

# Clinicians' Judgments of Clinical Utility: A Comparison of the *DSM-IV* and Five-Factor Models

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Clinical utility, or the usefulness of a diagnostic system in clinical practice, has been identified as an important construct in proposed revisions to the diagnostic nomenclature and a significant limitation of dimensional models of personality disorder, such as the 5-factor model (FFM). Only 1 study to date has addressed explicitly the clinical utility of the FFM, and the findings suggested significant limitations. In the current study, 245 practicing psychologists described 3 historic cases using both the FFM and the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 2000) and then rated each model on 6 aspects of clinical utility. In contrast to prior research, the psychologists in this study considered the FFM to have greater clinical utility than the existing diagnostic categories.

*Keywords:* personality disorder, dimensional, alternative, Ted Bundy, psychopathology

Personality disorders are currently conceptualized as “qualitatively distinct clinical syndromes” in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 2000, p. 689). However, researchers have increasingly recognized the limitations of the categorical model (Clark, 2005; Krueger, Markon, Patrick, & Iacono, 2005; Livesley, 2003; Trull & Durrett, 2005; Watson, 2005; Widiger & Samuel, 2005). In 1999, the American Psychiatric Association and the National Institute of Mental Health organized a series of work groups (McQueen, 2000) to develop a research agenda for the forthcoming *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-V*). The Nomenclature Work Group, whose role was to examine the fundamental assumptions of the diagnostic system, concluded that it would be “important that consideration be given to advantages and disadvantages of basing part or all of *DSM-V* on dimensions rather than categories” (Rounsaville et al., 2002, p. 12). The Nomenclature Work Group further recommended that the personality disorders might be an appropriate initial section to try a dimensional model of classification: “If a dimensional system of personality performs well and is acceptable to clinicians, it might then be appropriate to explore dimensional approaches in other domains” (Rounsaville et al., 2002, p. 13).

The *DSM-V* white papers are being followed by a series of international conferences whose goal is to further refine the research agenda for *DSM-V*. The first of these conferences, “Dimensional Models of Personality Disorder: Etiology, Pathology, Phenomenology and Treatment” was held in December of 2004 (First, 2005). The purpose of this conference was to generate a research agenda that would help advance the field toward a dimensional classification of personality disorder. Topics covered

included biogenetics, neurobiology, cross-cultural issues, coverage, and childhood antecedents (Widiger, Simonsen, Krueger, Livesley, & Verheul, 2005). One plenary address (Verheul, 2005) focused in particular on the importance of examining clinical utility. In his address, Verheul (2005) noted the absence of studies providing information concerning the acceptability of dimensional models to clinicians, their ease of usage, their usefulness for treatment decisions, and other matters of clinical utility. There is a substantial amount of clinical literature providing treatment recommendations for individual personality disorders (e.g., Beck, Freeman, & Davis, 2003; Benjamin, 2002; Oldham, Skodol, & Bender, 2005) but only a few papers and texts regarding the clinical application of dimensional models of classification (e.g., Cloninger & Svrakic, 1999; Livesley, 2001b; Sanderson & Clarkin, 2002). Some of the more commonly raised objections to replacing the current diagnostic categories with a dimensional model are that clinicians will be largely unfamiliar with the constructs, they will find the dimensional classification to be too complex and cumbersome, and they will be unable to use the dimensions to effectively guide treatment decisions (e.g., Benjamin, 1993; Frances, 1993; Shedler & Westen, 2004). The importance placed on clinical utility by Verheul was shared by the *DSM-V* Research Planning Nomenclature Work Group, which stated that “there is a clear need for dimensional models to be developed *and their utility be compared* [italics added] to existing typologies” (Rounsaville et al., 2002, p. 13). Of primary concern to Rounsaville et al. (2002) was whether a dimensional model would actually be “acceptable to clinicians” (p. 13).

First and his colleagues (2004) have similarly argued that matters concerning clinical utility should receive more emphasis and attention by the authors of *DSM-V*. Clinical utility has always been an important concern for the authors of the diagnostic nomenclature. It is stated explicitly in the first paragraph of the introduction to *DSM-IV* that “our highest priority has been to provide a helpful guide to clinical practice” (American Psychiatric Association, 2000, p. xxiii). The authors of *DSM-IV* addressed matters of

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clinical utility in some of their revisions to the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; American Psychiatric Association, 1987), such as shortening criterion sets to make them easier to use in clinical practice. Nevertheless, it is evident that the foci of the authors of the current and past editions of the diagnostic manual have been primarily matters of reliability and validity (Frances, Widiger, & Pincus, 1989; Spitzer, Williams, & Skodol, 1980).

First and colleagues (2004) suggested that a valid diagnostic manual that is not being used effectively within clinical practice is unlikely to realize its full potential. They proposed that authors of future editions of the manual "empirically demonstrate improvement in clinical utility to clarify whether the advantages of changing outweigh potential negative consequences" (p. 946). Going further, they concluded that a "crucial target for evaluating the advantages and disadvantages of a particular change is its effect on clinical utility" (p. 953). They delineated in particular six aspects of clinical utility that should be considered in future revisions to the diagnostic manual: (a) conceptualization of the disorder, (b) communicating information to other mental health professionals, (c) communicating information to clients and their families, (d) ease and acceptability of usage in clinical practice, (e) choosing appropriate and effective interventions, and (f) predicting future course.

The relative importance that should be placed on clinical utility relative to reliability and validity is debatable (First et al., 2004; Verheul, 2005). It is also possible that clinical utility will not play as large a role in the overall development of the next edition of the diagnostic manual as suggested by First et al. (2004). However, clinical utility concerns have been repeatedly raised as a major reason for retaining the existing personality disorder diagnoses (Benjamin, 1993; Frances, 1993; Shedler & Westen, 2004). Verheul's (2005) critique of the existing literature is accurate in its conclusion that there have, as yet, been very few systematic studies assessing the clinical utility of a dimensional classification of personality disorder and certainly no studies that attempt to address the concerns raised by First et al., Rounsaville et al. (2002), and others.

Consider, for example, the five-factor model (FFM). There is a substantial amount of research supporting its reliability and validity as a dimensional model of personality structure (Mullins-Sweatt & Widiger, in press), and quite a number of studies have suggested that the existing categorical diagnoses can be understood as maladaptive variants of the domains and facets of the FFM (Livesley, 2001a; Saulsman & Page, 2004; Widiger & Costa, 2002). However, there have been only four studies to date that have even examined the ability of practicing clinicians to use the FFM (i.e., Blais, 1997; Samuel & Widiger, 2004; Sprock, 2002, 2003).

Blais (1997) asked 100 clinicians to describe one of their clients who carried a primary diagnosis of personality disorder with respect to the five domains of the FFM and the 10 *DSM-IV* personality disorders. Blais found extensive agreement among the clinicians' FFM ratings for each particular *DSM-IV* personality disorder. Blais concluded, "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" (p. 392).

Sprock (2002) sent 89 licensed psychologists brief, hypothetical descriptions of prototypic and nonprototypic cases of the schizoid, antisocial, and obsessive-compulsive personality disorders. Each psychologist received three vignettes and was asked to describe each in terms of the 30 facets of the FFM. Internal consistency of the FFM descriptions was excellent for each of the personality disorders, with average interrater reliability ranging from a low of .51 for the schizoid case to a high of .64 for the obsessive-compulsive and antisocial cases. Furthermore, the FFM descriptions of the three prototypic cases agreed well with FFM descriptions of prototypic cases provided by personality disorder researchers surveyed earlier by Lynam and Widiger (2001). The correlations were .84 with the schizoid, .87 with the antisocial, and .86 with the obsessive-compulsive prototypes. Sprock (2002) concluded that these results further "suggest that practicing clinicians can directly apply the dimensions of the FFM to cases of disordered personality with a moderate level of reliability" (p. 417).

