# DIAGNOSIS AND ASSESSMENT OF PERSONALITY DISORDERS IN OLDER ADULTS: A CRITICAL REVIEW

Daniel L. Segal, PhD, Michel Hersen, PhD, Vincent B. Van Hasselt, PhD, Carolyn Smith Silberman, MS, and Leonard Roth, PhD

Personality disorders in older adults only recently were identified as significant clinical problems, with little empirical attention having been directed to this diagnostic classification. In light of the burgeoning population of older adults, clinicians and researchers are now beginning to recognize the importance of evaluating specific diagnostic and assessment strategies for such personality-disordered older adults. From our critical review of the extant literature, it is apparent that personality disorders traditionally have been underdiagnosed in older adults. Moreover, some of the diagnostic criteria in use appear to be inadequate for this population. In addition, failure to recognize the moderating impact of a characterological component to Axis I symptom presentation in older individuals may result in faulty treatment decision making. Appropriateness and utility of measures for evaluating personality disturbances in older adults are discussed, and comparisons between instruments are provided. Considerably more investigation in this area is warranted, and suggestions for future empirical work are outlined.

Despite the growing body of literature about the psychology of older adults, there is a paucity of data pertaining to the diagnosis and assessment of personality disorders in this population. The American Psychiatric Association's (1994) Fourth Edition of the Diagnostic and Statistical Manual of Mental Disorders provides descriptions of personality disorders and traits. According to DSM-IV: "A Personality Disorder is an enduring pattern of inner experience and behavior that deviates markedly from the expectations

From the Department of Psychology University of Colorado at Colorado Springs (D.L.S.), and the Center for Psychological Studies, Nova Southeastern University (M.H., V.B.V.H., C.S.S., L.R.).

Address correspondence to Daniel L. Segal at the Department of Psychology, University of Colorado at Colorado Springs, Colorado Springs, CO 80933-7150.

This manuscript was accepted under the editorship of former Editors Dr. Allen Frances and Dr. Theodore Millon.

of the individual's culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment" (p. 629).

Further, regarding the course of these dysfunctional patterns, DSM-IV notes that some disorders tend to "remit with age, whereas this appears to be less true for some other types" (p. 632). Recognition of the persistent course of at least some personality dysfunction into later life can be contrasted with the view proffered in DSM-III-R (American Psychiatric Association, 1987), in which it was noted that such manifestations frequently become less pronounced in middle or old age.

Epidemiological and prevalence data for Axis II disorders in older adults are scant. As noted by Spar and LaRue (1990), "Few data have been gathered on Axis II disorders in elderly patients, in part because most of the personality disorders in DSM-III-R have not been defined long enough for thorough studies to take place" (p. 180). Indeed, prior to DSM-III, personality disorders did not have well-operationalized or specific criteria for each type. As such, early investigations of character pathology in older adults used classification systems that are quite dissimilar from current DSM-III-R and DSM-IV conceptualizations (Kroessler, 1990), thus preventing comparison of current and prior data.

An early study by Mezzich, Fabrega, Coffman, and Glavin (1987) showed that on the basis of a retrospective chart review, 5.1% of a sample of mixed inpatient and outpatient elders (N = 494) evinced personality disorders. Similarly, Casey and Schrodt (1989) reviewed charts of 100 older inpatients and found that 7% received a diagnosis of personality disorder as determined by psychiatrist rating. In the largest retrospective study to date, Fogel and Westlake (1990) ascertained prevalence of characterological disorder in 2332 older inpatients suffering from major depression. Again, diagnoses were assigned by attending psychiatrists, with results showing that Axis II diagnoses were made in 15.8% of the cases. Also targeting older adult inpatients with major depression, Kunik, Mulsant, Rifai, Sweet, Pasternak, Rosen, and Zubenko (1993) found that 37 of 154 (24%) met criteria for a personality disorder based on consensus diagnosis among psychiatrists. The limitations of the three retrospective studies and the one descriptive study are their reliance on clinical judgment in assigning diagnoses as well as the absence of reliability checks. Clearly, large-scale cross-sectional and longitudinal studies that employ more objective diagnostic instruments, such as structured interview formats, are warranted to fully investigate the prevalence of personality disorder in this population. Obviously, results are likely to vary depending on type of sample (i.e., inpatient, outpatient, medical patients), method of diagnosis (i.e., clinical judgment, structured interview, self-report), and type of design (descriptive, chart review, longitudinal). What is clear, however, despite gaps in the epidemiological research base, is that prevalence rates between 5% and 24% are probably inaccurate. Nevertheless, extant data suggest that there are a significant number of older adults suffering from debilitating personality dysfunction. Moreover, symptoms and manifestations of these character disor-

ders are often ignored in psychological intervention as the more florid Axis I symptoms are targeted.

The past few years have witnessed an acceleration of clinical and investigative endeavors directed toward the diagnosis and assessment of Axis II disorders in the elderly. The purpose of this article is to critically review extant diagnostic and assessment approaches for personality disorders in older adults. First, general diagnostic issues pertaining to the apparent inadequacy of some criteria for personality disorders in older adults will be discussed. Next, we will review the literature concerning personality assessment instruments that have been utilized with this population. Finally, current issues and gaps in this area will be discussed and suggestions for directions for future research will be offered.

