PART I

New Directions in MCMI Interpretation
The Millon Clinical Multiaxial Inventory-III (MCMI-III) possesses multiple levels of information regarding the structure of personality that is accessible via rational and empirical means. A recent study by the first author (Grossman, 2004) examined the MCMI-III for its potential to support facet subscales intrinsically tied to Millon’s (1990) evolutionary theory, the guiding framework for the development of the original instrument. Rational examination of the 14 personality scale item pools sought a reflection of the theory’s specifications regarding eight functional and structural domains of personality. Each personality pattern, according to the theory, is predicted to present most saliently with two to three of the eight personologic domains; the aforementioned analysis proposes 35 facet subscales for the MCMI-III that coincide with personologic domains predicted by the theory and demonstrate sufficient internal consistency to be applied as supportive, clinical hypothesis-building subscales for the MCMI-III. This chapter examines the proposed facet subscales to be published in an upcoming MCMI-III revision and discusses implications for their utilization in personality assessment, treatment planning, and intervention.

Psychologists and other mental health professionals carry a burden never before seen in their treatment settings. Since the advent of managed care, clinicians have become overloaded with short-term patients, rapid turnover, and less clock time in which to assess and interact with a given patient. While the merits of such trends are dubious at best, it is clear that for some time to come, this unprecedented onus on practitioners will continue. Further, accountability for clinical time has moved to the forefront as a result of third-party insurers’ interest in controlling health care costs. What may be useful is a methodology that affords the practitioner
greater power and efficiency in assessing multiple facets of a patient’s need, without a concurrent sacrifice in quality of care. In short, the need for economical clinical specificity has never been greater.

The MCMI-III’s primary measurement scales may be described as multifaceted psychological constructs adhering to principles of Millon’s (1990) evolutionary theory, demonstrating both construct and content validity consonant not only with the overarching theory, but with DSM-IV-TR (American Psychiatric Association, 2000) diagnostic categories as well. In itself, the test is quite parsimonious and pragmatic, but there are even finer distinctions that can be made that hierarchically fit under its constructs. This chapter examines the theoretical underpinnings of the proposed Grossman Facet Subscales of the MCMI-III, to be published in the upcoming revision of the instrument.

Millon and Davis (1997), in commenting on historical and future developments of the MCMI and other Millon instruments, encouraged researchers and clinicians using the MCMI-III to view the instrument as a constantly evolving entity that will continue to undergo revisions and development as the field’s knowledge base expands and modifies. Further, they lament that although the instrument is, in fact, capable of discriminating subtypes (admixtures of personality styles), the current categorical approach of the DSM limits its ability to do this in a clean manner, often yielding a confusing array of elevated scales. It is their hope that future DSMs will yield a more dimensional approach congruent with the intent of Millon’s evolutionary theory and that future incarnations of the MCMI will further reflect this. Congruent with their call to further explore the instrument’s more molecular elements, the new facet subscales seek to reflect fundamental facets of personality that may be clinically useful.

Indeed, working on a more molecular level than the instrument’s original scales (which, in most cases, are construct scales), content subscales allow test administrators to examine underlying dimensions and latent facets at a level of detail beyond the scope of the original test design. Also, content scales are developed from the original test’s item pool in a post hoc manner; as a consequence, the development of content scales presents a substantial opportunity for clinical gain without detracting in any manner from the original instrument’s design.

THE MCMI AND MILLON’S EVOLUTIONARY THEORY

Millon’s evolutionary theory of personality was first defined as a biosocial-learning theory (Millon, 1969); it has since evolved into the more comprehensive ecological-motivational theory closely related to evolutionary biology, and it now shares parallel constructs with the physical sciences.
The MCMI-III Facet Subscales

as a whole (Millon, 1990; Millon & Davis, 1996). The theory has, at its core, three polarity structures believed to be universal motivating aims shared in the animal and plant kingdoms and connected to principles found in studies of particle physics, chemistry, and cosmogony, among other natural sciences. These include a pain—pleasure (survival) polarity, an active—passive (adaptation) polarity, and a self—other (replication) polarity. These structures form the basis for this categorical and dimensional approach to personality assessment.

From these dimensions, a further deduction may be made into functional (F) and structural (S) domains of personality (Millon & Davis, 1996), each of which is represented in the individual personality styles or disorders. These eight dimensions are Expressive Acts (F), Interpersonal Conduct (F), Cognitive Style (F), Self-Image (S), Object Representations (S), Regulatory Mechanisms (S), Morphologic Organization (S), and Mood/Per-temperament (S). From here, prototypal constructs of the basic personality disorders are deduced (Choca, 1999), with prototypical features along these domains, although in reality, admixtures of several personality styles are likely to occur (e.g., antisocial personality with schizoid features). These subtypes contain an admixture of dimensional features of both prototypical constructs. From here, it is possible, after assessment, to deduce the subtype structure of the personality and address salient therapeutic concerns from a personality-oriented conceptualization of the individual (Davis, 1999; Dorr, 1999; Millon, Grossman, Meagher, Millon, & Ramnath, 2004). Items on the MCMI are derived based on the polarity scheme and expressed via the prototypical functional and structural domains.

**DEFINITION OF CONTENT SCALES**

Operationally, content scales are particularly challenging to define due to the lack of clear demarcation between the terms content and construct. In actual practice, these ideas overlap considerably, and their fine distinction may lack usefulness beyond basic pedagogical purposes. However, their direct comparison, at specific points, may help delineate differences that are essential to an understanding of the need for content subscales of a particular instrument.

The primary scales of any given psychological inventory are generally construct scales. By definition, constructs are based on a specific psychological theory (Cronbach & Meehl, 1955). Because they represent a man-made concept, they must be held to greater scientific rigor because they must demonstrate both content and construct validity. Constructs generally contain elements that may seem unrelated to each other at first glance but, according to the particular framework in question, bind together via correlation, criterion grouping, theoretical deduction, or other
methodology. As such, the elements that constitute a construct scale may not be immediately apparent to nonpsychologists who are unfamiliar with the given framework from which the construct is derived. For example, the MMPI-2’s scale 4, Psychopathic Deviate, contains subject matter dealing with family dysfunction, directed by an assumed concordance between strained family relations and the overarching construct of deviance. This MMPI-2 scale must demonstrate construct validity, delineating the relationship between these two subject areas. Constructs, thus, must be consonant with the framework and methodology of the scale’s construction, but they do not necessarily demonstrate face validity, or the ability of the layperson to recognize these connections.

