

Personality Disorders in Older Adult Inpatients with Chronic Mental Illness

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It has been hypothesized that some types of personality disorders tend to remit with age whereas others may become more prominent. The present study determined the prevalence and nature of 13 personality disorders with a self-report inventory (Coolidge Axis II Inventory) in an older group of chronically mentally ill inpatients (N = 30, mean age = 63 years) and a younger group of similar patients (N = 30, mean age = 39 years). All patients met DSM-IV criteria for either Schizophrenia, Schizoaffective Disorder, Bipolar Disorder, or recurrent severe Major Depression with psychotic features. The prevalence rate of personality disorders was high for both groups: 58% for the older sample and 66% for the younger group. The younger group was more likely to be diagnosed Antisocial, Borderline, Passive-Aggressive, Sadistic, and Schizotypal, but the groups were not different in the rates of Obsessive-Compulsive Disorder. This study supports the hypothesis that some personality disorders remit with age. However, no evidence was found to suggest that other personality disorders become more prominent in older adult psychiatric populations. Suggestions for future research are offered.

KEY WORDS: personality disorders; inpatients; chronic mental illness; older adults; Coolidge Axis II Inventory.

INTRODUCTION

Despite a growing body of literature, research on assessment and treatment of personality dysfunction in older adults is in its nascent stage. Simply too few studies have been done to draw definitive conclusions about diverse practical and conceptual issues, such as relevance of diagnostic criteria, preferred assessment tools, specialized treatment strategies, comorbidity of personality disorders with Axis I conditions, and the course of personality disorders across the life span. With the rapid aging of our population and the concomitant growing number of older adults seeking mental health services, accurate assessment of personality dysfunction is critical, especially since personality disorders are sometimes

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overlooked, underdiagnosed, and inappropriately ignored in the treatment in some older adults (Segal *et al.*, 1996; also see Kroessler, 1990).

Research on the stability or change of personality disorders as one enters old age has been especially limited. Several potential reasons for this include the following:

- (a) The advent of the multiaxial system with specific diagnostic criteria for personality disorders in DSM-III (American Psychiatric Association, 1980) is relatively recent. Prior to that time the criteria for personality disorders were notoriously vague and unreliable (Mellsop *et al.*, 1982), thus obviating accurate classification and programmatic research.
- (b) The belief held by some clinicians that older persons rarely suffer from personality disorders is erroneous (Segal *et al.*, 1996).
- (c) Carrying out longitudinal studies on course/stability of maladaptive personality traits is difficult because of the extensive time, cost, and effort of such endeavors.

Despite these difficulties, information is sorely needed about this important conceptual and clinical issue if we are to better understand our older adult clients with personality problems.

Notably, the DSM-III and DSM-III-R (American Psychiatric Association, 1980, 1987) offered similar views about the course of personality disorders across the life span: Both suggested that personality disorders are generally recognizable by adolescence or earlier, continue through most of adult life, and become less prominent with age. Several researchers have put these contentions to empirical test. Almost a decade ago, Tyrer (1988) studied the relationship between DSM-III personality disorders and increasing age. Tyrer suggested that “mature” forms of personality disorder such as obsessive-compulsive, paranoid, schizoid, and schizotypal remain stable with age. In contrast, “immature” or flamboyant disorders such as antisocial, borderline, histrionic, and narcissistic were noted to likely decrease with age. Tyrer’s hypotheses certainly have anecdotal support, culled from clinicians with vast experience in the diagnosis and assessment of older persons. Indeed, the present personality functioning for some older adult clients appears markedly improved compared to the social and occupational turmoil characteristic of their earlier years.

On the other hand, some older persons show exacerbation in their personality styles. In an interesting study, Coolidge *et al.* (1992) investigated the course of DSM-III-R personality disorders by directly comparing personality disorder rates in purportedly normal younger ($N = 573$; mean age = 24.0 years) and older ($N = 36$; mean age = 69.4 years) individuals in a cross-sectional study. Mean T scores for 13 personality disorder scales were analyzed to assess group differences. The hypothesis from DSM-III-R (American Psychiatric Association, 1987) that personality disorders “often become less obvious in middle or old age” (p. 335) was only partially supported, as the older adult group was significantly more obsessive-compulsive and schizoid than their younger counterparts, and the groups did not differ on the avoidant or dependent personality disorder scales.