#### **DIAGNOSIS**

As previously noted, epidemiological data reveal significant prevalence rates for personality disorders in older adults, and it is commonly believed that personality dysfunction often remains underdiagnosed and underreported (see Casey & Schrodt, 1989; Rose, Soares, & Joseph, 1993). Diagnosis of personality disorder in the older population has been complicated by several factors. One is the widely held (albeit erroneous) belief that character pathology either was not present or was not a serious difficulty in older individuals. This perspective has been challenged only recently as the scope and characteristics of the problem in older adults have been more clearly articulated. Some misdiagnoses occur because personality disorders often produce symptoms that constitute Axis I disturbances, which are more easily recognized and accepted by both clients and service providers. Indeed, manifestations of characterological difficulties may be viewed as signs of other psychiatric disorders—most notably depression and anxiety. These symptoms may, in fact, be a consequence of the pervasive social difficulties and distorted self images experienced by those suffering from dysfunctional personalities. Second, some signs of personality disturbance (i.e., dependency, social withdrawal, odd thinking, emotional lability) are erroneously attributed to "old age" or may be perceived as "normal" in the aged population. Given these diagnostic misconceptions, the need for elder-specific diagnostic criteria is underscored, since many health care professionals (as well as clients themselves) fail to recognize character pathology. A ramification of this is that determination of the most appropriate form of intervention is often obfuscated. Treatment is often not indicated if behavior is considered a "normal" concomitant of senescence. or, if intervention is applied, it solely targets the more recognized affective component of the disturbance while the etiologically significant underlying personality disorder is ignored.

Another obstacle to accurate diagnosis of personality disorder in older adults is that DSM-IV criteria for some personality disorders have limited relevance or applicability to aged clients, given their unique physical, cognitive, and social circumstances. There appears to be a need to attend to age-related issues when diagnosing such disorders. This notion was initially derived from diagnostic studies focusing on MMPI scale elevations in the older psychiatric population. For example, the significance of high elevations on scales pertaining to depression and hysteria has been questioned, as legitimate somatic complaints consonant with the aging process may produce a faulty pathological picture (see Bolla-Wilson & Bleecker, 1989; Taylor, Strassberg, & Turner, 1989). And just as somatic problems may confound diagnosis of Axis I disorders, Kroessler (1990) notes similar difficulties with the diagnosis of personality disorders in older individuals. Kroessler (1990) contends that personality disorders are most reliably described in behavioral terms and normal aging can alter pre-existing behaviors and produce new behaviors. Lawlessness, aggressiveness, impulsiveness, initiating physical fights, child-beating, and promiscuity require physical activity. Consequently, some criteria may not be applicable to older adults for biological reasons, in terms of their normal decreases in energy, strength, and mobility. Along these lines, Fogel and Westlake (1990) use the aging borderline personality disorder as an example, observing that "some forms of impulsive sexual and self-injurious behaviors may become less likely, despite the persistence of characteristic personality traits and psychodynamics" (p. 233). Such "age-bias" is likely to apply to other personality types as well.

Also, in accordance with DSM-IV, a major requirement for the diagnosis of any personality disorder is experience of clinically significant distress or impairment in social or occupational functioning (i.e., criterion C). However, as individuals age, they work less frequently and have fewer friends and social outlets, due to deaths or physical restrictions. Thus, the requirement of social/occupational impairment may preclude accurate diagnosis of personality disorder in those older adults whose social world is much different from their younger counterparts, upon whom many taxonomies are based. As age-related behavioral change may mask presence of personality disorder, we concur with Kroessler (1990) and also argue for inclusion of age-associated criteria in the diagnostic guidelines. Reflecting on the fact that older clients meet fewer criteria for borderline personality disorder than they did as younger clients, Rosowsky and Gurian (1991) cogently point out that "This could reflect more the lack of fit of our existing diagnostic yardsticks than the lack of borderline personality in old age" (p. 39). We suggest that this comment applies to other personality disorders as well.

There are several additional factors that contribute to the modicum of attention to Axis II disorder in older adults. First, there appears to be a lack of consensus concerning age-related manifestations of certain disorders, as researchers and clinicians have only recently become interested in the psychopathology of older adults. Second, treatment providers may lack appropriate knowledge about the manifestations of personality disorders in older adults and, consequently, their initial assessment measures may fail to address this component. Third, diverse service providers to older individuals may be biased against diagnosing

personality disorders or defining problems as characterological (Rose et al., 1993). Rose and colleagues relate that the inflexibility and resistance to intervention attributed to individuals carrying an Axis II diagnosis often make the client seem "hopeless" and service providers feel "helpless." Professionals may also feel angry, frustrated, and manipulated, with concomitant withdrawal or blaming of the client. Unfortunatelydespite the discomfort of service providers—and the bias against diagnosing Axis II disorders, older clients with character pathology exist and are in need of support and intervention. Finally, there may be inadequate case-finding strategies for personality-disordered elders who view their characteristic modes of thinking and behavior as ego syntonic and do not recognize a problem. Consequently, a large number of older adults with significant character pathology simply see little reason to seek mental health services. Several case reports have appeared in the literature documenting the unique diagnostic and intervention challenges faced by mental health professionals. Specifically, a vivid case description has been documented for borderline personality disorder (Siegel & Small, 1986). More recently, case examples of histrionic, borderline, and avoidant personality disorders in old age have been presented (Rose et al., 1993). It is obvious, however, that systematic evaluation is necessary to develop profiles of the manifestations of each disorder in the aged, and longitudinal studies following personality-disordered individuals into later life are needed to assess changes over time in symptom patterns and personality characteristics of older individuals.

## **ASSESSMENT**

With the increasing number of older adults seeking mental health services, accurate assessment of personality disorders has become critical. In addition, with development of updated instruments it is important to examine the psychometric properties of such devices (i.e., reliability and validity) as they apply to older adults.

The original Minnesota Multiphasic Personality Inventory (MMPI—Hathaway & McKinley, 1983), its revision, the MMPI-II (Hathaway & McKinley, 1989), and the Millon Clinical Multiaxial Inventory (MCMI—Millon, 1983) are among the most commonly utilized objective methods for measuring personality styles, disorders, and clinical syndromes. A parallel self-report questionnaire, the Coolidge Axis II Inventory (CATI—Coolidge, 1984), is specifically geared toward the assessment of DSM-IV personality disorders, and, like the MMPI and MCMI, has been applied to older adults. A discussion of the application and utility of these measures for evaluating personality disturbances in older adults is provided below.