This example reveals the need for a more rudimentary breakdown in assessment. While constructs are certainly useful in generating hypotheses regarding the nature of presenting clinical phenomena in relation to what has been established in psychology and mental health, it is also necessary to gain a more elucidated, contextual picture of the patient and his or her multifaceted presentation. It is not enough, for example, for the clinician to note that an individual presents with a particular, established personality “label” and is showing signs of an Axis I condition such as clinical depression. It is much more useful to inspect the many elements of this individual’s multifaceted personality style, noting the different presentation from what may be surmised based on “typical” diagnostic presentation.

Additionally, as in the previous case, it is possible that specific elements may be shared between separate theoretical constructs. Nowhere is this more evident than in the systemic, intricate area of personality and its assessment. While this polythetic quality is consonant with basic assumptions about personality (Millon, Davis, & Millon, 1997), the astute clinician must be able to make these important distinctions between disparate contents, a function that would be made more consistent with the use of content scales. In the example, family dysfunction is not an element unique to the construct measured by “psychopathic deviate” because it is certainly possible that an individual whose profile falls outside that description may acknowledge such an item. It would be safer to note this response as a member of a content scale, as represented under the subscale known as Family Discord (Harris & Lingoes, 1955, 1968).

HISTORY OF CONTENT SCALE DEVELOPMENT IN RELATED INSTRUMENTS

Content scales are rooted in a desire to make more specific and finite distinctions than are possible with an extant instrument. The most famous
and historic example of this endeavor lies with the original MMPI scales (Hathaway & McKinley, 1943), designed to predict group membership. This method frustrated clinicians, who found the underlying dimensions of each scale inconsistent, and many scale elevations and profiles seen in practice remained mysterious and ill-defined (Graham, 2000). Fortunately, the large and diverse item pool inherent in that instrument served well in the development of a number of content scales, the most famous of which are those developed by Harris and Lingoes (1955, 1968). The widely used and comprehensive Harris-Lingoes subscales represent the first major effort to systematically analyze the heterogeneous content of many of the major MMPI scales. Six of the 10 standard clinical scales considered to be most heterogeneous underwent factor analysis, yielding between three and six underlying factors for each of these six scales.

The MMPI has been investigated for its factorial structure many times over the past half century. Several other content scales have achieved widespread use for this instrument, including those developed by Wiggins (1966, 1969), as well as those developed as part of the MMPI-2 re-standardization project, known as the Content scales (Butcher, Graham, Williams, & Ben-Porath, 1990) and the MMPI-2 Content Component scales (Ben-Porath & Sherwood, 1993). Many supplementary scales have been developed, perhaps most notably Morey, Waugh, and Blashfield’s (1985) MMPI DSM-III Personality Disorder scales. Other supplementary scales (e.g., the MacAndrew Alcoholism [MAC] scale; MacAndrew, 1965) tend to focus on a single construct, whereas the scales by Morey, Waugh, and Blashfield seem to capture more of the underlying content of the overall instrument.

The various MMPI content scales and subscales have demonstrated significant clinical contribution beyond the scope of the original instruments’ design. In a study of the MMPI-2 content scales in an outpatient mental health environment, Barthlow, Graham, Ben-Porath, and McNulty (1999) found that many of these scales demonstrated incremental validity in predicting therapists’ ratings of clients’ behavior and personality characteristics, with seven scales for men and three scales for women adding to the information and interpretive power provided by the instrument’s primary clinical scales. Similar results were also found in an earlier study examining incremental validity with the MMPI-2 content scales in a psychiatric sample (Archer, Aiduk, Griffin, & Elkins, 1996).

Analysis of particular content areas and specific mental health problems further reveal the clinical utility of examining personality dimensions on a more molecular level than allotted by the principal scales. Interpretation of the MMPI-2 content scales has been found particularly valuable in identifying distressing symptomatology among patients with
traumatic brain injury in rehabilitation settings (Palav, Ortega, & McCaffrey, 2001) and providing significant discriminant identification of particular aspects of subjective distress in a population of chronic pain patients (Strassberg & Russell, 2000). In more traditional mental health settings, these factorially derived scales have been instrumental in identifying serious pathology and patient risk factors. Specific content scales and Harris-Lingoes subscales of the MMPI-A have been shown to predict suicide probability differentially in boys and girls to an extent beyond what is provided by the clinical scales (Kopper, Osman, Osman, & Hoffman, 1998). In the adult measure, Kopper, Osman, and Barrios (2001) found that two of the content scales, Anger (for women) and Type A (for men), contributed significantly to the predictability of suicidal behavior. In other studies, the MMPI-2 content scales, namely the Depression (DEP) and Bizarre Mentation (BIZ) scales, have contributed significantly to differential diagnosis and predictive utility beyond that afforded by the primary clinical scale 2 (Depression) in the affective and psychotic spectra. Boone (1994) noted that in a group of 62 psychiatric inpatients with diagnoses ranging from Adjustment Reaction with Depressed Mood to Schizophrenia, the DEP content scale not only correctly identified DSM-IV aspects of depression, but was a significant suicidal behavior predictor as well. In differentiating the often confusing realm of schizophrenic-spectrum disorders with their frequently comorbid affective features against affective-spectrum disorders with their sometimes comorbid psychoses, the two aforementioned content scales (in conjunction with the primary clinical scales) have demonstrated incremental contribution to meting out these clinical phenomena (Ben-Porath, Butcher, & Graham, 1991), a finding replicated in similar studies (e.g., Munley, Busby, & Jaynes, 1997).

**FACTORIAL EXPLORATIONS OF THE MILLON INSTRUMENTS**

Several investigators have explored the factorial structure of Millon’s theory and how it is measured utilizing the instruments derived from it. However, few studies have been carried out that explore subsets of factors within-scale, that is, attempts to identify the latent composition of individual personality construct scales of the MCMI-III. One study (Choca, Retzlaff, Strack, & Mouton, 1996) attempted to demonstrate the factorial structure of test items for each of the personality scales. A primary consideration for determining the number of factors was concurrence with what was theoretically expected. Five of the eight domains specified by the theory emerged in the analysis of the factors’ content, with the three
domains not represented in the factor structure belonging to those domains concerned with intrapsychic and psychodynamically oriented constructs. Another study (Petrocelli, Glaser, Calhoun, & Campbell, 2001) was more successful in demonstrating convergence with all eight domains of personality. This study identified the eight domains, plus one “core belief” composite, as relating directly to a cluster analysis of the instrument’s scales identifying five cognitive schemas.