Notably, DSM-IV (American Psychiatric Association, 1994) was the first version of the manual to include a specific section on the developmental issue of aging in the diagnosis of personality disorders. Like the earlier manuals, the DSM-IV again stated that a personality disorder is usually recognized by adolescence or early adulthood, and onset must occur before middle age for an official diagnosis to be made. Since personality disorders are “enduring patterns of thinking, feeling and behaving” (p. 632) they were also hypothesized to

be consistent and stable throughout adulthood. However, the DSM-IV also specifically noted that the Antisocial and Borderline disorders “tend to become less evident or to remit with age, whereas this appears to be less true for some other types (e.g., Obsessive-Compulsive and Schizotypal personality disorders)” (p. 632). Empirical research, however, in support of or against these latter specific hypotheses has been scarce.

A related issue concerns the personality structure of individuals with chronic mental disorders, such as Schizophrenia, Bipolar Disorder, and recurrent severe psychotic depression. Are particular dysfunctional personality styles associated with these debilitating and lifelong conditions? If so, what are the effects on personality of a long history of a chronic Axis I condition? One might theorize that suffering from a chronic mental disorder such as Schizophrenia, Bipolar Disorder, or recurrent psychotic depression could have serious deleterious effects on one’s personality development. Indeed, many older adults with persistent mental illness have suffered a lifetime of debilitating symptoms, social isolation, poor work functioning, financial woes, iatrogenic medication effects, and stigmatization by others, and as a result may have learned inappropriate and maladaptive cognitive and behavioral coping responses that have become ingrained. On the other hand, several researchers have argued that personality traits (adaptive and maladaptive) are crystallized by early adulthood and are not likely to significantly change as a result of aging and diverse life experiences (Costa and McCrae, 1988; Field and Millsap, 1991; McCrae and Costa, 1990). To date, a plethora of research has shown that dysfunctional personality traits negatively influence the course and treatment of diverse clinical disorders such as Major Depression in older (Thompson *et al.*, 1988) and younger patients (Diguer *et al.*, 1993; Pilkonis and Frank, 1988), Bipolar Disorder (Schou, 1988), and Schizophrenia (Smith *et al.*, 1993). Overall, research on the effects and course of personality disorders in chronically mentally ill older adults is especially sparse.

Recently, Ekselius *et al.* (1994) theorized that personality disorders in psychotic patients not only reflects the presence of a “schizophrenia spectrum” but, moreover, “it seems as if patients with various personality disorders may develop a psychotic disorder” (p. 185). In their study of 21 inpatients and outpatients who met DSM-III-R criteria for Schizophrenia (mean age approximately 36 years), they found that 67.7% met criteria for at least one personality disorder by a structured clinical interview whereas 85.7% met criteria for at least one personality disorder by a self-report questionnaire. Overall, their results demonstrated the high prevalence of personality disorders in psychotic disorders and support previous studies with similar high rates. For example, Hogg *et al.* (1990) found that 57% of 40 schizophrenic patients had at least one personality disorder according to a structured interview whereas 70% had at least one personality disorder according to self-reports. They also found that multiple personality disorder diagnoses were nearly as common ($N = 11$) as single diagnoses ($N = 12$). Turley *et al.* (1992) found even higher rates (89%) of personality disorders in a study of 19 patients with Bipolar Disorder when the personality disorders were assessed by self-report using the Millon Clinical Multiaxial Inventory II (MCMI-II; Millon, 1987). The rate dropped to 58% when the personality disorders were assessed by structured clinical interviews. They also found an average of 2.7 ($SD = 4.8$) personality disorders per patient, and 58% of the 19 patients had more than one personality disorder according to the MCMI-II results. In contrast, somewhat lower (but still relatively high) values were reported by Carpenter *et al.* (1995) who found that 22% of married adult bipolar outpatients met criteria for a personality disorder. In one of the few personality

disorder investigations of depressed older adults, Vine and Steingart (1994) found that approximately 36% of 64 elderly patients (mean age = 75.7 years, $SD = 6.4$ years, range = 60 to 92 years) met criteria for at least one personality disorder according to a review of patient records.