#### **MMPI**

The MMPI is a 550-item self-report, true-false inventory, initially developed to provide an efficient way of arriving at appropriate psychodiagnostic labels. The MMPI, however, was not designed or standardized to measure

functioning in older adult populations. In fact, individuals over age 65 were not included in the normative sample (Colligan & Offord, 1992). The restandardization process involved in constructing the MMPI-II (Hathaway, & McKinley, 1989) incorporated persons up to 85 years of age. However, norms for older adults are noticeably absent from resource books (Graham, 1993). Interestingly, the MMPI-II already has separate norms for men and women, and a version designed specifically for adolescents is available.

## MMPI AND OLDER ADULTS

As the original MMPI did not include persons over 65 in the normative group, several studies have examined its effectiveness within normal, nonpatient older samples (e.g., Colligan & Offord, 1992; Colligan, Osborne, Swenson, & Offord, 1984; Greene, 1980; Harmatz & Shader, 1975; Leon, Gillum, Gillum, & Gouze, 1979). Taylor, Strassberg, and Turner (1989) carefully reviewed results of these studies and identified some trends. It was noted, for example, that non-psychiatric older respondents generally displayed substantial elevations (about one standard deviation) on scales 1 (hypochondriasis), 2 (depression), and 3 (hysteria). Smaller elevations on the order of 1/2 standard deviations were reported for scales K and O (social introversion) when compared to the standard adult MMPI norms.

Application of the MMPI has also been investigated in older psychiatric populations (e.g., Dye, Bohm, Anderten, & Cho, 1983; Pennington, Peterson, & Barker, 1979; Rusk, Hyerstay, Calsyn, & Freeman, 1979; Weiss, 1973). Again, Taylor, Strassberg, and Turner (1989) concluded from the collective findings that the most common elevations (averaging about plus two standard deviations) were obtained on scales 1 and 2, a finding similar to the normal samples of older individuals. In addition, elevations of +1 1/2 standard deviations were found on scales 3 and 8 (schizophrenia), while elevations of about +1 standard deviation were noted for scales F, 4 (psychopathic deviate), 6 (paranoia), and 7 (psychasthenia). Taylor et al. (1989) cautioned, however, that most results were based on either extremely small samples or highly specific clinical groups, thus limiting generalizability. Indeed, these investigators improved upon earlier studies by employing a large, diversified sample of 204 nonpatients as a matched normal reference group to a sample of 30 psychiatric outpatients. The purpose of their effort was to identify norms for a nonclinical elderly sample and to assess the discriminant validity of the MMPI (clinical vs. community elderly). Results suggested that the MMPI discriminated well between the two groups (significant differences on nine of 13 scales). Overall, it was concluded that the MMPI is valid for use with older populations. A shortcoming of this study, however, is the comparatively small sample size of patients. Given that substantial age-related difference on MMPI scores between younger and older samples have been confirmed in numerous investigations, a version specifically designed for older populations would be useful.

Clearly, the utility of the MMPI and MMPI-2 in older adult samples has yet to be unequivocally ascertained. For example, questions have been raised pertaining to the interpretation of elevations on scales 1, 2, and

3 in both older normal and psychiatric subjects. The confound of an increase in physical problems (due to normal biological maturation) has prompted some researchers to urge caution when interpreting elevations in scale 2 (Bolla-Wilson & Bleecker, 1989) and scales 1 and 3 (Taylor et al., 1989). Elevations are not necessarily indicative of depression or abnormal somatic preoccupations, but may indeed reflect realistic concerns and reactions. Additionally, we were unable to locate any research specifically applying the MMPI to older inpatient groups or to groups with specific personality disorders. Also, the new MMPI-II has not been validated specifically in the older population. Finally, it should be pointed out that the MMPI scales employed in these studies are not measures of DSM-III-R or DSM-IV personality disorders, but rather personality traits, symptom profiles, and Axis I disorders. Further, while personality disorder scales have been derived from the MMPI (see Morey, Waugh, & Blashfield, 1985), validation studies specific to older populations are lacking.

# **MCMI**

The original MCMI (Millon, 1983) was revised and reintroduced as the MCMI-II (Millon, 1987), a 175-item, true-false, self-report inventory designed to assess and diagnose personality disorders. This instrument is widely used in clinical and research contexts, and its taxonomy is more consistent with DSM-III-R than the original MCMI. The MCMI-II includes 22 clinical scales and is constructed to distinguish between Axis I and Axis II diagnoses, as well as level of severity of syndromes (Millon, 1992). According to Millon, there are ten basic personality types (schizoid, avoidant, dependent, histrionic, narcissistic, antisocial, aggressive/sadistic, compulsive, passive-aggressive, and self-defeating), as well as three that evince a greater level of severity (schizotypal, borderline, and paranoid). Additionally, nine symptom scales are provided, covering common and moderate clinical presentations (e.g., anxiety, dysthymia) and severe symptoms (e.g., thought disorder). The MCMI has been the focus of over 400 publications since its development in 1967 (Millon, 1992). The instrument has been shown to have good psychometric properties and to be more reliable in diagnosing personality disorders than in differentiating between clinical syndromes (Millon, 1992). Notably, the latest version of Millon's instrument, the MCMI-III, has recently been published (Millon, 1994) and is designed to assess DSM-IV related personality disorders and clinical syndromes.