Although several unpublished attempts at subscales were carried out with the MCMI (Millon, 1977) and MCMI-II (Millon, 1983), there have been none whose principal focus was to uncover underlying “facets” within construct scales specifically for use as content subscales of the MCMI-III. A related undertaking was accomplished, however, by Davis (1993), who constructed content scales for the MCMI’s sister inventory, the Millon Adolescent Clinical Inventory (MACI; Millon, 1993), a test derived via the same methodology as the MCMI and structured in the same manner but used with a younger, adolescent population. This instrument features personality construct scales parallel to its sister inventory, and Davis’s study yielded content scales that hierarchically fit under each of the primary scales in a manner similar to the Harris-Lingoes subscales of the MMPI (Harris & Lingoes, 1955, 1968) but with more sound psychometric qualities.

**SCALE CONSTRUCTION: METHODOLOGICAL TRADITIONS**

One final question bears cause for exploration before commencing the current study: What is the most appropriate paradigm in which to develop content scales? Traditionally, content scales have been derived in a manner compatible with the primary personality scales of a given instrument. Burisch (1984) describes three prototypical methods historically used for personality scale construction: (1) external (criterion group), (2) inductive (internal consistency or itemic), and (3) deductive (rational, theoretical). These three methods are reviewed briefly here to help elucidate choices for the current study.

The MMPI, its revision, and its sister adolescent instrument, in large measure a result of their external criterion method of construction but not overlooking the popularity and longitudinal history of the instruments, stand as the sole outstanding examples of the need for content scales. Congruent with the external methodology of “dust bowl empiricism” (Meehl, 1945), the original MMPI items were retained solely on their ability to distinguish criterion groups from normal subjects. This was accomplished without regard to several important clinical and statistical concerns, such as internal consistency or item content.
To externalists, who consider themselves scientific realists, the world exists in categories (such as diagnoses), with groups such as narcissists, borderlines, and depressives composing the palette of human existence. The exact means by which an individual is classified, according to externalist thought, is a matter for other researchers to uncover. In this form of scale construction, a very large item pool is developed and given to a large number of diagnosed subjects and normal controls. These items need not demonstrate theoretical grounding or any other particular quality, aside from the ability to discriminate between groups. The resulting scales contain highly disparate sources of variation, a generally low Cronbach’s alpha measure, and little to no insight concerning how or why an individual belongs to a category. Such questions of causality or context, in general, have been left to those subscribing to a more inductive approach (e.g., those who have developed factor or content scales for the MMPI instruments). These investigators have constructed several principal scales of their own.

Inductivists, as opposed to externalists, represent a second tradition in scientific instrumentation. Those subscribing to this paradigm believe that personality has some latent dimensional structure that is accessible primarily via statistical measures, such as factor analysis. The inductivist, like the externalist, does not approach scientific problems with any preconceived notions regarding overarching theory; for this reason, the inductive approach relies heavily on a representative sampling of the content domain. This methodology’s most famous example is the Cattell, Eber, and Tatsuoka Sixteen Personality Factor Inventory (16PF; 1970). It is also represented contemporarily by the NEO-Five Factor inventories representing the five-factor model of personality (Costa & McCrae, 1992; Costa & Widiger, 1994), Goldberg’s Big Five lexical model (1990) and models for personality disorders proposed by Livesley, Jackson, and Schroeder (1989) and Clark (1993).

Although the inductive approach yields the most internally consistent, statistically sound measures of personality based on ostensibly real traits, there is a real danger in that the methodology and sampling procedure may serve as a magnifying lens that distorts appearances. In other words, the results may be biased by the procedure itself. Davis and Millon (1993) present an important argument that calls into question the validity of the inductivists’ claim that their methodology is a true reflection of underlying personality structure. These approaches are based in a lexical tradition, yet new constructs are introduced as latent theoretical, as opposed to surface, manifest constructs. By definition, however, the lexical approach begins with words based in the natural lexicon. This begs the question of whether the distillation of terms in the natural language can serve as the basis of a science. Such a methodology seems prone to
distortion by virtue of this lexical assumption. As Davis and Millon state, inductive methods of theory building

achieve simplicity mechanically, essentially by projecting data into some geometric space. If one is willing to go to the next step, to assume that the axes of this geometric space drive behavior, then one has only to name the axes to feel that something of fundamental importance has been discovered . . . far from selecting and discarding on some theoretical basis, the claim of [such] models rests on the representative sampling of content domains. (p. 107)

The third tradition, the deductive or rational approach, seeks to answer many of the shortcomings found in the expression of the previous two methods. In contrast with inductivists, deductivists believe that the structure of personality may be accessed most pragmatically via theoretical grounds. An inventory is prepared, which incorporates core constructs selected by the theorist in accordance with his or her theory, and items are written to represent operational definitions of those chosen constructs. After construction, the theory or inventory is statistically and psychometrically evaluated. This methodology, of the three discussed, is the one most congruent with the decisive, now historic discussion by Cronbach and Meehl (1955) regarding construct validity, in which they explicitly call for a theoretical basis for any given construct. Rather than make the often quantum leap from observation to theory (e.g., content to construct validity), as is seen with the inductive approach, the deductive theoretician begins his or her study with theory. The MCMI-III, as with all Millon instruments, is derived deductively via theoretical means. So, too, may the entire DSM taxonomy of personality disorders be derived, and this overlap of the objective, empirical standard of the DSM with the theoretically deduced instrument and taxonomy demonstrates convergent validity highly pragmatic for the purposes of achieving clinical economy and accuracy. The weakness, however, in this or any deductive approach, is simply that of theories in general. Virtually any theory is possible (if not plausible), and some are simply better than others.

DEVELOPMENT SCHEME FOR MCMI-III FACET SUBSCALES

A schema that addresses the development of content scales or, more specifically, post hoc scales for an established instrument, may illuminate the choices facing an investigator seeking to develop scales from an already fixed item pool (that is, the items composing the established instrument). Burisch’s (1984) taxonomy, discussed earlier, applies primarily to original scale development wherein the item pool has not been written or the boundaries of constructs are extremely fluid; such a taxonomy, while
a good guideline for overarching theoretical orientation to the development of content scales, does not fully define specific methodology for the task. A schema that is specific to post hoc scales, in addition to the obvious task of helping structure choices to be made by the scale developer, should ideally serve two additional roles: (1) It should possess some logical basis allowing it to serve as a means of categorizing sets of content scales that have already been developed. (2) It should be generative with respect to ways that content scales might be developed in the future. In constructing the MACI content scales, Davis (1993) suggested a model that serves this purpose. His schema involved two elemental choices to be made by content scale developers, each represented in a bipolar axis. The first axis involves the method of scale development—rationally initiated and statistically refined versus statistically initiated and rationally defined. The second involves the level at which the post hoc scales are designed—using the entire inventory as an item pool versus using some logical subset of the inventory’s scales.