Samuel and Widiger (2004) asked clinicians in independent practice to describe prototypic cases of each of the 10 *DSM-IV* personality disorders in terms of the 30 facets of the FFM. One hundred fifty-four clinicians each provided ratings on two personality disorders using an FFM rating form that contained a series of 30 items corresponding to each facet of the FFM. The ratings were then averaged across participants to produce a mean consensus rating for each personality disorder in terms of the 30 FFM facets. The agreement among raters was good, with average interrater correlations above .64 for all 10 personality disorders. The consensus ratings converged well with the findings for the three prototypic cases from Sprock (2002), with correlations ranging from .83 for the obsessive-compulsive to .91 for the antisocial cases. Convergent validity with similar ratings provided by personality disorder researchers (Lynam & Widiger, 2001) was even better, with coefficients that ranged from .90 (dependent) to .97 (antisocial). Samuel and Widiger concluded that "clinicians can conceptualize and apply the FFM to personality disorders in a consistent way" (p. 286).

These three studies have provided compelling documentation that clinicians are able to conceptualize personality disorders in terms of the FFM. However, they are limited in their coverage of clinical utility, being confined to just one of the six components emphasized by First et al. (2004)—case conceptualization—and none of the studies actually asked the clinicians whether they found the FFM descriptions to be clinically useful. Sprock (2003) provided the only study to date that has explicitly addressed judgments concerning clinical utility, and much of her findings were not supportive of the FFM.

Sprock (2003) surveyed two national samples of practicing psychologists and randomly assigned each person to read two of six brief case vignettes that described prototypic and nonprototypic personality disorders. After reading each vignette, the first sample was instructed to provide both categorical and dimensional ratings using the current *DSM-IV* personality diagnostic constructs. The other sample was asked to provide ratings of alternative dimensional models of personality, including the five broad domains of the FFM. After providing these ratings, they were asked to rate each model (FFM and *DSM-IV*) on three measures of clinical utility. The three measures she included were usefulness for professional communication, case conceptualization, and treatment

planning. Sprock (2003) reported that the clinicians rated the *DSM-IV* significantly higher than the FFM on all three measures of clinical utility. The same pattern was found for both the prototypic and nonprototypic cases, although the differences in utility ratings for the nonprototypic cases were less dramatic. Sprock (2003) concluded that the findings with respect to "clinical utility for nonprototypic cases were unexpected and imply a certain degree of resistance to a dimensional approach. Even for nonprototypic cases, the ratings . . . suggest a preference for the categorical (*DSM*) model" (p. 1007).

Sprock (2003) suggested that her findings could be due in part to the fact that the clinicians had been trained with the *DSM* (hereafter, the acronym *DSM* is used to refer to the general *DSM* system) and that many were probably unfamiliar with the FFM. However, this degree of familiarity is unlikely to change anytime in the near future. If her findings are correct and they are consistent with concerns that have been raised about the FFM (Frances, 1993), a conversion to a dimensional model of classification, such as the FFM, does appear to be problematic with respect to the very issues emphasized by First et al. (2004) and Rounsaville et al. (2002).

However, there are two potentially important limitations of the study by Sprock (2003). One, the FFM ratings were confined to the five broad domains. Research has shown that the 30 facets are necessary to provide adequate differentiation (Axelrod, Widiger, Trull, & Corbitt, 1997). A description at the level of the five broad domains is comparable with confining a personality disorder assessment to the three broad clusters (i.e., odd–eccentric, anxious–fearful, and dramatic–emotional). It is perhaps not surprising that clinicians would find that descriptions confined to the five broad domains had less clinical utility than descriptions at the level of the 10 *DSM-IV* personality disorders.

An additional limitation was the use of formulated case vignettes as opposed to those based on real individuals. In fact, the case vignettes were composed of sentences confined largely to behavioral descriptions or illustrations of the diagnostic criteria for *DSM* personality disorders. Each vignette was quite brief (approximately one paragraph in length), with the sentences confined largely to specific behaviors that would illustrate individual personality disorder diagnostic criteria. It was not the intention of Sprock (2003) to construct or use cases that would favor the *DSM-IV* nomenclature over an alternative dimensional model. Many of the cases were simply obtained from previously prepared vignettes developed for studies of the process with which clinicians reach *DSM* diagnostic decisions (Blashfield, Sprock, Pinkston, & Hodgins, 1985) or were obtained from casebooks that were published to illustrate the diagnostic categories (e.g., Spitzer, Gibbon, Skodol, Williams, & First, 1989). Nevertheless, it is perhaps not surprising for clinicians to indicate that the *DSM-IV* system is more useful for conceptualizing, describing, and understanding persons who are described explicitly in terms of the diagnostic criteria provided within the existing nomenclature. The FFM would have likely obtained higher ratings than the *DSM-IV* if the sentences were written to describe specific facets of the FFM, but this would only indicate that the FFM is more readily applicable than *DSM-IV* for cases written to represent the domains and facets of the FFM. A more fair comparison of the clinical utility of the *DSM-IV* and FFM would be to use cases concerning actual persons, described in a manner that is more neutral with respect to the

two alternative nomenclatures. One might still expect clinicians to provide higher ratings for the *DSM-IV* nomenclature, given their familiarity and training with the *DSM-IV*, but at least the cases would not explicitly favor one of the two alternatives.

## Method

Fifteen hundred members were drawn from the directory of the American Psychological Association, the organization of psychologists in independent practice. The participants were from Division 42, which was chosen to maximize the probability that the participants would be actively engaged in clinical practice. The clinicians were randomly assigned to receive one of three case vignettes. After reading the case history, clinicians were asked to provide *DSM-IV* and FFM ratings (the sequence was counterbalanced to prevent order effects). After making the ratings of both models, the clinician was asked to rate the clinical utility of each model with respect to six concerns. Finally, each participant completed a demographic questionnaire and returned the materials in the envelope provided.

## Case Histories

The psychiatric and personality literatures were examined for case histories written about actual individuals who possessed significant personality difficulties. Three historic cases were selected on the basis of their level of functional impairment, salience, and the accessibility of a reasonably comprehensive description of the individual's personality. The case histories, approximately 1.5 pages (single space) in length, covered the individual's life span, although they emphasized the maladaptive personality traits of adulthood. In each instance, the vignettes used wording of the original sources to avoid any potential biasing toward *DSM* or FFM terminology. Verbatim copies of the vignettes used in this study are available on request from Douglas B. Samuel.

*Case 1: Ted Bundy.* Ted Bundy was a serial murderer who systematically raped and murdered young women over the course of at least 6 years. Ted was considered to be a useful case for the purposes of this study because his history is used in casebooks (e.g., Meyer, 2006) and undergraduate textbooks (e.g., Oltmanns & Emery, 2004) to illustrate a personality disorder. Information for this vignette was drawn from biographical texts (Kendall, 1981; Rule, 2001).

*Case 2: Earnst.* During the 1930s, Henry A. Murray and the staff at the Harvard Psychological Clinic conducted detailed and comprehensive assessments of several individuals over the course of many years. Perhaps the most well known of these case studies appeared in Murray's classic 1938 text *Explorations in Personality* under the name of Earnst. The comprehensive assessment of Earnst included many instruments of the era as well as a detailed life history. Earnst recalled a childhood in which he was frequently ill, coupled with several family tragedies including his mother's untimely death and his father's inability to work after an injury. In his adult life, Earnst had trouble establishing relationships and was particularly distressed by his difficulty in attracting the attention of women, instead turning to an inner fantasy world constructed from storybook characters. During the time of his initial sessions with Murray, Earnst was devoting himself to pursuing a college education, but he was later forced to turn back from this goal because of financial and personal limitations, eventually pursuing a meager existence through a series of minimum-wage jobs. The description of Earnst for the case vignette was drawn from the summaries of the life history interviews conducted by Murray (1938).