# MCMI AND OLDER ADULTS

Application of the MCMI to older psychiatrically impaired adults has been explored in only one study, while norms for this measure are unavailable for non-psychiatric elders. Hyer and Harrison (1986) administered the inventory to 60 elderly psychiatric inpatients (mean age not reported). Results showed that incidence rates of dependent and avoidant personality disorders were highest in this older group, a finding that mirrors results from younger age groups. In contrast, histrionic, narcissistic, and antisocial

personality disorders had the lowest rates. These disorders were characterized as higher intensity personality styles. Hyer and Harrison concluded that "with age, there appears to be a 'mellowing' of higher energy personality types" (p. 408). Unfortunately, the study failed to provide data for clinical syndromes, test for gender effects, or compare results to a matched non-clinical group or a younger sample to directly assess changes in incidence over time.

Davis and Greenblatt (1990) also investigated age disparities on the MCMI among inpatients with the same diagnosis. However, these researchers deviated from standard practice and broadly defined "old" as anyone over 36 years of age. Further, they failed to provide a breakdown of results for specific age groups within this "old" category, thus severely limiting the applicability of these results to those over age 55. A general tendency for older subjects to produce lower symptom scale scores than younger subjects was observed. The only significant difference discovered between the older and younger group was a lower Drug Abuse score among older patients. The collection of normative data for older populations and the clarification of age differences between younger and older adults (over 55 years of age) are recommended in future research on the MCMI-II.

# COOLIDGE AXIS II INVENTORY (CATI)

The CATI (Coolidge, 1984) is a 200-item, self-report, four point, true-false inventory developed to assess personality disorders according to the diagnostic criteria of DSM-III-R. The inventory contains 13 personality disorder scales, including the proposed sadistic and self-defeating personality disorders, with items designed to match the 117 unique criteria for personality disorder diagnosis detailed in DSM-III-R. The CATI also provides scores on three Axis I scales (Brain Dysfunction, Depression, and Anxiety). Excellent test-retest reliability (.90) has been established for the CATI, as well as moderate internal consistency (.76). With regard to validity, a 50% concordance rate with clinicians' diagnoses for 24 personality-disordered patients was found (Coolidge & Merwin, 1992). Most recently, the CATI has been updated to match DSM-IV criteria, with 225 items.

# CATI AND OLDER ADULTS

Recently, Coolidge, Burns, Nathan, and Mull (1992) administered the CATI to normal younger (N = 573; mean age 24.0 years) and older (N = 36; mean age 69.4 years) individuals and compared results. They found that for Axis I syndromes, older adults were significantly less anxious and showed more signs of organicity, while no differences were reported on the depression scale. As for Axis II, the elderly scored significantly lower on antisocial, borderline, histrionic, narcissistic, paranoid, passive-aggressive, schizotypal, sadistic, and self-defeating scales than their younger counterparts. By contrast, the older adult sample was significantly more obsessive-compulsive and schizoid. No group differences were obtained for avoidant or dependent personality disorder scales. Coolidge et al. (1992) note that, in general, the older sample scored low on questions associated with impulsivity and endorsed items

consistent with restricted affectivity. Also, the nonsignificant finding for depression was attributed to the lack of somatic items on that particular scale. In this study, age differences on the CATI were assessed in nonclinical, normal subjects. To date, normative data or age comparisons have not been examined in an older adult population of psychiatric patients.

# COMPARISONS OF THE MMPI, MCMI, AND CATI

MMPI and MCMI. Several studies have compared the MMPI and MCMI for Axis I disorders (see Libb, Murray, Thurstin, & Alarcon, 1992; Patrick, 1988). With regard to Axis II disorders, controversy surrounds the fact that the MCMI is derived from personality/psychopathology theory. Conceptual differences between Millon's theory of psychopathology and nosology and DSM-III typology call into question the validity of the MCMI as a measure of DSM-III personality disorders (see Widiger, Williams, Spitzer, & Francis, 1985) and it is unclear to what extent Millon's taxonomy and DSM converge.

Several studies have examined the concordance between the MCMI and the MMPI, using the set of personality disorder scales derived from the MMPI (Morey, Waugh, & Blashfield, 1985). These concurrent validity investigations generally have shown a modest degree of convergence (McCann, 1989; Morey & LeVine, 1988; Streiner & Miller, 1988), with notably poor results reported for antisocial and compulsive scales. A recent validity study with the updated MCMI-II and MMPI personality disorder scales demonstrated that, relative to the original MCMI, the updated MCMI-II generated higher concordance rates for antisocial and passive-aggressive disorders, but still failed to reach significant convergence on the obsessive-compulsive scale (McCann, 1991). None of these studies, however, specifically targeted older adults. As such, the concurrent validity of the MCMI and MMPI is presently unknown for this population. Given the widespread use of both self-report instruments, and the burgeoning elderly psychiatric population, it is important to compare these measures and assess validity in future studies.

MCMI and CATI. Coolidge and Merwin (1992) compared the CATI and the MCMI-II in a sample of 24 psychiatric outpatients (mean age 38.0 years), suspected by their therapists to have personality disorders. Raw score totals for both instruments were correlated resulting in a median concurrent validity correlation of .58 for the 13 scales. Specifically, the correlations were as follows: borderline, .87; passive aggressive, .86; avoidant, .80; histrionic, .72; self-defeating, .67; schizotypal, .65; paranoid, .58; antisocial, .57; dependent, .43; sadistic, .40; narcissistic, .38; schizoid, .22; and obsessive-compulsive, .10. Similar to a previous MCMI-MMPI validation study (McCann, 1991), correlations for the obsessive-compulsive personality disorder were extremely low. Due to the low correlation, a criterion analysis of this scale was conducted. Results suggested that diagnostic criteria coverage of the MCMI-II was incomplete. Only five of the stated nine DSM-III-R criteria were tapped by MCMI-II items. Coolidge and Merwin (1992) concluded that the low correlation was due to a lack of adherence of the MCMI to the DSM-III-R criteria upon which the CATI is based. Also, for the disorders where the MCMI-II's adherence to the DSM III-R criteria was high, correlations between the two inventories were stronger. Overall, the MCMI-II diagnosed more subjects as having personality disorders than the CATI.