The present study addresses these issues by comparing scores of chronically mentally ill older adults to scores of similarly impaired younger adults on a well-validated self-report personality disorder inventory aligned with the DSM-IV system. This way, age-related differences in DSM-IV personality disorders can be investigated, and the contentions from DSM-IV that some types of personality disorders tend to remit with age (e.g., Antisocial and Borderline) whereas others may not (e.g., Obsessive-Compulsive and Schizotypal) can be evaluated empirically. The purpose of our study, therefore, was to examine the prevalence and nature of DSM-IV personality disorders in an older group of chronically mentally ill patients compared with a younger sample.

METHOD

Participants

Demographic information for each group was collected through self-report questionnaires and chart review. Individuals from both groups were inpatients of one of two psychiatric hospitals: one in Colorado and the other in Florida. All of the patients were receiving regular doses of various antipsychotic and anticholinergic medications.

Younger Group

The younger (control) group consisted of 30 chronically mentally ill male inpatients whose ages ranged from 22 to 54 years. The mean age for this younger sample was 39.4 ($SD = 10.1$). All younger patients were diagnosed by a psychiatrist as having a primary diagnosis of Schizophrenia as defined by DSM-III-R. Years of education completed ranged from 7 to 16 ($M = 11.6$; $SD = 2.0$). Approximately 37% of the sample were divorced, 60% had never been married, and 3.3% were married. Approximately 50% of the sample were Caucasian, 27% were Hispanic, 17% were Black, and 3% were Asian.

Older Group

The older group consisted of 30 chronically mentally ill patients whose ages ranged from 55 to 83 years. The mean age for this group was 63.3 years ($SD = 6.4$). There were 18 females and 12 males. All older patients were diagnosed by a psychiatrist as having a chronic mental illness as defined by DSM-III-R. Four participants (13%) were diagnosed with Schizophrenia, 14 participants (47%) were diagnosed with Major Depression, and 12 participants (40%) met criteria for Schizoaffective Disorder. Years of education completed ranged from 8 to 16 ($M = 12.3$; $SD = 2.0$). Approximately 37% of the sample were divorced, 20% were separated, 20% had never been married, 13% were widowed, and 10% were married. All were Caucasian.

Instruments

Coolidge Axis II Inventory (CATI; Coolidge, 1984; Coolidge and Merwin, 1992)

The CATI is a 225-item, self-report inventory designed to assess personality disorders according to DSM-IV criteria. Items are answered on a 4-point Likert scale ranging from Strongly False to Strongly True. The inventory contains 13 personality disorder scales, including the 10 standard DSM-IV personality disorders as well as the Sadistic, Self-Defeating, and Passive-Aggressive Personality Disorders from DSM-III-R. Each unique criterion from the DSM-IV Axis II disorders is covered by at least two items on the CATI. The CATI also has five Axis I measures (Anxiety, Depression, Social Phobia, Posttraumatic Stress Disorder, and Schizophrenia), several neuropsychological dysfunction scales, and four validity scales. According to the CATI manual (Coolidge, 1984), the presence of a personality disorder is strongly indicated if a scale has a *T* score greater than or equal to 70. Excellent test-retest reliability (1 week intervening, mean $r = .90$; range = .78 to .97) has been established for the CATI, as well as moderate internal consistency (median scale reliability = .76; range = .66 to .87; Coolidge and Merwin, 1992). As to validity, a 50% concordance rate with clinicians' diagnoses for 24 personality-disordered outpatients was found (Coolidge and Merwin, 1992). Similarly, moderate convergent validity with the MCMI II (Millon, 1987) has been found in younger psychiatric outpatients (median concurrent validity correlation for 13 scales = .58; Coolidge and Merwin, 1992) and older psychiatric inpatients (median concurrent validity correlation for 13 scales = .55; Silberman *et al.*, 1997).

Procedure

Participants were selected for their ability to complete a self-report inventory by an experimenter not aware of the dependent measure. Informed consent was obtained from all participants and their confidentiality was ensured through the use of numerical codes so that the participant's names never appeared on any of the data forms. Before completing the CATI, participants were ensured that the results would have no bearing on their hospitalization, medication, or legal standing. In the older sample, the CATI was administered in small groups of five or fewer, whereas the younger participants completed the measure individually. If an older subject was unable to complete the questionnaires during the group administration, the examiner met with him or her individually to finish the protocol. CATI test protocols were manually entered into a computer for computer scoring. Axis I diagnoses were assigned by attending psychiatrists who extensively interviewed the patients.