*Case 3: Madeline.* The case of Madeline was drawn from the recently published text *Paradigms of Personality Assessment* by Jerry Wiggins (2003). In this text, Wiggins asked leading experts from five different paradigms of personality assessment (i.e., psychodynamic, multivariate, interpersonal, personological, and empirical) to assess and describe the same person. The person they assessed was Madeline G. who provided an intriguing case study with surprising depth and color of character. Made-

line, as described in Wiggins's text, is a Native American woman who experienced a chaotic childhood, including severe physical abuse at the hands of her alcoholic father as well as her own alcohol abuse and criminal activities. However, during her stay in prison, Madeline focused on improving her life and she went on to attend an ivy league institution where she earned degrees in law and social work. She subsequently established a very successful legal practice and appeared to have unlimited future potential. However, she later was served several setbacks when she lost her job with a high-profile law firm and was abandoned by her common-law husband. A recent review of Wiggins's text suggested that "Madeline G may go down in history as one of the best case studies ever published" (Strack, 2005, p. 106). The description of Madeline was drawn from the life history interview and peer descriptions provided by McAdams (2003) as well by Trobst and Wiggins (2003).

### Instruments

**FFM Rating Form (FFMRF).** The FFMRF is a one-page measure of the 30 facets of the FFM. The individual is described on each facet using a 5-point Likert scale where 1 = *extremely low*, 2 = *low*, 3 = *neutral*, 4 = *high*, and 5 = *extremely high*. Each of the 30 facets is labeled with a trait term (e.g., the first facet of neuroticism is labeled *anxiousness*). In addition to this label, both the high and low pole of each facet contains 2–3 trait descriptors to assist the user in making the ratings. For example, the facet of gregariousness is described by the words *sociable* and *outgoing* at the high pole as well as *withdrawn* and *isolated* at the low pole.

**DSM-IV Rating Form (DSMRF).** The DSMRF is a one-page measure that assists the clinician in providing dimensional ratings for each of the 10 DSM-IV personality disorders in a manner comparable with the FFMRF. All 10 DSM-IV personality disorders are listed along with a brief one-sentence description. The clinician rates the extent to which the individual is characterized by each of the disorders on a 5-point Likert scale where 1 = *absent*, 2 = *subthreshold*, 3 = *threshold*, 4 = *above threshold*, and 5 = *prototypic*. After rating each disorder, the clinicians were also asked to provide a final DSM-IV diagnosis, for which they could select (a) one or more of the above diagnoses, (b) personality disorder not otherwise specified (PDNOS), or (c) no personality disorder diagnosis.

**Clinical Utility Questionnaire.** After completing the DSMRF and the FFMRF, the clinicians were asked to rate both the DSM-IV and the FFM descriptions on each aspect of clinical utility. This questionnaire was designed to assess components of clinical utility outlined by First et al. (2004). The six questions that were addressed were "How easy do you feel it was to apply the system to this individual?" "How useful do you feel the system would be for communicating information about this individual with other mental health professionals?" "How useful do you feel this system would be for communicating information about the individual to him or herself?" "How useful is this system for comprehensively describing all the important personality problems the individual has?" "How useful would this system be for helping you to formulate an effective intervention for this individual?" and "How useful was this system for describing the individual's global personality?" These ratings were provided on a 5-point Likert scale where 1 = *not at all useful*, 2 = *slightly useful*, 3 = *moderately useful*, 4 = *very useful*, and 5 = *extremely useful*.

**Demographic Questionnaire.** Each clinician was also asked to complete a brief questionnaire that gathered basic demographic information as well as information about training, experience, direct clinical contact hours, and theoretical orientation. Additionally, they were asked to rate their level of familiarity with both the DSM-IV and FFM as *not at all familiar*, *vaguely familiar*, *average level of familiarity*, *moderately familiar*, or *very familiar*.

## Results

### Demographics

Fifteen hundred psychologists were randomly sampled from American Psychological Association Division 42 (private practi-

tioners) and solicited via postal mail. One hundred eighty-two of the envelopes were returned unopened by the postal service, leaving 1,318 that probably reached their intended recipient. From that number, 256 psychologists returned the survey, yielding a 19.4% response rate, which compares well with similar samples of the same population (25% from Samuel & Widiger, 2004; 18.5% from Sprock, 2003). Eleven participants were later eliminated because of incomplete data, leaving 245 usable responses. The number of raters per case was 73 for Ted, 78 for Madeline, and 94 for Earnst. The sample was predominantly male (64.6%) and Caucasian (96.7%). All respondents were doctoral-level psychologists, with 88.2% listing their highest degree as PhD and 8.9% listing their highest degree as PsyD. Seventy-five percent listed their subfield as clinical psychology, whereas 13.5% were in the subfield of counseling psychology, and an additional 11.5% described their subfield as "other" (e.g., forensic or family). The clinical experience of the participants ranged from a low of 6 years to a high of 54, with a mean of 26 years since earning their degree. Additionally, the majority were full-time clinicians, spending an average of 73% of their working hours in direct contact with clients. A wide variety of theoretical backgrounds were represented (72% cognitive, 50% psychodynamic, 44% behavioral, 42% interpersonal, 21% humanistic, and 12% other; each clinician was allowed to endorse more than one orientation).

The clinicians were much more familiar with the DSM-IV than the FFM. In fact, the modal response for familiarity with the DSM was *very familiar*, whereas the modal response for the FFM was *not at all familiar*. The mean familiarity with the DSM-IV was 4.26, whereas the mean for the FFM was 1.93, a difference that was significant,  $t(242) = 32.02, p < .001$ .

### Reliability

The reliability of the composite profiles was first assessed using Cronbach's alpha (raters serving as variables and facets as cases). By this measure, reliability was excellent for both models, with values above .95 for both the DSM-IV and FFM for all three cases. To provide a more stringent measure of agreement, we calculated intraclass correlation coefficients using an absolute agreement definition. Intraclass absolute agreement ranged from .51 (Ted) to .58 (Madeline) for the DSM-IV and from .58 (Ted) to .67 (Madeline) for the FFM. These results compare favorably with those reported by Sprock (2003) in which the intraclass absolute agreement correlations were .60 and .58 for the DSM-IV and FFM, respectively.

### Personality Disorder Diagnoses

The three case histories were selected in part because they described individuals with clinically significant, maladaptive personality traits. Table 1 provides data on the mean consensus ratings on all 10 DSM-IV personality disorders provided by the clinicians for each case. It is evident from Table 1 that all but a few of the clinicians felt that Ted, Earnst, and Madeline met criteria for at least one personality disorder. Ted received a consensus rating of 4.70 for antisocial personality disorder, with 96% of the sample providing this diagnosis. In fact, 80% of the clinicians described Ted as being a prototypic case of antisocial personality disorder, although almost as many clinicians diagnosed Ted with narcissistic

Table 1

*Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition (DSM-IV) Personality Disorder Ratings*

DSM-IV diagnosis	Ted				Earnst				Madeline			
	M	SD	% > 3	% = 5	M	SD	% > 3	% = 5	M	SD	% > 3	% = 5
Paranoid	2.18	1.2	31.5	5.5	2.51	0.9	39.8	2.1	1.58	0.9	14.5	0.0
Schizoid	2.82	1.2	56.2	11.0	<b>3.38</b>	1.0	79.6	11.7	1.54	0.8	10.4	0.0
Schizotypal	2.27	1.3	32.9	11.0	2.67	1.2	48.9	8.5	1.56	0.9	10.4	0.0
Antisocial	<b>4.70</b>	0.7	95.9	79.5	1.18	0.4	1.1	0.0	2.59	1.0	48.1	2.6
Borderline	2.61	1.2	52.1	6.8	1.52	0.8	12.1	0.0	<b>3.24</b>	1.1	66.0	14.1
Histrionic	1.70	0.9	14.1	1.4	1.07	0.3	1.1	0.0	<b>3.63</b>	1.1	86.8	23.1
Narcissistic	<b>4.15</b>	1.0	94.5	43.8	1.68	0.9	16.1	0.0	<b>3.96</b>	1.0	90.8	34.6
Avoidant	1.94	1.1	24.7	2.7	<b>4.00</b>	0.9	94.5	30.9	1.18	0.5	2.6	0.0
Dependent	1.29	0.5	4.1	4.1	1.63	0.9	15.2	0.0	1.22	0.6	5.2	0.0
Obsessive	2.16	1.1	34.7	2.7	2.07	1.0	30.0	1.1	1.58	0.9	16.9	0.0
No personality disorder diagnosis			0.0				6.4				0.0	
PDNOS			7.7				25.6				19.4	

Note Means are based on a 1–5 scale. Means of at least 3 are in boldface to represent consensus of meeting the disorder. The second column represents the percentage of all respondents who rated the case a 3 or higher (e.g., meets diagnostic criteria). % = 5 is the percentage of clinicians who rated the case as prototypic for each particular disorder. PDNOS = personality disorder not otherwise specified.

personality disorder, with a comparably high consensus rating of 4.15. Forty-four percent of the clinicians considered Ted also to be a prototypic case of narcissistic personality disorder. It is perhaps noteworthy that at least 50% of the clinicians stated that Ted was also above threshold for the borderline and schizoid personality disorders.