Absence of studies applying the MCMI-II and CATI to older populations represents a major gap in the research literature. Recently, however, the concurrent validity of the two instruments has been evaluated in a pilot study targeting older adults (Silberman, Roth, Segal, & Burns, in press). Specifically, the MCMI-II and CATI were investigated in a chronically mentally ill older adult inpatient sample. Subjects were 30 older adults (age range = 55-83; mean = 63.3) who were inpatients in a community mental health center. All subjects were diagnosed by a psychiatrist as having a chronic mental illness (e.g., schizophrenia, bipolar disorder) as defined by DSM-III-R. The MCMI-II and CATI were concurrently administered in counterbalanced fashion and the data submitted to correlational analyses. The median concurrent validity (raw score sums) for the 13 personality disorder scales was .55. Obtained correlations for specific disorders are as follows: borderline, .88; passive aggressive, .77; avoidant, .55; histrionic, .10; self-defeating, .67; schizotypal, .57; paranoid, .55; antisocial, .70; dependent, .20; sadistic, .42; narcissistic, .40; schizoid, -.13; and obsessive-compulsive, -.11. Also, the CATI diagnosed 24 subjects as having a personality disorder (> 1 standard deviation above the mean), while the MCMI-II diagnosed 28 subjects (> base rate of 85).

In comparing results to those obtained by Coolidge and Merwin (1992) with a younger and less severe sample (24 psychiatric outpatients, mean age = 38.0 years), Silberman et al. (in press) report that most correlations were lower for the older sample. Some of these differences were quite large (histrionic older .10, younger .72; schizoid older -.13, younger .22; avoidant older .55, younger .80). In fact, in the older sample, negative correlations between measures were found for the schizoid (-.13) and obsessive-compulsive (-.11) scales. Considering the confounds of both age (older/younger) and psychiatric severity (chronic inpatient/outpatient), it is unclear to what extent each variable contributed to the poorer convergence in the older sample. A direct comparison between younger and older samples with similar psychiatric dysfunction could answer this question. It should also be noted that to date no studies have directly compared the CATI to the MMPI personality disorder scales.

# OTHER ASSESSMENT INSTRUMENTS AND OLDER ADULTS

The present review has focused on the application of three self-report personality instruments (MMPI, MCMI, and CATI) to older adults. Several additional devices also have been designed to assess personality disorders tied to DSM taxonomy. For example, the Personality Diagnostic Questionnaire-4 (PDQ-4—Hyler, 1994) is an 85-item, self-administered, true/false inventory. Several popular structured interviews that yield DSM-IV diagnoses include the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II, version 2.0—First, Spitzer, Gibbon, Williams, & Lorna, 1994), the International Personality Disorder Examination (IPDE—

Loranger et al., 1994), and the Structured Interview for DSM-IV Personality (SIDP-IV—Pfohl, Blum, & Zimmerman, 1995). Reliability and validity data for each of these measures have been reported elsewhere (see recent review by Segal, in press; see also Ferguson & Tyrer, 1989; Reich, 1989) and need not be reviewed here. Unfortunately, the literature regarding the application of these instruments to older individuals is sparse, although several clinical studies have been reported. Abrams, Alexopoulos, and Young (1987) administered the PDE to 21 older adults who had recovered from depression and 15 normal controls. Only two study participants met criteria for a personality disorder and no reliability estimates for the PDE were reported. In a more recent study also employing the PDE in a sample of 30 recovered depressed elders, reliability estimates between two raters were calculated (Abrams, Rosendahl, Card, & Alexopoulos, 1994). Results suggested a high level of interrater reliability (range .75 to 1.0; mean .94) for all personality disorders except histrionic (.23). Similarly, Schneider, Zemansky, Bender, and Sloane (1992) assessed personality traits using the SCID-II in a small sample of euthymic elders with a history of major depression. Also investigating the relationship between personality disorder and outcome in the treatment of late life depression, Thompson, Gallagher, and Czirr (1989) obtained Axis II formulations by using the SID-P in a sample of 79 elders. While interrater reliability for comparisons across all twelve personality classifications was high (kappa = .79), individual estimates were not reported. Clearly, studies providing additional normative, reliability, and validity data for the above noted instruments with larger samples of older individuals are warranted.

## SUMMARY AND FUTURE DIRECTIONS

The present review has highlighted the fact that despite a growing interest in the psychology of older adults, clinical and investigative interest in personality disorders in this population is at the nascent stage. Only recently have psychologists recognized the importance of evaluating specific diagnostic and assessment strategies for elders with significant personality dysfunction. This recognition arises as a result of recent statistics, case reports, and descriptive studies.

Accurate diagnosis of character pathology has been hampered by numerous factors. Our review suggests that DSM diagnostic criteria may be inadequate for older individuals, given the unique physical, cognitive, and social complications encountered by this segment of society. The apparent decline in prevalence rates of some disorders (i.e., borderline, histrionic) may not be due to a "mellowing" or maturation of the individuals but rather the inability of the current diagnostic system to identify the age-related manifestations of these disorders. Also, the requirement of significant social/occupational impairment (DSM-IV criterion C) to establish the diagnosis does not adequately apply to older adults who generally have fewer social outlets and employment opportunities. Further complicating diagnosis is that manifestations of character pathology in this group are often misperceived as signs of old age or other psychiatric conditions. Future

research is needed to clarify the clinical manifestations, to develop profiles, and to identify specific age-related criteria that many investigators have found lacking for older adults. We trust that subsequent versions of the DSM will acknowledge the current age bias and provide age-associated criteria to better fit the clinical presentation of older individuals. Along these lines, while new age-related criteria are also being devised, the number needed to assign a diagnosis (e.g., five of nine for borderline personality disorder) may be modified (usually lowered) to improve diagnostic accuracy and application to the elderly. This issue can be determined empirically by validity studies assessing cut-off rates as the number of criteria are changed.