The researcher’s first choice is whether to construct the candidate content scales with rational or statistical means as the initial consideration. An investigator choosing a rational route will most likely have in mind a functional need the scale will serve. The methodology here invariably fits existing items to some set of concepts. The researcher choosing a statistically initiated route will develop content scales by some multivariate technique, such as factor or cluster analysis, to identify domains of communality or clusters of items. These investigators typically believe that the statistical methodology is sufficient to have latent dimensions emerge from an existing item pool. Here, the definition of candidate content scales is left to methodological formalities rather than the researcher’s theoretical orientation or utilitarian desire. Functionality is generally determined after the construction has taken place.

The second decision in this schema is whether the established inventory’s entire item pool may serve as the raw material for the candidate content scales, or whether some extant logical boundary exists that may be retained in the development process. Advantages and liabilities exist with either choice, as they do with the first choice regarding methodological initiation. In a multiaxial inventory, this decision is further divided into subset decisions; that is, some items represent Axis I constructs, and others represent Axis II constructs (although some overlap is common). In this case, a first consideration is whether the focus is on classic psychiatric symptomology or personality characteristics.

In constructing the MCMI-III subscales, further questions resided in what sublevel of inquiry would be most meaningful and desirable in terms of clinical efficacy and consonance with the parent instrument. Several possible delineations existed within the theory. One possibility
was Millon’s (1990; Millon & Davis, 1996) four distinctions between groups of personalities: the Pleasure-Deficient, the Interpersonally Imbalanced, the Intrapsychically Conflicted, and the Structurally Defective (the last representing a deeper level of pathology than the first three). Items from these scales could be pooled in an effort to seek out organizational and structural elements of personality. A second possibility was to organize an analysis to explore the three polarities (Existence, Adaptation, Replication) in an attempt to illuminate motivational patterns from the core of the theory.

The most molecular choice was the possibility of utilizing the items of each principal scale as its own separate, small item pool. At this level of analysis, the size of the pools is minimized, and the logical meaningfulness of potential content scales, by virtue of the theory that deduces these personalities, is maximized. Each set of content scales, which might aptly be termed facet subscales, may be taken as representations of the larger scale-level polythetic construct. A further utilitarian purpose to such a design is the ability to examine dissociations between elevations within the primary scales and their associated subscales for purposes of treatment planning. Knowing from a clinical interview that the person is likely to be diagnosed with a Histrionic Personality Disorder, for example, the clinician would be in a position to determine what subtype, or admixture of personality prototypes, of histrionic expression this individual may present.

PROCEDURAL CONSIDERATIONS FOR THE CURRENT STUDY

The theoretical grounding of the original instrument, and the nature of what the researcher sought to accomplish, suggested that the most empirically sound, theoretically logical, and clinically effective framework for development of MCMI-III content scales, stated in terms of Davis’s (1993) model, was to develop subscales for each prototypical personality pattern of the MCMI-III (working within logical boundaries of the extant scales) utilizing a combined rational-empirical approach, with the initial generation of the subscales grounded in the MCMI-III’s guiding theory (initiating via rational means).

It was necessary, first, to identify a pragmatic level of the overarching theory on which to base predictions. One simple choice was between the evolutionary-dimension level (i.e., survival, modification, adaptation) and the functional-structural personologic-domain level (e.g., behavioral acts, intrapsychic mechanisms). However, neither of these bore much theoretical or empirical promise for facet subscales. The former represented the derivation of personality styles across logical domains and would have
been more appropriate for an analysis that had as its goal the construction of content scales utilizing the instrument’s entire item pool across constructs. The latter would attempt to extract precisely eight factors for each individual, small item pool. This would be unwieldy, at best, in terms of clinical utility and highly unlikely to be psychometrically sound, given properties of available statistical procedures. There were two other logical possibilities for this breakdown, however, that have been described by the theory.

Millon and Davis (1996) describe two logical means of organization for the presentation of the personality styles. First, the eight personologic domains may be further broken down into four logical levels, as follows:

1. **Behavioral** (subsuming Expressive Behaviors and Interpersonal Conduct)
2. **Phenomenologic** (subsuming Cognitive Style, Self-Image, and Object Representations)
3. **Intrapsychic** (subsuming Regulatory Mechanisms and Morphologic Organization)
4. **Biophysical** (subsuming Mood/Temperament)

These categories appeared highly convenient in terms of clinical use because they correspond to contemporary treatment modalities, and four similar subscales for each personality scale certainly would have proven useful. However, this represents the basic prototypical structure of each personality style on which the primary scales are based, but each prototypical pattern presents different domains in its primary presentation, while other domains may be quite subtle. The MCMI-III, then, does not equally represent all eight domains for each personality. Instead, it concentrates items as the theory predicts for prototypical presentation.

The second possibility is represented by the theory as the salience of personologic domains. For each personality style, Millon (1990; Millon & Davis, 1996) posits that two or three of the personologic domains will be most salient for a given prototype, one to three others will likely be of moderate (supportive) importance, and the remaining domains will be present but subtle. Which domain presents as the most salient, according to prototypical structure, varies among personality styles. For example, the prototypical histrionic is primarily identified by interpersonal conduct and mood/temperament, with expressive behavior and cognitive style features playing a secondary but important role. In contrast, the depressive prototype, whose cognitive style and mood/temperament are the most salient features, has three other domains presenting as significant but more moderate. Statistical analyses conducted within each item pool would further
The MCMI-III Facet Subscales

support these theoretical notions and would be consistent with the ultimate objective: the construction of subscales under each primary scale.

This level of the theory appeared to be the most congruent and stable starting point to guide examination of the items contained in each of the 14 item pools. The investigation began with predictions as to the most salient domains contained in each primary scale, most of which should match the most salient domains of the theory. It should be noted, however, that in some cases, secondary domains were better represented in the MCMI-III. Preliminary choices at this stage determined which and how many domains would best capture extant item content, guided by salience predictions of the overarching theory as well as rational examination of each item pool. Table 1.1 delineates the functional and structural domains of each of the prototypical personality patterns.