Ninety-four percent of the clinicians judged that Earnst would be diagnosed with a personality disorder, with the consensus favoring the avoidant (4.00) and schizoid (3.38) diagnoses. Ninety-four percent diagnosed Earnst with avoidant personality disorder, and 80% diagnosed him with schizoid. Almost a third of the clinicians considered Earnst to be a prototypic case of avoidant personality disorder. However, it also appears to be the case that many of the clinicians viewed Earnst as somewhat more difficult to fit into the 10 DSM-IV categories, as 26% of the sample endorsed PDNOS as their final DSM-IV diagnosis.

Madeline's consensus DSM-IV ratings were heavily grouped into Cluster B (i.e., dramatic-impulsive) of the DSM-IV nomenclature. The consensus ratings indicated that Madeline met criteria for the diagnoses of narcissistic (3.96), histrionic (3.63), and borderline (3.24) personality disorders. Ninety-one percent rated her as meeting criteria for narcissistic personality disorder, 87% rated her as meeting criteria for histrionic personality disorder, and two thirds rated her as meeting criteria for borderline personality disorder. Thirty-six percent considered her to be a prototypic case of narcissistic personality disorder, and almost one fourth of the clinicians considered her to be a prototypic case of histrionic personality disorder. Nevertheless, it should also be noted that 19% of the clinicians preferred the diagnosis of PDNOS.

### FFM Ratings

The FFM ratings provided by the clinicians were also averaged across raters to produce a consensus FFM profile for each of the three case histories. Table 2 provides the FFM facet means and standard deviations for each case. Ted's FFM profile was characterized by low ratings on all six facets of agreeableness. Ted was also described as being very low in the anxiousness, self-

Table 2

*Five-Factor Model (FFM) Ratings for Each Case*

FFM facet	Ted		Earnst		Madeline	
	M	SD	M	SD	M	SD
Neuroticism						
Anxiousness	<u>1.49</u>	0.87	<b>4.33</b>	0.54	2.28	1.07
Angry hostility	<b>4.14</b>	1.03	3.50	0.88	3.41	0.96
Depressiveness	2.12	0.99	<b>4.07</b>	0.63	2.24	0.90
Self-consciousness	<u>1.38</u>	0.84	<b>4.54</b>	0.58	<u>1.28</u>	0.68
Impulsivity	2.84	1.40	<u>1.85</u>	0.79	<b>4.08</b>	0.89
Vulnerability	<u>1.58</u>	0.82	3.76	0.84	<u>2.00</u>	0.94
Extraversion						
Warmth	<u>1.95</u>	1.13	<u>1.84</u>	0.59	2.26	0.93
Gregariousness	3.45	1.23	<u>1.47</u>	0.73	<b>4.56</b>	0.66
Assertiveness	<b>4.08</b>	1.06	<u>1.60</u>	0.57	<b>4.69</b>	0.65
Activity	<b>4.10</b>	0.67	<u>2.00</u>	0.67	<b>4.72</b>	0.62
Excitement seeking	<b>4.38</b>	0.78	<u>1.52</u>	0.67	<b>4.74</b>	0.59
Positive emotions	3.11	0.95	<u>1.69</u>	0.59	<b>4.19</b>	0.72
Openness						
Fantasy	3.03	1.25	<b>4.07</b>	0.86	2.65	1.02
Aesthetics	3.22	1.13	3.00	0.86	2.82	0.91
Feelings	2.08	1.11	2.59	1.10	2.15	0.79
Actions	3.85	1.08	2.79	1.10	<b>4.14</b>	0.82
Ideas	3.88	1.13	3.14	1.06	3.19	0.81
Values	2.75	1.18	<u>1.93</u>	0.81	<b>4.28</b>	0.90
Agreeableness						
Trust	<u>1.71</u>	0.74	<u>1.88</u>	0.76	2.14	0.73
Straightforwardness	<u>1.16</u>	0.58	3.01	0.66	<u>1.77</u>	0.98
Altruism	<u>1.27</u>	0.53	2.85	0.59	2.22	1.09
Compliance	<u>1.88</u>	0.90	3.27	0.84	<u>1.69</u>	0.63
Modesty	<u>1.40</u>	0.70	3.83	0.95	<u>1.27</u>	0.50
Tender-mindedness	<u>1.25</u>	0.60	3.13	0.72	<u>1.60</u>	0.61
Conscientiousness						
Competence	<b>4.33</b>	0.60	3.71	0.71	<b>4.35</b>	0.66
Order	<b>4.48</b>	0.60	3.64	0.73	3.64	0.81
Dutifulness	3.36	1.07	3.71	0.68	3.00	0.97
Achievement striving	<b>4.00</b>	0.88	3.75	0.90	<b>4.74</b>	0.55
Self-discipline	3.41	1.20	3.69	0.84	3.51	1.00
Deliberation	3.93	0.87	3.97	0.84	2.24	0.78

Note Means are based on a 1–5 scale. Facets with means of 4 or greater are in boldface, and facets with means of 2 or less are underlined to indicate characteristic traits.

consciousness, and vulnerability facets of neuroticism as well as in the warmth facet of extraversion. The clinicians also rated him high in angry hostility; high on the extraversion facets of assertiveness, activity, and excitement seeking; and high on the conscientiousness facets of competence, order, and achievement striving. The FFM description of Ted can be correlated with the FFM descriptions of prototypic cases of *DSM-IV* personality disorders obtained by Samuel and Widiger (2004). The highest absolute intraclass correlations for Ted were with the narcissistic and antisocial personality disorders (.72 and .64, respectively), consistent with the *DSM-IV* diagnoses that were provided by the clinicians. However, the correlations with the schizoid and borderline prototypes were only .21 and -.04, respectively, perhaps inconsistent with the frequency with which these *DSM-IV* diagnoses were provided.

The clinicians rated Earnst as being very low on all six facets of extraversion as well as low on impulsivity, openness to values, and trust. He was also quite high on the neuroticism facets of anxiousness, depressiveness, and self-consciousness as well as the openness facet of fantasy. Earnst's FFM profile correlated most highly with the prototypic profiles for the avoidant (.88), schizoid (.71), and schizotypal (.70) personality disorders, consistent with the *DSM-IV* diagnoses that were provided by the clinicians.

The consensus FFM ratings for Madeline included very high scores on gregariousness, assertiveness, activity, excitement seeking, and positive emotionality on the extraversion domain. Madeline was also described as low on the agreeableness facets of straightforwardness, modesty, compliance, and tender-mindedness. Within the neuroticism domain, Madeline was rated as low on the facets of self-consciousness and vulnerability as well as high on the facet of impulsivity. Finally, the clinicians rated her as high on the conscientiousness facets of competence and achievement striving. Madeline's FFM profile correlated most highly with the prototypic profile for a narcissistic personality disorder (.74), consistent with the clinicians' use of this *DSM-IV* diagnosis, but it did not correlate highly with the prototypic profiles for the histrionic (.29) or the borderline (.31) personality disorders that were also frequently diagnosed by the clinicians.