To assess the changes in diagnostic profiles and clinical presentations of personality disordered individuals over time, longitudinal studies are needed that follow younger individuals with personality disorders into later life; such investigations are the only way to directly assess and clarify intra-individual changes over time in these disorders that may hamper accurate diagnosis. This research has not yet been conducted for several reasons, including (1) the only recently operationalized criteria for personality disorder, (2) lack of attention to these disorders in the elderly, and (3) the significant time, energy, and expense of any longitudinal study. Utilization of sophisticated developmental research methods (e.g., sequential designs) can help in this endeavor.

The urgent need for normative and psychometric studies examining the efficacy of existing instruments with the elderly is underscored. In the absence of normative or baseline data, how are clinicians and researchers expected to interpret scores obtained by older respondents on a given instrument? At present, many popular assessment devices lack such normative and reliability data for normal and psychiatrically impaired elderly. While all of the frequently administered structured interviews for DSM personality disorders (SCID-II, IPDE, SIDP-IV) have been applied to older populations, definitive comparisons have been difficult to make because of small sample sizes, variant settings, and limited reliability data. Large scale reliability and validity studies are needed in this area. Recently, it has been demonstrated that the SCID for Axis I disorders can be reliably administered to older psychiatric populations (see Segal, Hersen, Van Hasselt, Kabacoff, & Roth, 1993; Segal, Kabacoff, Hersen, Van Hasselt, & Ryan, 1995), and similar studies for Axis II seem warranted. In the absence of empirical verification, it cannot be assumed that structured interviews for Axis II disorders have acceptable operating characteristics for this unique population. It should be noted here that reliability is a function of several factors, such as the "true" reliability of the instrument, type of reliability measured (e.g., test-retest, simultaneous rating, internal consistency), and sample investigated (e.g., normal/psychiatric, younger/older).

As for self-report devices, normative and reliability data are absent for the PDQ-4, although we currently are collecting these data on normal elders as well as older outpatients. For the MMPI, several large scale studies have provided normative data for older adults. Results have clearly shown that older individuals respond in substantially different

ways than their younger counterparts. However, this clinically significant information has not been incorporated into standard use of the instrument as in the case of differing norms for men/women and adolescents have. Despite strong research data, many clinicians employing the MMPI with older adults continue to rely on clinical intuition to determine significance of profile elevations. Moreover, while normative data for the MMPI exist, neither the MMPI-II nor the MMPI personality disorder scales developed by Morey, Waugh, and Blashfield (1985) have been applied to the elderly. Given the widespread use of the MMPI, this type of research is imperative.

The MCMI and CATI self-report personality disorder instruments have at least been minimally applied to older adults, although much additional work is needed. Hyer and Harrison (1986) administered the MCMI to a group of older inpatients and reported incidence rates, although comparisons to matched normals or younger patients were not included in their investigation. Future studies on the MCMI should make these comparisons in addition to providing norms for non-psychiatric elders. For the CATI, only one report examined age differences between normal younger and older respondents (Coolidge et al., 1992). Future studies might focus on providing normative and reliability data for the CATI for psychiatric elderly, as well as age comparisons between younger and older patients.

Comparisons among widely employed measures to assess their concurrent validity with older adults have only recently been undertaken. A recent comparison between MCMI-II and MMPI personality disorder scales in an adult sample has yielded encouraging results (McCann, 1991). It would be beneficial to investigate this relationship in an older sample. Two studies have explored the concurrent validity of MCMI-II with the CATI, with one specifically targeting older inpatients (Silberman et al., in press). Median concordance (correlation between raw score sums) in this study was .55, with a range of -.13 (schizoid) to .88 (borderline). Results for the older sample were also generally poorer than those obtained in the younger group (Coolidge & Merwin, 1992). Again, this points to the need for specific validation in older samples who seem to manifest character disorders differently than younger adults.

Little attention also has been accorded to systematic exploration of the relationship between Axis I and Axis II disorders, specifically within the older population. As shown by Mavissakalian and colleagues (e.g., Mavissakalian & Hamann, 1986; Mavissakalian & Hamann, 1988; Mavissakalian, Hamann, & Jones, 1990; Mavissakalian, Hamann, Haidar, & de Groot, 1993), personality disorders and numerous Axis I disorders (e.g., generalized anxiety, panic/agoraphobia, and obsessive-compulsive) can be linked, providing important conceptual clarification of the Axis I conditions. Some of Mavissakalian's work included older subjects; however, data were not separated for older and younger groups. There is a need for an understanding of the characterological component to Axis I presentations in older patients. Future research might elucidate the relationships between Axis I and Axis II disorders, thus yielding more effective treatment strategies.

Overall, inadequate diagnosis and assessment are major barriers to the treatment phase for personality dysfunction in older adults. While some existing instruments have been adapted for use in older populations, elder-specific assessment measures have yet to be developed and validated. An heuristic model to follow in this regard is the way in which a standard screening test for depression, the Beck Depression Inventory, has been complemented by a parallel instrument, the Geriatric Depression Scale, which is specifically designed and validated for use with the aged. Effectiveness of treatment interventions also depends on the competence of service providers. Knowledge is presently limited as to how personality disorders in older adults are identified and dealt with by service providers. Because of the unique characteristics and differing presentation of older individuals with personality difficulties, clinicians must be cognizant of specific variables associated with aging as well as correlates of personality disorders in the elderly. Increased awareness and understanding of personality disorders are vital, as treatment approaches can be appropriately adjusted to address underlying personality deficits.