The next stage involved a choice of statistical methodology to support these predictions. The data pool to be used consisted of item responses from the original MCMI-III standardization sample. Subjects 600 individuals used for the development of the clinical scales and 393 individuals used for cross-validation purposes, who were administered an MCMI research form. As has been the case with most content scales or subscales in the past, the most logical choices for empirical substantiation of the subscales would be those found in factor analytic methods. However, because of the enigmatic scale construction using single items on multiple primary scales, the brevity of each item pool, and the high covariance expected due to the polythetic nature of the theory, most statistical methods would not be expected to yield highly parsimonious results (Choca, 1998).

Given the theoretical nature of the task, we might argue that a sound choice would be to employ confirmatory factor analytic (CFA) methods now available (Goldberg & Digman, 1994). However, CFA, by its nature, assumes a normal distribution of the data under consideration. The MCMI-III does not follow this assumption. Rather, its normative data are based on estimates of prevalence rates of clinical patterns known to not be normally distributed (Millon et al., 1997). Hence, as other researchers considering CFA in analyzing Millon instrumentation have noted (e.g., Derksen & Sloore, in press), CFA is inappropriate for applications involving the MCMI-III, while exploratory factor analysis (EFA) options remain viable.

Alpha method factoring was chosen for this purpose because it maximizes internal consistency of the extracted factors; it differs from principal components analysis, a more widely utilized method, in that it extracts factors specifically with this end in mind. This affords a degree of freedom to the researcher to concentrate on distal concerns, such as the rational
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<td>Deferential</td>
<td>Diffident</td>
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<td>Exaggeration</td>
<td>Inverted</td>
<td>Dysphoric</td>
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<td>Secretive</td>
<td>Autistic</td>
<td>Estranged</td>
<td>Chaotic</td>
<td>Undoing</td>
<td>Fragmented</td>
<td>Distracting or Insouciant</td>
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<td>Paradoxical</td>
<td>Capricious</td>
<td>Uncertain</td>
<td>Incompatible</td>
<td>Regression</td>
<td>Split</td>
<td>Labile</td>
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<td>Paranoid</td>
<td>Defensive</td>
<td>Provocative</td>
<td>Suspicious</td>
<td>Inviolable</td>
<td>Unalterable</td>
<td>Projection</td>
<td>Inelastic</td>
<td>Irascible</td>
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refinement of the resultant factors without as much concomitant concern with deleting items manually to maximize coefficient alphas (Davis, 1993). Additionally, an oblique rotation method was employed, allowing for correlated factors consonant with the polythetic model that undergirds the DSM personality disorders. Of the available choices for oblique rotations, promax rotation was the best choice, given the large size of the data set and its endorsement by previous investigators of polythetic personality attributes (e.g., Goldberg & Digman, 1994).

Owing to the first rational step, a factor analysis procedure to help substantiate theoretical predictions required some rationale for extracting the appropriate number of factors likely to differ from common approaches, such as Kaiser’s (1960) stopping rule related to eigenvectors over 1 or Cattell’s (1966) graphical scree test procedure. Hair, Anderson, Tatham, and Black (1992) suggest an alternative, a priori criterion, useful for researchers motivated by a predetermined theory that specifies an appropriate number of factors. This procedure was followed, using the first stage predictions as a guide for specifying factor solutions.

Following the aforementioned factor analytic stage, the emerged factors were subjected to a final rational refinement stage. Results of the factor analysis were scrutinized for their concordance with the predicted personologic domains, and adjustments were made based on content and relative factor loadings. The next stage involved calculating alphas for the proposed subscales. Given the predicted brevity of many of the subscales and the polythetic nature of personality constructs, a moderate alpha of .50 was deemed acceptable, and those scales falling under this level were discarded.

The final preparation stage, incorporation of the proposed facet subscales as a supplementary MCMI-III interpretive tool, is now in process in collaboration with the MCMI-III’s primary author, Theodore Millon. This final stage involves further scrutiny of various elements of the emerged factor structure. Intercorrelations, as predicted by the polythetic model, are anticipated to be moderately high; those scales demonstrating more orthogonal qualities will be scrutinized closely for their concordance with the theory. Also, personality measures demonstrating an unacceptably high level of skewness may lack appropriate sensitivity at the higher end of the scale, where clinical distinction is most important; those scales demonstrating unacceptably high skewness will also be scrutinized. Finally, several additional facet subscales derived from the theory may be added in order to add robustness and clinical utility to the final set. When these procedures are complete, base rate scores for the final facet subscales will be calculated, and the facet subscales will be adopted for use in conjunction with the established inventory.
Table 1.2 details and summarizes all five stages of development for the MCMI-III facet subscales.

Thirty-five of the 36 personality components tested for use as personality facet subscales survived the rational/statistical procedure, with several modest modifications. One scale, originally hypothesized as a component of the MCMI-III Compulsive scale, Conscientious Self-Image, failed to meet internal consistency criteria and was tentatively excluded from the overall set pending further analysis. Also, Worthless Self-Image replaced Pessimistic Cognitive Style in the rational refinement stage of the Depressive pattern, although this change did not bring about the exclusion of items or changes in the hypothesized factor structure. It may be useful to present an overview of general trends found in these results.
The first consideration for component identification was rational examination of each of the 14 item pools for concurrence with the most salient domains of each prototypal pattern as specified by Millon’s theory. For each primary scale, individual items were assessed for their congruence with the personologic domains as described for that primary personality pattern. In concert with the current study’s hypothesis, most items could be identified as operationalized constructs of the two to three most salient domains for that primary personality pattern. In only a few cases, domains predicted by the theory to have more moderate salience in prototypical construction appeared to have better item representation than those predicted to be most salient. It was also typical to have several outlier items match best with secondary or even tertiary domains; these items were reviewed for their possible use as a contextual, supportive member of a better represented domain. Although definitive assignments to domains were not made at this time, this process served as the guiding influence to identify latent structure and confirm representation of predicted domains.

The second stage, factor analysis of each item pool, supported most of the initial hypotheses in terms of giving further support to item response trends from the original normative sample. Generally, the factor solutions imposed via a priori criteria from stage 1 yielded strong trends that gave credence to the theoretical predictions. In some instances, results were initially unclear, which gave partial impetus for the third planned stage, rational refinement. The facets most affected by this consideration were found in the Depressive, Narcissistic, and Paranoid subscales. Further detail will follow in the explication of each analysis.

