostic criterion sets. The FFM profiles of the personality disorders provided in this study may provide a more comprehensive and richer description of each personality disorder than is provided by the more behaviorally specific diagnostic criterion sets.

REFERENCES

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.) Washington, DC: American Psychiatric Association.

American Psychiatric Association. (1987). *Diagnostic and Statistical Manual of Mental Disorders. Text Revision* (Rev. 3rd ed.). Washington, DC: American Psychiatric Association.

American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders. Text Revision* (Rev. 4th ed.). Washington, DC: American Psychiatric Association

Axelrod, S.R., Widiger, T.A., Trull, T.J., & Corbitt, E.M. (1997). Relation of five-factor model antagonism facets with personality disorder symptomatology. *Journal of Personality Assessment, 69*, 297-313.

Basic Behavioral Science Task Force of the National Advisory Mental Health Council. (1996). Basic behavioral science research for mental health. Vulnerability and resilience. *American Psychologist, 51*, 22-28.

Benjamin, L.S. (1993). *Interpersonal diagnosis and treatment of personality disorders.* New York: Guilford.

Blais, M.A. (1997). Clinician ratings of the five-factor model of personality and the DSM-IV personality disorders. *Journal of Nervous and Mental Disease, 185*, 388-393.

Blashfield, R.K., & Breen, M.J. (1989). Face validity of DSM-III-R personality disorders. *American Journal of Psychiatry, 146*, 1575-1579.

Blashfield, R.K., & Herkov, M.J. (1996). Investigating clinician adherence to diagnosis by criteria: A replication of Morey and Ochoa (1989). *Journal of Personality Disorders, 10*, 219-228.

Blashfield, R.K., Sprock, J., Hodgins, J., & Pinkston, K. (1985). Exemplar prototypes of personality disorder diagnosis. *Comprehensive Psychiatry, 26*, 11-21.

Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin, 117*, 187-215.

Bornstein, R.F. (1998). Reconceptualizing personality disorder diagnosis in DSM-V: The discriminant validity challenge. *Clinical Psychology: Science and Practice, 5*, 333-343.

Clark, L.A. (1992). Resolving taxonomic issues in personality disorders: The value of large-scale analyses of symptom data. *Journal of Personality Disorders, 6*, 360-376.

Clark, L.A. (1993). *Manual for the schedule for nonadaptive and adaptive personality.* Minneapolis, MN: University of Minnesota Press.

Cloninger, C.R. (2000). A practical way to diagnose personality disorders: A proposal. *Journal of Personality Disorders, 14*, 99-108.

Coker, L.A., Samuel, D.B., Widiger, T.A. (2002). Maladaptive personality functioning within the big five and the five-factor model. *Journal of Personality Disorders, 16,* 385-401.

Costa, P.T. Jr., Herbst, J.H., McCrae, R.R., & Siegler, I.C. (2000). Personality at midlife: Stability, intrinsic maturation, and response to life events. *Assessment, 74*, 365-378.

Costa, P.T., Jr., & McCrae, R.R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology, 54*, 853-863.

Costa, P.T., Jr., & McCrae, R.R. (1990). Personality disorders and the five-factor model of personality. *Journal of Personality Disorders, 4*, 362-371.

Costa, P.T., Jr., & McCrae, R.R. (1992). *Revised NEO personality inventory (NEO PI-R) and NEO five-factor inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.

Costa, P., & McCrae, R.R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment, 64*, 21-50.

Dyce, J.A., & O'Connor, B.P. (1998). Personality disorders and the five-factor model: A test of facet-level predictions. *Journal of Personality Disorders, 12*, 31-45.

First, M.B., Bell, C.C., Cuthbert, B., Krystal, J.H., Malison, R., Offord, D.R., Reiss, D., Shea, M.T., Widiger, T., & Wisner, K.L. (2002). Personality disorders and relational disorders: A research agenda addressing crucial gaps in DSM. In D.J. Kupfer, M.B. First, & D.A. Regier (Eds.), *A research agenda for DSM-V* (pp. 123-199). Washington, DC: American Psychiatric Association.

Frances, A. (1980). The DSM-III personality disorders section: A commentary. *American Journal of Psychiatry, 137*, 1050-1054.