We believe that this review can raise awareness about the scope of the problem for clinicians and investigators working with older individuals, as well as stimulate much needed research to address the gaps in our understanding of this important and prevalent clinical manifestation. As we noted, concentrated investigative efforts in the areas of identification, assessment, diagnosis, and treatment of personality disorder in older adults are warranted. Increased awareness and knowledge of this problem will eventuate in more appropriate intervention and the reduction of suffering for elders with pervasive and dysfunctional personality problems.

## REFERENCES

- Abrams, R. C., Alexopoulos, G. S., & Young, R. C. (1987). Geriatric depression and DSM-III-R personality disorder criteria. Journal of the American Geriatrics Society, 35, 383–386.
- Abrams, R. C., Rosendahl, E., Card, C., & Alexopoulos, G. S. (1994). Personality disorder correlates of late and early onset depression. Journal of the American Geriatrics Society, 42, 727-731.
- American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders (3rd ed. rev.). Washington, DC: Author.
- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.
- Bolla-Wilson, K., & Bleecker, M. L. (1989). Absence of depression in elderly adults. Journals of Gerontology, 44, 53-55.
- Casey, D. A., & Schrodt, C. J. (1989). Axis II

- diagnoses in geriatric inpatients. Journal of Geriatric Psychiatry and Neurology, 2, 87–88.
- Colligan, R. C., Osborne, D., Swenson, W. M., & Offord, K. P. (1984). The MMPI: Development of contemporary norms. Journal of Clinical Psychology, 40, 100–107.
- Colligan, R. C., & Offord, K. P. (1992). Age, stage, and the MMPI: Changes in response patterns over an 85 year age span. Journal of Clinical Psychology, 48, 476-493.
- Coolidge, F. L. (1984). Coolidge Axis II Inventory. U.S. Copyright TXU 182 026, Washington, DC.
- Coolidge, F. L., Burns, E. M., Nathan, J. H., & Mull C. E. (1992). Personality disorders in the elderly. Clinical Gerontologist, 12, 41-55.
- Coolidge, F. L., & Merwin, M. M. (1992). Reliability and validity of the Coolidge Axis

- II Inventory: A new inventory for the assessment of personality disorders. Journal of Personality Assessment, 59, 223–238.
- Davis, W. E., & Greenblatt, R. L. (1990). Age differences among psychiatric inpatients on the MCMI. Journal of Clinical Psychology, 46, 770-774.
- Dye, C. J., Bohm, A., Anderten, P., & Cho, D. W. (1983). Age group differences in depression on MMPI-D scale. *Journal of Clinical Psychology*, 39, 227-234.
- Ferguson, B. & Tyrer, P. (1989). Personality disorders. In C. Thompson (Ed.), The instruments of psychiatric research (pp. 239–251). New York: John Wiley & Sons.
- First, M.B., Spitzer, R.L., Gibbon, M., Williams, J.B.W., & Lorna, B. (1994). Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II), (Version 2.0). New York: Biometrics Research Department, New York State Psychiatric Institute.
- Fogel, B. S., & Westlake, R. (1990). Personality disorder diagnoses and age in inpatients with major depression. *Journal of Clinical Psychiatry*, 51, 232-235.
- Graham, J. R. (1993). MMPI-2: Assessing personality and psychopathology (2nd ed.).

  New York: Oxford.
- Greene, R. L. (1980). The MMPI: An interpretive manual. New York: Grune & Stratton.
- Harmatz, J. S., & Shader, R. E. (1975). Psychopharmacological investigations in healthy elderly volunteers: MMPI depression scale. *Journal of the American Geriatrics Society*, 23, 350-354.
- Hathaway, S. R., & McKinley, J.C. (1983). The Minnesota Multiphasic Personality Inventory Manual. New York: Psychological Corporation.
- Hathaway, S. R., & McKinley, J.C. (1989).

  MMPI-2: Minnesota Multiphasic Personality Inventory-2: Manual for administration and scoring. Minneapolis, MN:
  University of Minnesota Press.
- Hyer, L., & Harrison, W. R. (1986). Later life personality model. Clinical Gerontologist, 5, 399-416.
- Hyler, S. E. (1994). Personality Diagnostic Questionnaire, 4th edition (PDQ-4). New York: New York State Psychiatric Institute.
- Kroessler, D. (1990). Personality disorders in the elderly. Hospital and Community Psychiatry, 41, 1325-1329.
- Kunik, M. E., Mulsant, B. H., Rifai, A. H., Sweet, R. A., Pasternak, R., Rosen, J.,

- & Zubenko, G. S. (1993). Personality disorders in elderly inpatients with major depression. *American Journal of Geriatric Psychiatry*, 1, 38–45.
- Leon, G. R., Gillum, B., Gillum, R., & Gouze, M. (1979). Personality stability and change over a 30 year period middle age to old age. Journal of Consulting and Clinical Psychology, 47, 515-524.
- Libb, J. W., Murray, J., Thurstin, H., & Alarcon, R. D. (1992). Concordance of the MCMI II, the MMPI, and axis I discharge diagnosis in psychiatric inpatients. *Journal of Personality Assessment*, 58, 580–590.
- Loranger, A.W., Sartorius, N., Andreoli, A., Berger, P., Buchleim, P., Channabasavanna, S.M., Coid, B., Dahl, A., Diekstra, R.F.W., Feguson, B., Jacobsberg, L.B., Mombour, W., Pull, C., Ono, Y., & Regier, D. (1994). The International Personality Disorder Examination: The World Health Organization/alcohol, Drug Abuse, and Mental Health Administration international pilot study of personality disorders. Archives of General Psychiatry, 51, 215-224.
- Mavissakalian, M., & Hamann, M. S. (1986). DSM-III personality disorder in agoraphobia. *Comprehensive Psychiatry*, 27, 471–479.
- Mavissakalian, M., & Hamann, M. S. (1988). Correlates of DSM-III personality disorder in panic disorder and agoraphobia. Comprehensive Psychiatry, 29, 535–544.
- Mavissakalian, M., Hamann, M. S., & Jones, B. (1990). Correlates of DSM-III-R personality disorder in obsessive-compulsive disorder. Comprehensive Psychiatry, 31, 481–489.
- Mavissakalian, M., Hamann, M. S., Haidar, S. A., & de Groot, C. M. (1993). DSM-III personality disorders in generalized anxiety, panic/agoraphobia, and obsessive-compulsive disorders. Comprehensive Psychiatry, 34, 243-248.
- McCann, J. T. (1989). MMPI personality disorder scales and the MCMI: Concurrent validity. *Journal of Clinical Psychology*, 45, 365–369.
- McCann, J. T. (1991). Convergent and discriminant validity of the MCMI-II and MMPI personality disorder scales. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 3, 9–18.
- Mezzich, T.E., Fabrega, H., Coffman, G.A., & Glavin, Y. (1987). Comprehensively di-