Taking into consideration item content and relative loadings from each factor analysis, the subscales entered the third stage of development, rational refinement. Some items were reassigned to make the scales more cohesive and better aligned with the hypothesized domain. Although not all items within each resultant subscale were entirely face valid, specific wording of the item and suggestiveness in the context of the domain allowed their inclusion as part of the component being measured. It should also be noted that the eight domains specified by each of Millon’s prototypal patterns are highly related to one another and that the original test was designed to reflect more than the resultant factors; at the same time, almost all of the items from each pool were used, excepting those appearing only in one discarded Compulsive subscale. This apparent inconsistency is clarified by the fact that many items, theoretically, may be suggestive of more than one facet, as measured in these analyses. This issue was predictable, based on the discovery of outlying items from stage 1. However, there was no item overlap within each of the 14 discrete item pools. Instead, items were carefully considered for use in terms of which
facet they appeared to best represent. Items not meeting empirical standards but retained for rational/clinical grounds are presented in each table in italics; however, these items, as proposed for inclusion, are included in stage 3 alpha calculations.

After these final patterns were identified, internal consistency was established for the proposed subscales. Alpha coefficients were calculated for each facet; all but one scale met the minimum established criterion of .50. Overall results of the alpha criterion were impressive, given the brevity of many scales, some of which comprise only four items. For the 35 surviving scales, five scales exceeded an alpha of .80. These included Melancholic Mood/Temperament (Depressive), Inept Self-Image (Dependent), Admirable Self-Image (Narcissistic), Estranged Self-Image (Schizotypal), and Labile Mood/Temperament (Borderline). Twenty-one of the remaining scales achieved an alpha between .70 and .80, with four achieving a level of .60 to .70 and five attaining levels lower than .60. Although this last group only marginally survived, each of the facets represented was considered to be central to the parent construct and did not merit deletion based on statistical grounds alone. Overall, with a mean alpha across all accepted scales of .72, the alpha coefficients were satisfactory, especially in light of the brevity of many scales and the polythetic nature of clinical personality constructs.

It is anticipated that in the final preparatory stage, the scales will adopt base rate conversions reflective of each of the parent scales but will not retain the weighted point system. It is also anticipated, due to the MCMI-III system of shared items between primary scales, that a threshold for interpretability will be established for the facet scales. This consideration is in light of the shared items between primary scales and the small number of items on some subscales and is consistent with the tradition set by the Harris-Lingoes subscales of the MMPI (Harris & Lingoes, 1955, 1968). Although it may be useful to interpret some facet subscales without a clinically significant elevation on the corresponding primary scale, limits must be set to increase clarity and decrease the number of false positives on less relevant facets. This threshold may take the form of an assigned cut-off value on a primary scale (e.g., BR 65) or via a cutting rule (e.g., interpretability on the highest two to three primary scales only).

The proposed MCMI-III facet subscales are presented in Table 1.3.

DISCUSSION

The proposed MCMI-III Grossman Facet Subscales demonstrate a more finite breakdown of attributes contributing to the MCMI-III personality scales, in concert with the original theory that generated the primary scales. A natural question evolves from this development: How might this
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<tr>
<th>Schizoid</th>
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<tr>
<td>1: Apathetic mood/temperament (a = .65)</td>
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<td>2: Unengaged interpersonal conduct (a = .74)</td>
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<td>3: Impassive expressive behavior (a = .56)</td>
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<th>Avoidant</th>
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<tr>
<td>1: Aversive interpersonal conduct (a = .78)</td>
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<td>2: Alienated self-image (a = .78)</td>
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<td>3: Vexatious object representations (a = .78)</td>
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<tr>
<th>Depressive</th>
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<tr>
<td>1: Melancholic mood/temperament (a = .86)</td>
<td></td>
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<td>2: Worthless self-image (a = .75)</td>
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<td>1: Inept self-image (a = .83)</td>
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<td>2: Submissive interpersonal conduct (a = .72)</td>
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<td>1: Gregarious self-image (a = .77)</td>
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<td>2: Attention-seeking interpersonal conduct (a = .70)</td>
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<td>3: Dramatic expressive behavior (a = .64)</td>
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<th>Narcissistic</th>
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<tr>
<td>1: Admirable self-image (a = .86)</td>
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<tr>
<td>2: Expansive cognitive style (a = .52)</td>
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<td>3: Exploitive interpersonal conduct (a = .52)</td>
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<tr>
<td>1: Impulsive expressive behavior (a = .71)</td>
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<td>2: Acting-out regulatory mechanism (a = .71)</td>
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<td>1: Hostile mood/temperament (a = .74)</td>
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<td>2: Eruptive morphologic organization (a = .62)</td>
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<td>3: Pernicious object representations (a = .55)</td>
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<th>Compulsive</th>
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<tr>
<td>1: Constricted cognitive style (a = .73)</td>
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<td>2: Disciplined interpersonal behavior (a = .57)</td>
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<td>1: Irritable mood/temperament (a = .79)</td>
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<td>2: Resentful expressive behavior (a = .75)</td>
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<th>Masochistic</th>
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<tr>
<td>1: Discredited object representations (a = .76)</td>
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</tr>
<tr>
<td>2: Diffident cognitive style (a = .73)</td>
<td></td>
<td></td>
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<tr>
<td>3: Undeserving self-image (a = .76)</td>
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Table 1.3 Continued

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<th>Schizotypal</th>
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<th>Borderline</th>
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<th>Paranoid</th>
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<tr>
<td>1: Estranged self-image (a = .83)</td>
<td>2: Disorganized cognitive style (a = .76)</td>
<td>1: Labile mood/temperament (a = .83)</td>
<td>2: Paradoxical interpersonal conduct (a = .71)</td>
<td>1: Suspicious cognitive style (a = .73)</td>
<td>2: Defensive expressive behavior (a = .69)</td>
</tr>
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</table>

new system be incorporated into the existing MCMI-III paradigm for personality testing? This inquiry speaks directly to personality assessment. Additionally, both research tradition and demand for greater specificity and accuracy in personality testing invoke two vital questions following a demonstration of enhanced utility of an established psychometric instrument. The first is an extension of the prior inquiry and involves the explication of what is now available that was not readily accessible prior to the current research. This is suggestive of treatment planning and intervention options that may be generated via the proposed facet subscales. The other question involves what shortcomings could be inherent in this new protocol and what, in an ideal sense, could still be developed.