### Clinical Utility

The primary variables under investigation in this study were the judgments of clinical utility provided by the clinicians for the *DSM-IV* and the FFM. Table 3 presents the ratings of both the *DSM-IV* and FFM systems on the six clinical utility variables for each case. Analyses of the utility variables were first conducted using a 3 (case)  $\times$  2 (model) mixed multivariate analysis of variance, with the two models treated as repeated measures. Significant main effects were found for model,  $F(6, 235) = 57.13$ ,  $p < .001$ , and for case,  $F(12, 470) = 1.78$ ,  $p = .049$ . There was no interaction between case and model,  $F(12, 470) = 1.16$ ,  $p = .31$ . Post hoc tests were conducted using a Bonferroni correction.

For Ted, there were no significant differences between the models with respect to the clinicians' ratings of the ease of application or the usefulness for professional communication. However, as shown in Table 3, there was a significant difference in favor of the FFM on the remaining four aspects of clinical utility. The clinicians rated the FFM as more useful for communicating information to clients or other laypersons,  $F(1, 72) = 57.03$ ,  $p < .001$ .

Table 3  
*Clinical Utility Ratings for the Cases of Ted, Earnst, and Madeline*

Clinical utility variable	<i>DSM-IV</i>		FFM		<i>F</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Ted ( <i>dfs</i> = 1, 72)						
Ease of application	3.3	0.9	3.5	0.9	1.38	0.20
Professional communication	3.4	1.0	3.4	1.0	0.03	0.03
Global personality description	2.9	1.0	3.5	1.0	8.42*	0.54
Client communication	2.3	0.9	3.5	1.2	57.03**	1.16
Comprehensive of difficulties	2.8	0.9	3.6	1.0	24.20**	0.87
Treatment planning	2.8	1.1	3.2	1.1	8.10*	0.54
Earnst ( <i>dfs</i> = 1, 93)						
Ease of application	3.3	0.9	3.4	0.8	0.88	0.14
Professional communication	3.3	0.8	3.6	0.9	7.51*	0.33
Global personality description	3.0	1.0	3.6	0.9	19.88**	0.65
Client communication	2.4	1.1	3.9	0.9	128.04**	1.54
Comprehensive of difficulties	2.7	0.8	3.7	0.8	55.63**	1.11
Treatment planning	2.9	0.9	3.7	0.9	49.76**	0.87
Madeline ( <i>dfs</i> = 1, 77)						
Ease of application	3.4	0.8	3.4	0.7	0.00	0.00
Professional communication	3.3	0.7	3.5	0.5	2.86	0.31
Global personality description	2.9	0.9	3.4	0.9	8.46*	0.55
Client communication	2.4	0.9	3.7	0.8	102.54**	1.64
Comprehensive of difficulties	2.7	0.8	3.5	0.8	30.28**	0.97
Treatment planning	2.8	1.0	3.3	0.9	13.21**	0.55

Note. *DSM-IV* = *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.); FFM = five-factor model.

\*  $p < .01$ . \*\*  $p < .001$ .

The FFM was also rated significantly higher than the *DSM-IV* in terms of the model's ability to adequately describe all of the individual's important personality difficulties,  $F(1, 72) = 24.21$ ,  $p < .001$ , and for providing a global personality description,  $F(1, 72) = 8.42$ ,  $p = .005$ . Finally, the clinicians' mean ratings were also greater for the FFM with respect to the utility of the model for making treatment decisions,  $F(1, 72) = 8.10$ ,  $p = .006$ .

Clinicians' ratings of clinical utility followed a similar pattern for Earnst, with one exception. There was again no significant difference between the *DSM-IV* and FFM ratings in terms of ease of application. The clinicians again rated the FFM as having significantly greater utility than the *DSM-IV* in terms of communication with their clients, comprehensive description of the individual's important personality difficulties, treatment planning, and global personality description (see Table 3). The one deviation from the findings obtained for Ted was that the clinicians also rated the FFM as more useful than the *DSM-IV* for communicating information about Earnst to other mental health professionals,  $F(1, 91) = 7.51$ ,  $p = .007$ .

For Madeline, the differences between the utility of the FFM and the *DSM-IV* were again not significant for ease of application or for professional communication (see Table 3). The results for Madeline with respect to global personality description, communication with clients, comprehensive inclusion of important personality difficulties, and treatment planning again favored the FFM.

Averaged across the three cases, the six utility ratings for the FFM correlated positively with one another, ranging from .38 between ease of application and communication with client to .63 between comprehensive description and treatment decision. The six utility ratings for the *DSM-IV* also correlated positively with one another, ranging from .38 between communication with client and communication with another professional to .69 between comprehensive description and treatment decision. However, the FFM utility ratings were uncorrelated with the *DSM-IV* utility ratings in all but a few instances, and no significant correlations were obtained when control for experimentwise error was considered.

The averaged utility ratings were also correlated with demographic characteristics, including model familiarity. No significant correlations were obtained with gender, academic degree, theoretical orientation, or degree of clinical experience when averaged across all six utility questions. The only significant correlation of the mean utility rating for either model was between mean *DSM-IV* utility and familiarity with the *DSM-IV* nomenclature ( $r = .26, p < .001$ ). In other words, the more familiarity a clinician had with the *DSM-IV* nomenclature, the higher utility rating he or she provided for the *DSM-IV* nomenclature (however, inclusion of familiarity as a covariate in the multivariate analysis of variance for model did not alter the statistical significance of the results;  $F[6, 232] = 4.32, p < .001$ ). Familiarity with the FFM did not correlate significantly with the participants' perception of the utility of the FFM ( $r = .057, p > .05$ ) nor with their perception of the utility of the *DSM-IV* ( $r = .038, p > .05$ ).

### Discussion

The practicing psychologists in this sample were generally able to apply both the FFM and *DSM-IV* in consistent ways. Reliability for both models can be considered adequate to good and remained this way across all three cases and across most methods with which agreement was calculated. The significant finding of this study is that the FFM was consistently rated higher than the *DSM-IV* model in terms of four of the six aspects of clinical utility. The clinicians rated the FFM as significantly more useful with respect to its ability to provide a global description of the individual's personality, to communicate information to clients, to encompass all of the individual's important personality difficulties, and to assist the clinician in formulating effective treatment interventions. A potential understanding of these findings will be first discussed, followed by a consideration of one of the three case histories as an illustration.

#### *Clinical Utility of the FFM and the DSM-IV*

An aspect of clinical utility that one might expect the FFM to have an advantage over the *DSM-IV* is providing a description of an individual's global personality. The FFM was constructed to provide a reasonably thorough, comprehensive personality description (Costa & McCrae, 1992; John & Srivastava, 1999). This has never been the intention of the *DSM* personality disorder nomenclature, which has explicitly excluded normal and adaptive personality traits. Official diagnostic nomenclatures used in some other countries, however, have included normal, adaptive personality traits (e.g., Cuba and China). The broader coverage provided by the FFM may indeed prove to be a clinically useful advantage.

The inclusion of adaptive personality traits would allow for the provision of a more comprehensive description of a patient's entire personality functioning, would facilitate an integration of the diagnostic manual with basic science research on general personality structure, and might help identify personality traits that contribute to treatment responsiveness (Widiger & Simonsen, 2005).

Given the historical foundation of the FFM through studies of the common trait terms within the English language (Ashton & Lee, 2001), it is perhaps also not surprising that the FFM was rated as more useful for communicating information to laypersons such as clients or their families. The terms and constructs that describe the domains (e.g., extraversion) and the facets (e.g., achievement striving) are more familiar and easily understood by laypersons than the professional constructs of the *DSM-IV* nomenclature (e.g., histrionic, identity disturbance). This potential advantage of the FFM is not trivial (First et al., 2004). A system that is more readily understood and conceptualized by a client might be beneficial for establishing rapport and treatment engagement. Additionally, a nomenclature that uses familiar concepts might help to decrease some of the stigma that is often attached to mental disorders and personality disorders in particular (Schacht, 1985; Widiger, 2003).