- agnosing geriatric patients. Comprehensive Psychiatry, 28, 68–76.
- Millon, T. (1983). Millon Clinical Multiaxial Inventory. Minneapolis, MN: Interpretive Scoring Systems.
- Millon, T. (1987). Millon Clinical Multiaxial Inventory II (MCMI II) manual. Minneapolis, MN: National Computer Systems.
- Millon, T. (1992). Millon Clinical Multiaxial Inventory: I & II. Journal of Counseling and Development, 70, 421–426.
- Millon, T. (1994). Millon Clinical Multiaxial Inventory III (MCMI III) manual. Minneapolis, MN: National Computer Systems.
- Morey, L. C., Waugh, M. H., & Blashfield, R. K. (1985). MMPI scales for DSM-III personality disorders: Their derivation and correlates. *Journal of Personality Assessment*, 49, 245–256.
- Morey, L. C., & LeVine, D. J. (1988). A mutlitrait-multimethod examination of Minnesota Multiphasic Personality Inventory (MMPI) and Millon Clinical Multiaxial Inventory (MCMI). Journal of Psychopathology and Behavioral Assessment, 10, 333-334.
- Patrick, J. (1988). Concordance of the MCMI and the MMPI in the diagnosis of three DSM-III Axis I disorders. Journal of Clinical Psychology, 44, 186–190.
- Pennington, B. H., Peterson, L. P., & Barker, H. R. (1979). The diagnostic use of the MMPI in organic brain dysfunction. Journal of Clinical Psychology, 35, 484-492.
- Pfohl, B., Blum, N., & Zimmerman, M. (1995). Structured Interview for DSM-IV Personality SIDP-IV. Iowa City, Iowa: University of Iowa.
- Reich, J. H. (1989). Update on instruments to measure DSM-III and DSM-III-R personality disorders. *Journal of Nervous* and Mental Disease, 177, 366-370.
- Rose, M. K., Soares, H. H., & Joseph, C. (1993). Frail elderly clients with personality disorders: A challenge for social work. Journal of Gerontological Social Work, 19, 153-165.
- Rosowsky, E., & Gurian, B. (1991). Borderline personality disorder in late life. *International Psychogeriatrics*, 3, 39–52.
- Rusk, R., Hyerstay, B. J., Calsyn, D. A., & Freeman, C. W. (1979). Comparison of the utility of two abbreviated forms of the MMPI for psychiatric screening of the elderly. *Journal of Clinical Psychology*, 35, 104–107.
- Schneider, L. S., Zemansky, M. F., Bender,

- M., & Sloane, R. B. (1992). Personality in recovered depressed elderly. *International Psychogeriatrics*, 4, 177–185.
- Segal, D.L. (in press). Structured interviewing and DSM classification. In S.M. Turner & M. Hersen (Eds.), Adult psychopathology and diagnosis (3rd. ed.). New York: John Wiley & Sons.
- Segal, D.L., Hersen, M., Van Hasselt, V.B., Kabacoff, R.I., & Roth, L. (1993). Reliability of diagnoses in older psychiatric patients using the Structured Clinical Interview for DSM-III-R. Journal of Psychopathology and Behavioral Assessment, 15, 347-356.
- Segal, D.L., Kabacoff, R.I., Hersen, M., Van Hasselt, V.B., & Ryan, C. F. (1995). Update on the reliability of diagnosis in older psychiatric outpatients using the Structured Clinical Interview for DSM-III-R. Journal of Clinical Geropsychology, 1, 313-321.
- Siegel, D. J., & Small, G. W. (1986). Borderline personality disorder in the elderly: A case study. Canadian Journal of Psychiatry, 31, 859-860.
- Silberman, C. S., Roth, L., Segal, D. L., & Burns, W. (in press). Relationship between the Millon Clinical Multiaxial Inventory-II and Coolidge Axis II Inventory in chronically mentally ill older adults: A pilot study. Journal of Clinical Psychology.
- Spar, J.E., & LaRue, A. (1990). Concise guide to geriatric psychiatry. Washington, DC: American Psychiatric Press.
- Streiner, D. L., & Miller, H. R. (1988). Validity of MMPI scales for DSM-III personality disorders: What are they measuring? Journal of Personality Disorders, 2, 238-242.
- Taylor, J. R., Strassberg, D. S., & Turner, C. W. (1989). Utility of the MMPI in a geriatric population. *Journal of Personality Assessment*, 53, 665-676.
- Thompson, L. W., Gallagher, D., & Czirr, R. (1989). Personality disorder and outcome in the treatment of late life depression. Journal of Geriatric Psychiatry, 21, 133-146.
- Weiss, J. M. (1973). The natural history of antisocial attitudes: What happens to psychopaths? *Journal of Geriatric Psychology*, 2, 236–242.
- Widiger, T. A., Williams, J. B., Spitzer, R. F., & Francis, A. (1985). The MCMI as a measure of DSM III. Journal of Personality Assessment, 49, 366–378.