Friedman, H.S., Tucker, J.S., Schwartz, J.E., Martin, L.R., Tomlinson-Keasey, C., Wingard, D.L., & Criqui, M.H. (1995). Childhood conscientiousness and longevity: Health behaviors and cause of death. *Journal of Personality and Social Psychology, 68*, 696-703.

Goldberg, L.R. (1992). The development of markers of the Big Five factor structure. *Psychological Assessment, 4*, 26-42.

Hare, R.D., Hart, S.D., & Harpur, T.J. (1991). Psychopathy and the DSM-IV criteria for antisocial personality disorder. *Journal of Abnormal Psychology, 100*, 391-398.

Jang, K.L., McCrae, R.R, Angleitner, A., Reimann, R., & Livesley, W.J. (1998). Heritability of facet-level traits in a cross-cultural twin sample: Support for a hierarchical model. *Journal of Personality and Social Psychology, 74*, 1556-1565.

John, O.P., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. In L.A. Pervin & O.P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102-138). New York: Guilford.

Judge, T.A., Higgins, C.A., Thoresen, C.J., & Barrick, M.R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology, 52*, 621-652.

Lilienfeld, S.O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review, 14*, 17-38.

Lilienfeld, S.O., Waldman, I.D., & Israel, A.C. (1994). A critical examination of the use of the term "comorbidity" in psychopathology research. *Clinical Psychology: Science and Practice, 1*, 71-83.

Livesley, W.J. (1985). The classification of personality disorder: II. The problem of diagnostic criteria. *Canadian Journal of Psychiatry, 30*, 359-362.

Livesley, W.J. (2003). Diagnostic dilemmas in classifying personality disorder. In K.A. Phillips, M.B. First, & H.A. Pincus (Eds.), *Advancing DSM: Dilemmas in psychiatric diagnosis* (pp. 153-189). Washington, DC: American Psychiatric Association.

Lynam, D.R., & Widiger, T.A. (2001). Using the five-factor model to represent the DSM-IV personality disorders: An expert consensus approach. *Journal of Abnormal Psychology, 110*, 401-412.

McCrae, R.R., & Allik, J. (2002). *The five-factor model of personality across cultures*. New York: Plenum Press.

McCrae, R.R., & Costa, P.T. (1999). A five-factor theory of personality. In L.A. Pervin & O.P. John (Eds.), *Handbook of Personality* (2nd ed., pp. 139-153). New York: Guilford.

McCrae, R.R., Costa, P.T., & Busch, C.M. (1986). Evaluating comprehensiveness in personality systems: The California Q-Set and the five-factor model. *Journal of Personality, 54*, 430-446.

Millon, T. & Davis, R.O. (1996). *Disorders of personality: DSM-IV and beyond* (2nd ed.). Oxford, England: Wiley.

Morey, L.C. (1988). Personality disorders under DSM-III and DSM-III-R: an examination of convergence, coverage, and internal consistency. *American Journal of Psychiatry, 145*, 573-577.

Morey, L.C., Gunderson, J.G., Quigley, B.D., Shea, M.T., Skodol, A.E., McGlashan, T.H., Stout, R.L., & Zanarini, M.C. (2002). The representation of borderline, avoidant, obsessive-compulsive

and schizotypal personality disorder by the five-factor model. *Journal of Personality Disorders, 16*, 215-234.

Morey, L.C., & Ochoa, E.S. (1989). An investigation of adherence to diagnostic criteria: Clinical diagnosis of the DSM-III personality disorders. *Journal of Personality Disorders, 3*, 180-192.

Plomin, R., & Caspi, A. (1999). Behavioral genetics and personality. In L.A. Pervin & O.P. John (Eds.), *Handbook of Personality: Theory and research* (2nd ed., pp. 251-276). New York: Guilford.

Reynolds, S.K., & Clark, L.A. (2001). Predicting dimensions of personality disorder from domains and facets of the five-factor model. *Journal of Personality, 69*, 199-222.

Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar big five markers. *Journal of Personality Assessment, 63*, 506-516.

Shea, M.T. (1992). Some characteristics of the axis II criteria sets and their implications for assessment of personality disorders. *Journal of Personality Disorders, 6*, 377-381.