A somewhat surprising result, however, might be the higher ratings for the FFM in terms of comprehensively describing all of the individual's important personality problems. Concerns have been raised regarding the effectiveness of the FFM for describing all of the aspects and nuances of a patient's personality disorder (Benjamin, 1993; Shedler & Westen, 2004; Zanarini, Frankenburg, Hennen, Reich, & Silk, 2005). This concern was supported by the results of Sprock (2003), who reported that the *DSM-IV* categorical system was more useful than the FFM for case conceptualization. In contrast, the current study found that the clinicians considered the FFM to be much more useful for conceptualization of the patient's personality problems.

The inconsistency with the findings of Sprock (2003) is probably due to the use of vignettes that were not written in terms of the *DSM* diagnostic criteria as well as the inclusion of all 30 facets of the FFM. It seems likely that the inclusion of the 30 facets, as opposed to the five broad domains, would have the effect of improving the model's utility for comprehensively describing an individual's important difficulties (although in turn potentially decreasing ease of usage). In addition, the vignettes of the current study used the descriptions and language provided within the original source materials rather than being confined to sentences describing individual diagnostic criteria.

The higher rating for case conceptualization is also consistent with prior studies that have indicated that the existing nomenclature is inadequate in its coverage of maladaptive personality traits, as suggested by the clinical survey of Westen and Arkowitz-Western (1997) and the popularity of the PDNOS diagnosis in clinical practice (Verheul & Widiger, 2004). The real life cases of Ted, Earnst, and Madeline would meet criteria for one of the existing diagnoses, but the clinicians indicated that these persons met criteria for multiple diagnoses, and many of the clinicians preferred the diagnosis of PDNOS for Earnst and Madeline. Systematic reviews of the research literature have concluded that the existing personality disorder symptomatology can be accounted for by the domains and facets of the FFM (Livesley, 2001a; O'Connor, 2005; Saulsman & Page, 2004; Trull & Durrett, 2005; Widiger & Costa, 2002). Prior studies have also indicated that

clinicians can effectively use the FFM to describe personality disorders (e.g., Blais, 1997; Samuel & Widiger, 2004; Sprock, 2002). The FFM may have an additional advantage in being able to provide a more individualized profile description of the personality problems of Ted, Earnst, and Madeline without resorting to the cumbersome practice of multiple diagnoses or assigning a PDNOS classification.

Perhaps the most surprising finding of the current study was that the clinicians considered the FFM descriptions to be more useful in helping them to formulate an effective treatment plan. The clinicians indicated that they were moderately or very familiar with the *DSM-IV* nomenclature, and it is likely that they had been trained with the *DSM* system. In addition, it also seems likely that many of the clinicians would have been familiar with at least one of the many published texts on the treatment of the *DSM-IV* personality disorders (e.g., Beck et al., 2003; Benjamin, 2002). In contrast, the clinicians indicated that they were only vaguely familiar with the FFM, and it is less likely that they were familiar with any of the chapters or articles concerning the clinical or treatment applications of the FFM (e.g., Sanderson & Clarkin, 2002). Nevertheless, they still considered the FFM to be more useful for formulating an effective intervention.

The results of the current study are perhaps consistent with the suggestion of Livesley (2003) and Verheul (2005) that the clinical utility of the *DSM-IV* personality disorder categories could be a myth. A presumption that clinicians find the personality disorder diagnostic categories to be useful in guiding them toward treatment selection and intervention techniques might not be entirely accurate. Maser, Kaelber, and Weise (1991) conducted an international survey of psychologists and psychiatrists concerning their attitudes and opinions regarding the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.; American Psychiatric Association, 1980) and the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; American Psychiatric Association, 1987). They reported that "personality disorders led the list of diagnostic categories with which respondents were dissatisfied" (p. 275). Toward the end of the survey, they also provided an open-ended opportunity for the clinicians to write in the section of the diagnostic manual that was most in need of revision; 35% of the sample chose to write in personality disorders, which again led the list. Maser and colleagues did not include questions in their survey to indicate precisely why the clinicians were so dissatisfied with the personality disorders section, nor did the current study ask clinicians why they found the FFM descriptions to be more helpful for making treatment decisions. However, a few respondents did provide unsolicited statements in the margins of the utility questionnaire. For instance, Subject 192 wrote, "I prefer describing people rather than categories," and Subject 247 wrote, "Just filling this [clinical utility form] out helped me to realize how inadequate *DSM* really is." The potential utility of the FFM for describing personality disorder can perhaps be illustrated by examining in greater detail one of the three case vignettes.

#### Case Illustration: Ted

Eighty percent of the clinicians in this study considered Ted to be a prototypic case of antisocial personality disorder. However, prototypic cases would be persons who meet all of the diagnostic criteria and fail to have significant features of other disorders

(Cantor & Genero, 1986). In contrast, many of the clinicians also judged Ted to meet *DSM-IV* criteria for the narcissistic (95%), borderline (52%), and even schizoid (56%) personality disorders. It is even questionable whether one would conclude that Ted meets all of the antisocial diagnostic criteria. Criterion 3 requires that the individual must evidence "impulsivity or failure to plan ahead" (American Psychiatric Association, 2000, p. 706). Given the meticulous planning and careful execution that characterized the vast majority of Ted's murders and the fact that he functioned quite well in his professional life, it is not apparent that this criterion fits Ted. Criterion 6 requires "consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial commitments" (American Psychiatric Association, 2000, p. 706). Again, there is nothing from Ted's history that suggests any such difficulties occupationally or financially. On the contrary, his employers and close associates described him as being quite competent and responsible (Kendall, 1981; Rule, 2001). Consistent with these traits, Ted was described by the clinicians in terms of the FFM as being relatively high within the domain of conscientiousness, particularly the facets of competence, order, achievement striving, and deliberation. These are strengths of Ted that are integral to fully understanding and characterizing his personality structure (perhaps contributing to his avoidance of arrest for many years). Ted's high standing on these FFM personality traits helps differentiate him from a prototypic case of antisocial personality disorder. Ted's FFM profile did correlate with the antisocial FFM prototype from Samuel and Widiger (2004), but the magnitude of this correlation fell appreciably below an indication that Ted would represent a prototypic case. The prototypic antisocial person was described by the clinicians surveyed by Samuel and Widiger and by the antisocial personality disorder researchers surveyed by Lynam and Widiger (2001) as being very low on the conscientiousness facets of dutifulness, self-discipline, and deliberation.

The finding that Ted was considered to be a prototypic case of antisocial personality disorder by 80% of the clinicians is illustrative of a common problem with the categorical method of diagnosis. "There is a tendency, once having categorized, to exaggerate the similarity among nonidentical stimuli by overlooking within-group variability, discounting disconfirming evidence, and focusing on stereotypic examples" (Cantor & Genero, 1986, p. 235). In contrast, the FFM dimensional profile of Ted includes his antisocial personality traits (e.g., duplicity, exploitation, callousness, and aggression from the domain of antagonism), his maladaptive traits not represented within the antisocial criterion set (e.g., low anxiousness, arrogance, and even his glib charm as indicated by low self-consciousness), and his normal or adaptive personality traits not included anywhere within *DSM-IV* (e.g., his assertiveness, competence, order, and achievement striving).