INCORPORATION OF FACET SUBSCALES INTO THE MCMI-III PARADIGM

Recall that in the polythetic model, personality disorders are a covariant attribute structure. As such, they are composed of facets that, taken individually, are conditions neither necessary nor sufficient for a diagnosis of the personality syndrome. Both Millon’s evolutionary theory (Millon, 1990; Millon & Davis, 1996) and the *DSM-IV-TR* (American Psychiatric Association, 2000) demonstrate this concept. For example, the *DSM* specifies nine criteria for the Narcissistic Personality Disorder, but only five are required for a diagnosis. In Millon’s evolutionary theory, eight domains are listed as core components of the prototypical Narcissistic personality pattern (as is the case with all prototypical patterns derived from this theory), but, as stated previously, there are very few prototypical narcissists, antisocials, avoidants, schizoids, and so on. Instead, most clinical presentations involve admixtures of personality patterns, likely involving parallel domains from other prototypes in the spectrum of personologic
patterns. In other words, two people equally diagnosed according to DSM Axis II are almost guaranteed to differ in their clinical presentation, and this divergence is very likely to be clinically significant. Regardless of whether an assessment clinician is oriented toward one or the other or possibly both of these paradigms, simply stating that a person falls under one (or more) of the established diagnostic categories is not sufficient for real clinical utility. The real world demonstrates that divergence between the diagnosis and possession of its defining features is the norm, not the exception, and considerable heterogeneity is probable in the established diagnostic system.

The facet scales address these assessment shortcomings on several levels. The first level speaks to distinctions that are now illuminated in each primary scale, a consideration obviously consistent with the polythetic model. Two individuals diagnosed with the same Axis II syndrome are highly unlikely to present identically. Rather, they may be expected to demonstrate markedly different problematic domains within that diagnostic category. The addition of these facet scales allows for a more molecular view of the primary diagnosis, highlighting important dimensions of personologic function at a more discriminating level than can be achieved via categorical labels. In other words, clinicians may now note the most important functional and structural domains of a person’s Axis II diagnosis.

Another level of consideration relates to individuals who present with problematic personality features not reaching the level of an Axis II diagnosis. Indeed, the DSM multiaxial system allows personality features to be noted on Axis II to allow clinicians to conceptualize how personality traits may be affecting an Axis I presentation. However, this system does not allow for specificity beyond a notation that an individual presents with “histrionic traits,” “antisocial traits,” and so on. The personality facet scales do not require a full elevation of a primary MCMI-III scale to hold interpretive value; rather, they will likely adhere to a cut-off rule to be established in the final incorporation stage during base rate assignment. In this capacity, the clinician may then make note of specific problematic functional and structural domains with a greater degree of specificity.

A final gain as a result of the current research goes well beyond within-category distinctions, to a level that may not be as obvious on initial examination of the facet subscales. Whether or not a clinically significant elevation occurs on one or more primary MCMI-III scales, the facet subscales will be able to detect specific elevations between primary scales. Millon’s evolutionary theory predicts that most personality presentations, as mentioned previously, are not prototypical in nature. Rather,
they are admixtures of two or more personality patterns that form a subtype (e.g., Narcissistic with Antisocial features, Dependent with Avoidant features). Sixty-one subtype patterns are identified in Millon’s writings of the past decade or so (Millon, 1999; Millon & Davis, 1996; Millon et al., 2004); further combinations appear regularly in clinical presentation. The facet subscales utilize a level of the theory that specifies eight functional and structural domains that are consistent across all primary patterns. Therefore, it is possible that a subtype pattern may be detected by the primary scales, and specific comparable facets may be identified by the corresponding subscales. For example, it is now possible to note that an individual presents as Antisocial with Histrionic features (identified by the theory as a Risk-Taking Antisocial) via relative elevations on the primary scales, while the subscales identify problematic domains such as Impulsive Expressive Behavior (from the Antisocial facets) and Attention-Seeking Interpersonal Conduct (from the Histrionic facets). A clearer, more detailed clinical picture emerges with this greater level of specificity.

BEYOND ASSESSMENT: IMPLICATIONS FOR TREATMENT PLANNING AND INTERVENTION

In a mature science, a theory is posited that serves as the generative source for a system of classifying the phenomena found within the domain of the subject matter at hand, as well as a method for measuring and substantiating the content of the classification system. What makes such a science clinical in nature is the additional ability to manipulate and modify those phenomena (Millon, 1990). Clinical psychology, of course, is no exception to this rule; the definitive function that makes this subject domain a clinical science is the ability to intervene in a manner most consonant with beneficial change. The ultimate goal of the MCMI-III facet subscales is aligned with this basic premise.

Perhaps the most parsimonious and cohesive, albeit the most obvious, example of the subscale’s utility may be found in the personologic intervention methods (i.e., Personality-Guided Therapy; Millon, Grossman, Meagher, Millon, & Everly, 2000) that are a direct outgrowth of the same guiding theory from which the subscales are generated. This paradigm is integrative in nature, recognizing the eight personologic domains employed by the subscales as key guides to appropriate therapeutic strategies. As explained earlier, each domain, viewed as a separate entity, is aligned with one of the principal schools of thought in modern psychotherapy (e.g., cognitive, psychodynamic, pharmacologic). Taken together, however, they constitute the complex, interwoven spectrum of the
individual’s personality, which may be viewed as the \textit{psychic immune system}. Any given personality pattern will have certain vulnerabilities that may, given environmental and constitutional conditions, allow for problematic psychological functioning. By intervening pragmatically at the personality level (i.e., choosing strategies from the various available therapeutic modalities to match the personologic domains), while tactically orienting treatment toward balancing the \textit{motivating aims} of evolutionary polarities (i.e., pain—pleasure, passive—active, self—other), this system of psychotherapy works to bolster the individual’s personologic functioning, rather than treating the symptom alone and out of context. By aiding in identifying these problematic personologic domains, the MCMI-III facet subscales serve as a catalyst to efficient synergistic psychotherapeutic treatment planning and intervention.

Although the facet subscales are allied with but one of many theories found in the subject domain of clinical psychology, their use is in no way limited to this one paradigm. While purists and strict adherents to the various unilateral schools of psychotherapy are not likely to accept the myriad choices from competing therapeutic paradigms, there are a growing number of integrative and eclectic approaches to treatment in both traditional and short-term modalities that will benefit from the current research. For example, combinatorial cognitive and pharmacologic and cognitive-behavioral modalities (e.g., Beck, Freeman, Davis, 2004; Young, 1990) are now widely used strategies for the treatment of personality and mood disorders. Generally speaking, these models not only seek to ascertain an individual’s cognitive schema (relating to subscales oriented to Cognitive Style and Self-Image), but also seek to understand and modify mood difficulties and behavioral tendencies (relating to subscales oriented to Mood/Temperament, Expressive Behavior, and Interpersonal Conduct). In these and other contemporary examples, the greater specificity afforded by the addition of personality facet subscales will enhance their aims at efficient and pragmatic intervention.