RESULTS

Validity of Self-Report in the Psychotic Samples

The CATI has a three-item validity scale designed primarily to detect random responding or the failure to read the items carefully. The three items are written such that it is unlikely someone would ever produce any other answer than Strongly False (e.g., I played

quarterback for the Denver Broncos). Although the validity of self-report inventories in psychotic patients is rarely reported in the literature, the present study found that 85% (51 of 60 patients) fully denied on all three items. The other nine patients were still included in further analyses because their CATI profiles still appeared within range for the present sample (i.e., no other scales greater than or less than 3 *SDs* from the normative means). The younger sample was not significantly more elevated than the older sample on the 45-item Schizophrenia scale of the CATI but they were significantly more elevated on the 9-item Psychotic Thinking scale of the CATI, and both groups were more elevated than the normative control means on both scales.

Prevalence of Personality Disorders

According to the CATI manual's *T*-score criterion (greater than 2 *SDs* above the normative mean), the overall prevalence rate of at least one personality disorder was high for both groups, 58% for the older sample and 66% for the younger group. It has been thought that prevalence rates of personality disorders in most clinical samples are about 40%, and the present finding reinforces the growing awareness that personality disorders are sometimes underdiagnosed in older adults (Segal *et al.*, 1996). A summary of the prevalence rates and mean *T* scores is presented in Table I.

In the younger group, the most prevalent personality disorder (*T* scores greater than 69) was Antisocial (47%), followed by Passive-Aggressive (30%), Borderline (27%), and Sadistic (23%). For the older group, the most prevalent personality disorder was Self-Defeating (20%), followed by Schizoid (17%), Dependent (13%), Antisocial (10%), Borderline (10%), and Obsessive-Compulsive (10%). Interestingly, each personality disorder was diagnosed at least once in the younger sample, although no older patients received a diagnosis of Histrionic, Paranoid, or Schizotypal Personality Disorder.

The hypothesis that the Antisocial and Borderline personality disorders remit with age was supported even in this sample of chronically mentally ill patients. However, there

Table I. Prevalence Rates for 13 Personality Disorders Between Younger and Older Chronically Mentally Ill Patients

Personality disorder	Younger group (<i>n</i> = 30)			Older group (<i>n</i> = 30)		
	<i>n</i>	%	Mean <i>T</i>	<i>n</i>	%	Mean <i>T</i>
Antisocial ^a	14	47	64	3	10	50
Avoidant	3	10	59	2	7	53
Borderline ^a	8	27	56	3	10	52
Dependent	4	13	57	4	13	56
Histrionic	2	7	54	0	0	49
Narcissistic	3	10	53	1	3	49
Obsessive-Compulsive	2	7	57	3	10	55
Paranoid	3	10	55	0	0	50
Passive-Aggressive ^a	9	30	64	1	3	52
Sadistic ^a	7	23	60	1	3	48
Schizoid	5	17	57	5	17	60
Schizotypal ^a	5	17	56	0	0	50
Self-Defeating	5	17	54	6	20	57

^aGroup mean differences as determined by analysis of variance is significant at $p < .05$.

was little or no evidence that the Obsessive-Compulsive Disorder tends to become more obvious with age. In fact, the older group was not significantly elevated (compared to the younger sample) on any of the 32 items of the Obsessive-Compulsive scale of the CATI. Likewise, there was no evidence that Schizotypal Personality Disorder increases with age in these samples. Interestingly, it appeared that the opposite was true. The mean *T* score for the Schizotypal scale for the younger group was significantly higher than for the older group, and five younger patients met full criteria for the diagnosis whereas none of the older patients did.

There was also some evidence of a diminution of personality disorders in older adults despite the high overall prevalence rates. First, the mean number of personality disorders for the younger patients who met criteria for at least one personality disorder ($n = 20$) was 3.5. For the older group who met criteria ($n = 17$), the mean was 1.6. Second, the mean *T* score across all 13 personality disorder scales for the younger group was 57.4, whereas the older group's mean was 52.4. Third, a summary of significant differences between the two groups' mean *T* scores for all 13 personality disorders revealed that the Antisocial, Borderline, Passive-Aggressive, Sadistic, and Schizotypal Personality Disorder scales were significantly greater for the younger group.