The clinicians' perception of Ted as a prototypic case of antisocial personality disorder might reflect the fact that he is one of the most well-known and heinous cases of antisocial personality disorder, involving vicious and brutal rapes and murders of at least 36 women. These ferocious crimes were clearly facilitated, at least in part, by his personality traits, but perhaps it should be considered that they might also represent additional psychopathology beyond a personality disorder. Ted has been described by some biographers (e.g., Rule, 2001) as having significant paraphilic impulses as an adolescent, including quite a few episodes of voyeurism (e.g., surreptitiously peeping into the windows of fe-



males in his neighborhood) and even more wicked fantasies. He is said to have struggled during this time with constraining these impulses, trying to control and suppress them, but at other times using alcohol as a means with which to disinhibit his constraint. There are also reports that Ted, as an adult, engaged in necrophilic behavior with some of his victims' corpses (Rule, 2001). Serial rape and murder are not inherent to an antisocial personality disorder, and perhaps Ted should also be diagnosed with a paraphilia on Axis I. Ted's final acts of sexual sadism were in fact more extreme and dyscontrolled than the vast majority that had preceded them (e.g., the rape and murder of a 12-year-old girl and the bloody slayings of four female college students within a sorority house). In that respect, the last few murders could even be said to be out of character for Ted, as they were more impulsive and poorly planned.

### *Limitations and Future Research*

The results of the current study support the potential clinical utility of the FFM relative to the existing *DSM-IV* categories, even when the latter are rated dimensionally. The higher ratings obtained for the FFM by experienced clinicians who were very familiar with the *DSM-IV* nomenclature were replicated across three different case vignettes that summarized the life histories of actual persons who had clinically significant personality disorder symptomatology.

A potential limitation of the current study was that the assessment of clinical utility relied solely on the opinions of clinicians. The subjective opinions of experienced clinicians who are actively engaged in applied practice do provide relevant information concerning clinical utility, particularly with respect to concerns regarding user acceptability (First et al., 2004; Rounsaville et al., 2002). Nevertheless, it is possible that the FFM would in fact be less useful in communication, conceptualization, and treatment planning than the clinicians suggested in the current study.

An alternative approach to assessing clinical utility would be to obtain more behavioral outcome measures (First et al., 2004). For example, utility for communication with clients could be assessed by providing to novice clients a description of their personality disorder in terms of the FFM and the *DSM-IV* and then asking them which they found to be more helpful or useful in understanding themselves. Utility for communication with other professionals could be assessed by providing clinicians with FFM and *DSM-IV* conceptualizations of the same case and then asking them which was more useful as a treatment referral.

The reliability of the *DSM-IV* and FFM ratings obtained in the current study do not provide an accurate estimate of the reliability of the *DSM-IV* and FFM assessments that would be obtained in general clinical practice, as the assessments in the current study were confined to a consideration of a 1.5-page case vignette. A more ecologically valid approach would be to ask clinicians to apply the FFM and the *DSM-IV* to an actual client using alternative methods of assessments that are routinely used (e.g., unstructured clinical interview, self-report inventory, and/or semistructured interview).

One could also ask clinicians to apply the *DSM-IV* and the FFM to an existing client who has already been diagnosed with a respective *DSM-IV* personality disorder. However, a limitation of this approach is that not only would the clinicians have already

been trained in terms of the language and concepts of the *DSM-IV* but he or she would have already developed a conceptualization of that particular patient in terms of the *DSM-IV*. A variation of this design would be to apply both models to a new case, although one would still have the problem that the participants would have already been trained to conceptualize personality disorders in terms of the *DSM-IV*. A more informative study might be to sample novice clinicians in training who do not yet have an established diagnostic conceptualization.

Future research should also be expanded to include participants from other mental health professions concerned with the treatment or assessment of personality disorders, such as psychiatrists and social workers. The current study was confined to a sample of psychologists. A common perception is that psychiatrists are more comfortable with a categorical model of classification, whereas psychologists are more comfortable with a dimensional model (e.g., Frances, 1993; Gunderson, Links, & Reich, 1991). However, there has not yet in fact been an explicit test of this assumption. It is also possible that the psychologists who volunteered to participate in this study were those who were particularly favorable toward the FFM. Inconsistent with this hypothesis was the finding that most of the psychologists indicated that they were unfamiliar with the FFM, and familiarity was uncorrelated with their ratings of clinical utility. Alternatively, it is possible that the psychologists who volunteered to participate in this study were those who were especially critical of or even antagonistic toward *DSM-IV*. Inconsistent with this interpretation is that utility ratings for *DSM-IV* were generally favorable (see Table 3). Nevertheless, in future studies, it would be useful to obtain information on general attitudes toward *DSM-IV* and the categorical (vs. dimensional) model of classification.

The current study was confined to a comparison of the *DSM-IV* and the FFM. It would also be of interest for future clinical utility studies to include additional dimensional models of personality disorder, such as those proposed by Clark, Simms, Wu, and Casillas (in press), Livesley (2003), Shedler and Westen (2004), and others. It is quite possible that one or more of these other dimensional models would also obtain higher clinical utility ratings than the *DSM-IV* and/or the FFM. It would be especially informative for such studies to identify the specific component(s) of the alternative models that are the source of any higher or lower clinical utility ratings. The alternative dimensional models of personality disorder overlap substantially in their coverage of maladaptive personality functioning (Markon, Krueger, & Watson, 2005; Widiger & Mullins-Sweatt, 2005), and it is quite feasible that each model and the components of each model have particular advantages and disadvantages. If future editions of the diagnostic manual include a dimensional model of personality disorder, the decision might not be to simply choose one model in preference to all of the alternatives. Instead, the optimal choice might instead be an integrated representation of the particular strengths of the various models (Widiger & Simonsen, 2005).

### *Conclusions*

Reservations and even skepticism regarding the clinical utility of the FFM have been expressed. Such reservations are reasonable given the lack of familiarity of most clinicians with the FFM and the limited amount of clinical literature describing its application.

In addition, there has been only one published study that has addressed explicitly its clinical utility, and the findings were quite negative (Sprock, 2003). The results of the current study, however, suggest that clinicians find the FFM personality descriptions to have significantly greater clinical utility than the *DSM-IV* personality disorder diagnoses with respect to the provision of a global personality description, communication with clients and relatives, a comprehensive description of important personality problems, and even treatment planning. The findings are promising and indicate that the FFM may have potential to increase the clinical utility of the diagnostic manual. Nevertheless, there are now only two published FFM clinical utility studies, and additional research is needed to further address the inconsistencies between the findings of Sprock (2003) and the current study as well as to further explore the potential advantages of the FFM and additional alternative dimensional models of personality disorder.