\section*{LIMITATIONS AND FUTURE DIRECTIONS}

Clinical psychology in general, and personality assessment in particular, are mature but imperfect sciences. Because no current clinical methodology or assessment technology can be expected to approximate ideal conditions, research efforts in these areas are constrained to a system of probabilities. In an experimental laboratory setting, investigators may be able to limit measurement error to a minute potential, but clinical settings are, by their very nature, much less predictable. Nowhere is this
more true than in the polythetic realm of personality constructs, and the subscales, further constrained by specific choices made by the authors of the established MCMI-III inventory, are no exception.

The first concern relates to the nature of personality constructs themselves. In contrast with many sister sciences now more fully investigated than any domain of psychology (e.g., biology, physics), most explored elements are well understood in terms of their composition, function, and interaction with other members of the natural world. Clinical syndromes of Axis I, being more homogeneous and readily identifiable when contrasted with personality concepts, are rapidly gaining status similar to elements of other natural sciences. Not so with personality constructs; the clinical science of personology features a core expression not found in adjacent sciences that inhibits modern investigation methods from reliably or validly capturing all aspects of personologic functioning. Millon's (1990) evolutionary theory describes this core expression as abstraction, a function found only in higher mammalian entities and confirmed only in human personality. A full discourse on this area of study is outside the parameters of this chapter; suffice it to say that there are data inherent in personology that are virtually unobservable that account for much of human functioning. A small sampling of this data is reasonably accessible via the most observable related phenomena: personologic dysfunction. The MCMI-III, being a theoretically derived, deductively constructed instrument, does attempt to capture the complex interrelationships and interactions that stem partially from this abstract expression, but it is limited to scientifically valid, established methodology. Indeed, this may account, in part, for obtained results that are, by and large, significantly greater than chance but fall short of currently held methodological ideals.

Directly related to the complexity inherent in personologic measurement, the MCMI-III, like the entire family of Millon instruments, utilizes methods oriented toward capturing as much personologic content as possible within a tolerable assessment framework. As noted previously, there is a complex system of item overlap that is reflective of the intricately intertwined covariance both within and between personality constructs. To adequately assess the personality variables alone without item overlap, it would be necessary to increase the personality item pool to 3 to 4 times its current size. This takes into account only the 14 personality scales; there are another 10 clinical syndrome scales that would need similar augmentation. The final “ideal” instrument could well exceed 1,000 items, a protocol virtually intolerable for any individual and highly subject to test-taking error due to subject fatigue. Instead, the instrument is reasonably brief, at 175 items, and captures a wide variety of personality content via shared items representing different meanings in different personality contexts.
As a result of these considerations, the proposed subscales are often remarkably short, sometimes containing as few as four items. Their distributional characteristics appear to be quite satisfactory but could be improved in some circumstances to demonstrate more discriminating power at the upper end of scoring, where finite distinctions are most needed. Furthermore, the initial intercorrelation patterns between constructs of the same parent scale, though seemingly demonstrating good composite representation of the personality patterns, may be occasionally overwhelmingly correlated, causing doubt in the discriminating quality of one within-construct scale from another.

A major statistical concern for many users may be related to the facet scales’ internal consistency characteristics. Although adequate for their intended use as supportive detail for the established primary scales, they may have been improved considerably were there more items available. However, these concerns are abated, in part, when comparing them to the Harris-Lingoes subscales, the most established and widely used MMPI subscales. It is notable that none of these well-established subscales achieves a coefficient alpha of .80. In fact, several subscales achieve only high .20s, and one (Hy5) only in the .10 to .20 range. The vast majority range from .50 to .80 (Graham, 2000). In comparison, the proposed MCMI-III facet subscales range from .51 to .86, with the majority of the scales in the .70 to .80 range. To the credit of both sets of subscales, traditional methods tend to underestimate internal consistency values, especially for short scales (Davis, Wagner, & Patty, 1994). Additional methods of internal consistency testing may be considered in subsequent research.

In terms of the available exploratory analytic options, the specific option of alpha factoring combined with an oblique (promax) rotation was chosen for several reasons. First, this particular method of factor analysis was the most consistent with the polythetic nature of the constructs inherent in the MCMI-III and, indeed, produced largely positively correlated results. Second, this method allowed for a means of approaching the data in the most consistent way with the task at hand (identifying a hypothesized number of factors in an a priori manner). Some may argue that cluster analysis, which constrains the variables to positive-only correlations, may have been a choice more consonant with the polythetic model. However, cluster analysis makes no assumptions that findings have relevance beyond a given data set (Goldberg & Digman, 1994); therefore, this method lacks full usefulness for the matter at hand.

A final statistical question may be posed regarding the selection of optimal numbers of factors per primary scale. The a priori approach utilized in the current research differed somewhat from more traditional stopping rules (e.g., eigenvalue threshold, scree plot). It is also true that using more traditional methods may have produced stronger alpha coefficients and
better explanation of variance in the data, among other considerations. However, two arguments for the a priori approach eclipsed these other possibilities. First, there was validated guiding theory to initially predict the latent structure. Second, traditional methods were likely to produce some factors too short for consideration as content scales, yielding more unused items and less flexibility for the factors to be incorporated as measurement instruments. Regardless of method chosen, Goldberg and Digman (1994) note that the standard for viability lies in replicability. Future studies using different data sets should be able to yield factors similar to the ones now produced.

Although results of the current study indicate that the resultant subscales are acceptable as a supportive clinical tool, they might be most adequately used in assisting the clinician in terms of hypothesis building. As with any psychometric measure, no single instrument should stand alone, and the subscales are no exception. Fortunately, although subscales respecting logical boundaries at the personality construct level (i.e., MCMI-III primary personality scales) retain the disadvantages of their parent scale, they also inherit their advantages. As content areas reflective of the parent construct, they retain qualities such as validity and theoretical consonance and may be substantiated beyond their own internal consistency by virtue of this overarching theory and its primary personality patterns. However, they must be taken in context with the presenting clinical picture, and their measures can be sustained only insofar as the evidence external to the measure itself (inclusive of MCMI-III primary scales, other assessment data, and ongoing clinical observation) remains consistent with its findings. Although this is a caveat for all assessment inventories, given the level of specificity and its reliance on corroborating measures external to the subscales themselves, it is most true for factorially generated content subscales.

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