Spitzer, R.L., Williams, J.B., & Skodol, A.E. (1980). DSM-III: The major achievements and an overview. *American Journal of Psychiatry, 137*, 151-164.

Sprock, J. (2002). A comparative study of the dimensions and facets of the five-factor model in the diagnosis of cases of personality disorder. *Journal of Personality Disorders, 16*, 402-423.

Trull, T.J., Widiger, T.A., & Burr, R. (2001). A structured interview for the assessment of the five-factor model of personality: Facet-level relations to the Axis II personality disorders. *Journal of Personality, 69,* 1175-1198.

Westen, D. (1995). A clinical-empirical model of personality: Life after the Mischelian ice age and the NEO-lithic era. *Journal of Personality, 63*, 495-524.

Westen, D. (1997). Divergences between clinical and research methods for assessing personality disorders: Implications for research and the evolution of axis II. *American Journal of Psychiatry, 154*, 895-903.

Westen, D., & Arkowitz-Westen, L. (1998). Limitations of axis II in diagnosing personality pathology in clinical practice. *American Journal of Psychiatry, 155*, 1767-1771.

Westen, D., & Shedler, J. (1999). Revising and assessing axis II, part II: Toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry, 156*, 273-285.

Widiger, T.A. (1993). The DSM-III-R categorical personality disorder diagnoses: A critique and an alternative. *Psychological Inquiry, 2*, 75-90.

Widiger, T.A. (1998). Psychopathy and normal personality, In D.J. Cooke, A.E. Forth, & R.D. Hare (Eds.), *Psychopathy: Theory, research and implications for society.* (pp. 47-68). Dondrecht, The Netherlands: Kluwer Academic Publishers.

Widiger, T.A., & Coker, L.A. (2002). Assessing personality disorders. In J.N. Butcher (Ed.), *Clinical personality assessment: Practical approaches* (2nd ed.). Oxford textbooks in clinical psychology (Vol. 2, pp. 407-434). London: Oxford University Press.

Widiger, T.A., & Costa, P.T. (1994). Personality and personality disorders. *Journal of Abnormal Psychology, 103*, 78-91.

Widiger, T.A., & Costa, P.T. (2002). Five-factor model personality disorder research. In P.T. Costa, Jr. & T.A. Widiger (Eds.), (2002). *Personality disorders and the five-factor model of personality* (2nd ed., pp. 59-87). Washington, DC: American Psychological Association.

Widiger, T.A., & Frances, A. (1985). The DSM-III personality disorders: Perspectives from psychology. *Archives of General Psychiatry, 42*, 615-623.

Widiger, T.A., Frances, A., Spitzer, R.L., & Williams, J.B.W. (1988). The DSM-III-R personality disorders: An overview. *American Journal of Psychiatry, 145*, 786-795.

Widiger, T.A., & Trull, T. (1987). Behavioral indicators, hypothetical constructs, and personality disorders. *Journal of Personality Disorders, 1*, 82-87.

Widiger, T.A., Trull, T.J., Clarkin, J.F., Sanderson, C., & Costa, P.T. (1994). A description of the DSM-III-R and DSM-IV personality disorders with the five-factor model of personality. In P.T. Costa & T.A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (pp. 41-56). Washington, DC: American Psychological Association.

Widiger, T.A., Trull, T.J., Clarkin, J.F., Sanderson, C., & Costa, P.T. (2002). A de-

scription of the DSM-IV personality disorders with the five-factor model of personality. In P.T. Costa & T.A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (2nd ed., pp. 89-99). Washington, DC: American Psychological Association.

Wiggins, J.S., & Pincus, A.L. (1989). Conceptions of personality disorders and dimensions of personality. *Psychological Assessment, 4,* 305-316.

Wilberg, T.E., Urnes, O., Friis, S., Pederson, G., & Karterud, S. (1999). Borderline and avoidant personality disorders and the five-factor model of personality: A comparison between DSM-IV diagnoses and NEO-PI-R. *Journal of Personality Disorders, 13*, 226-240.

Zimmerman, M., & Mattia, J.I. (1999). Differences between clinical and research practices in diagnosing borderline personality disorder. *American Journal of Psychiatry, 156*, 1570-1574.