### References

- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Ashton, M. C., & Lee, K. (2001). A theoretical basis for the major dimensions of personality. *European Journal of Personality, 15*, 327–353.
- Axelrod, S. R., Widiger, T. A., Trull, T. J., & Corbitt, E. M. (1997). Relations of Five-Factor Model antagonism facets with personality disorder symptomatology. *Journal of Personality Assessment, 69*, 297–313.
- Beck, A. T., Freeman, A., & Davis, D. D. (2003). *Cognitive therapy of personality disorders* (2nd ed.). New York: Guilford Press.
- Benjamin, L. S. (1993). Dimensional, categorical, or hybrid analyses of personality: A response to Widiger's proposal. *Psychological Inquiry, 4*, 91–95.
- Benjamin, L. S. (2002). *Interpersonal diagnosis and treatment of personality disorders* (2nd ed.). New York: Guilford Press.
- 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., Sprock, J., Pinkston, K., & Hodgins, J. (1985). Exemplar prototypes of personality disorder diagnoses. *Comprehensive Psychiatry, 26*, 11–21.
- Cantor, N., & Genero, N. (1986). Psychiatric diagnosis and natural categorization: A close analogy. In T. Millon & G. Klerman (Eds.), *Contemporary directions in psychopathology* (pp. 233–256). New York: Guilford Press.
- Clark, L. A. (2005). Temperament as a unifying basis for personality and psychopathology. *Journal of Abnormal Psychology, 114*, 505–521.
- Clark, L. A., Simms, L. J., Wu, K. D., & Casillas, A. (in press). *Manual for the Schedule for Nonadaptive and Adaptive Personality (SNAP-2)*. Minneapolis: University of Minnesota Press.
- Cloninger, C. R., & Svrakic, D. (1999). Personality disorder. In B. Sadock & H. Kaplan (Eds.), *Comprehensive textbook of psychiatry* (7th ed., pp. 1567–1588). Baltimore: Williams & Wilkins.
- 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.
- First, M. B. (2005). *DSM-V prelude project: Research and outreach. Psychiatric Research Report, 21*.
- First, M. B., Pincus, H. A., Levine, J. B., Williams, J. B. W., Ustun, B., & Peele, R. (2004). Clinical utility as a criterion for revising psychiatric diagnoses. *American Journal of Psychiatry, 161*, 946–954.
- Frances, A. J. (1993). Dimensional diagnosis of personality: Not whether, but when and which. *Psychological Inquiry, 4*, 110–111.
- Frances, A. J., Widiger, T. A., & Pincus, H. A. (1989). The development of *DSM-IV*. *Archives of General Psychiatry, 46*, 373–375.
- Gunderson, J. G., Links, P. S., & Reich, J. H. (1991). Competing models of personality disorders. *Journal of Personality Disorders, 5*, 60–68.
- 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 Press.
- Kendall, E. (1981). *The phantom prince: My life with Ted Bundy*. New York: Madrona.
- Krueger, R. F., Markon, K., Patrick, C., & Iacono, W. (2005). Externalizing psychopathology in adulthood: A dimensional-spectrum conceptualization and its implications for *DSM-V*. *Journal of Abnormal Psychology, 114*, 537–550.
- Livesley, W. J. (2001a). Conceptual and taxonomic issues. In W. J. Livesley (Ed.), *Handbook of personality disorders: Theory, research, and treatment* (pp. 3–38). New York: Guilford Press.
- Livesley, W. J. (Ed.). (2001b). *Handbook of personality disorders: Theory, research, and treatment*. New York: Guilford Press.
- 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.
- Markon, K. E., Krueger, R. F., & Watson, D. (2005). Delineating the structure of normal and abnormal personality: An integrative hierarchical approach. *Journal of Personality and Social Psychology, 88*, 139–157.
- Maser, J. D., Kaelber, C., & Weise, R. D. (1991). International use and attitudes toward *DSM-III* and *DSM-III-R*: Growing consensus in psychiatric classification. *Journal of Abnormal Psychology, 100*, 271–279.
- McAdams, D. P. (2003). Personological assessment: The life story of Madeline G. In J. S. Wiggins (Ed.), *Paradigms of personality assessment* (pp. 213–225). New York: Guilford Press.
- McQueen, L. (2000). Committee on Psychiatric Diagnosis and Assessment update on publications and activities. *Psychiatric Research Report, 16*, 3.
- Meyer, R. G. (2006). *Case studies in abnormal behavior* (7th ed.). Boston: Allyn & Bacon.
- Mullins-Sweatt, S., & Widiger, T. A. (in press). The five-factor model of personality disorder: A translation across science and practice. In R. Krueger & S. Tackett (Eds.), *Personality and psychopathology: Building bridges*. New York: Guilford Press.
- Murray, H. A. (1938). *Explorations in personality*. New York: Plenum Press.
- O'Connor, B. P. (2005). A search for consensus on the dimensional structure of personality disorders. *Journal of Clinical Psychology, 61*, 323–345.
- Oldham, J., Skodol, A., & Bender, D. (Eds.). (2005). *Textbook of personality disorders*. Washington, DC: American Psychiatric Press.
- Oltmanns, T. F., & Emery, R. E. (2004). *Abnormal psychology* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Rounsaville, B. J., Alarcon, R. D., Andrews, G., Jackson, J. S., Kendell, R. E., & Kendler, K. (2002). Basic nomenclature issues for *DSM-V*. In D. J. Kupfer, M. B. First, & D. A. Regier (Eds.), *A research agenda for DSM-V* (pp. 1–29). Washington, DC: American Psychiatric Association.
- Rule, A. (2001). *A stranger beside me*. New York: Signet.
- Samuel, D. B., & Widiger, T. A. (2004). Clinicians' personality descrip-

- tions of prototypic personality disorders. *Journal of Personality Disorders*, 18, 286–308.
- Sanderson, C., & Clarkin, J. F. (2002). Further use of the NEO-PI-R personality dimensions in differential treatment planning. In P. T. Costa Jr. & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (2nd ed., pp. 351–375). Washington, DC: American Psychological Association.
- Saulsman, L. M., & Page, A. C. (2004). The five-factor model and personality disorder empirical literature: A meta-analytic review. *Clinical Psychology Review*, 23, 1055–1085.
- Schacht, T. E. (1985). *DSM-III* and the politics of truth. *American Psychologist*, 40, 513–521.
- Shedler, J., & Westen, D. (2004). Refining personality disorder diagnosis: Integrating science and practice. *American Journal of Psychiatry*, 161, 1350–1365.
- Spitzer, R. L., Gibbon, M., Skodol, A. E., Williams, J. B. W., & First, M. B. (1989). *DSM-III-R casebook*. Washington, DC: American Psychiatric Press.
- 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*, 5, 402–423.
- Sprock, J. (2003). Dimensional versus categorical classification of prototypic and nonprototypic cases of personality disorder. *Journal of Clinical Psychology*, 59, 991–1014.
- Strack, S. (2005). An integrationist perspective on personality assessment. *Journal of Personality Assessment*, 84, 105–107.
- Trobst, K. K., & Wiggins, J. S. (2003). Constructive alternativism in personality assessment: Madeline G from multiple perspectives. In J. S. Wiggins (Ed.), *Paradigms of personality assessment* (pp. 296–324). New York: Guilford Press.
- Trull, T. J., & Durrett, C. A. (2005). Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology*, 1, 355–380.
- Verheul, R. (2005). Clinical utility of dimensional models for personality pathology. *Journal of Personality Disorders*, 19, 283–302.
- Verheul, R., & Widiger, T. A. (2004). A meta-analysis of the prevalence and usage of the personality disorder not otherwise specified (PDNOS) diagnosis. *Journal of Personality Disorders*, 18, 309–319.
- Watson, D. (2005). Rethinking the mood and anxiety disorders: A symptom-based hierarchical model. *Journal of Abnormal Psychology*, 114, 522–536.
- Westen, D., & Arkowitz-Westen, L. (1997). Limitations of Axis II in diagnosing personality pathology in clinical practice. *American Journal of Psychiatry*, 155, 1767–1771.
- Widiger, T. A. (2003). Personality disorder and Axis I psychopathology: The problematic boundary of Axis I and Axis II. *Journal of Personality Disorders*, 17, 90–108.
- Widiger, T. A., & Costa, P. T., Jr. (2002). Five-Factor model personality disorder research. In P. T. Costa & T. A. Widiger (Eds.), *Personality disorders and the five-factor model of personality* (2nd ed., pp. 59–87). Washington, DC: American Psychological Association.
- Widiger, T. A., & Mullins-Sweatt, S. N. (2005). Categorical and dimensional models of personality disorder. In J. Oldham, A. Skodol, & D. Bender (Eds.), *Textbook of personality disorders* (pp. 35–56). Washington, DC: American Psychiatric Press.
- Widiger, T. A., & Samuel, D. B. (2005). Diagnostic categories or dimensions? A question for the *Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition*. *Journal of Abnormal Psychology*, 114, 494–504.
- Widiger, T. A., & Simonsen, E. (2005). Alternative dimensional models of personality disorder: Finding a common ground. *Journal of Personality Disorders*, 19, 110–130.
- Widiger, T. A., Simonsen, E., Krueger, R. F., Livesley, W. J., & Verheul, R. (2005). Personality disorder research agenda for *DSM-V*. *Journal of Personality Disorders*, 19, 315–338.
- Wiggins, J. S. (2003). *Paradigms of personality assessment*. New York: Guilford Press.
- Zanarini, M. C., Frankenburg, F. R., Hennen, R., Reich, D. B., & Silk, K. R. (2005). The McLean Study of Adult Development (MSAD): Overview and implications of the first six years of prospective follow-up. *Journal of Personality Disorders*, 19, 505–523.

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