Prevalence of Axis I Disorders: Anxiety and Depression

The younger and older samples were also compared on the 28-item Anxiety scale of the CATI. Although both samples showed clinically significant mean group *T*-score elevations, there was no statistically significant difference between the two samples on the Anxiety scale: Anxiety *T*-score younger group mean = 56.6 ($SD = 13.6$), older group mean = 57.2 ($SD = 8.2$), $t(58) = -.21$, $p > .15$. For the younger group, 40% (12 of 30) were elevated by at least 1 *SD* above the normative sample mean, 17% (5 of 30) were elevated by 2 *SD*s, and 7% (2 of 30) were elevated by 3 *SD*s. For the older group, 43% (13 of 30) were elevated by at least 1 *SD* above the normative sample mean, but only 3% (1 of 30) was elevated by 2 *SD*s.

On the 24-item Depression scale of the CATI, there was also no statistical difference between the younger and older samples despite clinically significant elevations on mean scores of both groups; Depression *T*-score younger group mean = 58.7 ($SD = 11.4$) older group mean = 57.8 ($SD = 12.9$), $t(58) = .28$, $p > .15$. For the younger group, 53% (16 of 30) were elevated by at least 1 *SD* above the normative sample mean, 17% (5 of 30) were elevated by 2 *SD*s, and 7% (2 of 30) were elevated by 3 *SD*s. For the older group, 47% (14 of 30) were elevated by at least 1 *SD* above the normative sample mean, 17% (5 of 30) were elevated by 2 *SD*s, and one older patient was elevated by more than 3 *SD*s. With regard to Current Suicidal Ideation (CATI Item 198), 13% (4 of 30) of the younger group met the criterion whereas 23% (7 of 30) of the older group met the criterion. However, these rates were not statistically different: $\chi^2(1) = 1.01$, $p > .15$.

DISCUSSION

As expected, the overall prevalence rate for personality disorders for this older adult sample of chronically mentally ill inpatients was high (58%), although not statistically different from the younger group (66%) of schizophrenic patients. This finding is consistent

with the growing body literature (e.g., Ekselius *et al.*, 1994; Hogg *et al.*, 1990; Turley *et al.*, 1992) that suggests a high concomitance rate between personality disorders and psychoses. The finding that there seems to be a diminution of personality disorders in older adults is also consistent with the DSM-IV statement that although personality disorders appear consistent and stable throughout adulthood, some personality disorders (in this study, the Antisocial, Borderline, Passive-Aggressive, Sadistic, and Schizotypal) become less evident with increasing age.

However, contrary to the DSM-IV, there was no evidence that Obsessive-Compulsive Disorder becomes more prominent in older adults, at least in this sample of chronically ill patients. It is, of course, possible that the more florid Axis I characteristics of this older sample may have tended to obscure the Axis II features of Obsessive-Compulsive Disorder. However, the fact that the older group was not significantly elevated on any of the 32 items of the Obsessive-Compulsive scale of the CATI makes it more likely that the hypothesis that features of Obsessive-Compulsive Disorder may increase in older adults should be reexamined. In addition, there was no evidence for the DSM-IV notion that the Schizotypal Personality Disorder increases with age. Rather the mean *T* score for the Schizotypal scale for the younger group was significantly higher than for the older group, and five younger patients met criteria whereas none of the older patients did.

There was also some evidence for a diminution of personality disorders with age in terms of the number of personality disorder diagnoses a patient has and the overall personality pathology. Likewise, Molinari *et al.* (1994) found that older adult inpatients were less likely to be diagnosed with multiple personality disorders compared to younger adult inpatients. It has been argued that the apparent remission of various personality disorders (e.g., Antisocial and Borderline) results from the deaths at a young age of individuals with more severe features of the disorder, whereas those with milder forms tend to live longer. This would account for the decreased prevalence rates in older populations rather than remission of underlying personality dysfunction. Future studies should be conducted to account for this possibility and to see if the findings of the present study hold in patients without Axis I diagnoses. Longitudinal studies are needed to follow younger personality-disordered individuals into older age.

With regard to Axis I diagnoses, it appears that both groups had high group mean *T*-score rates of Anxiety (although group differences were not significantly different), but the actual percentage of patients meeting the criterion on the Anxiety scale of the CATI (*T* scores greater than 69) was higher for the younger group (17%) than for the older group (3%). With regard to the Depression scale of the CATI, both groups again had high mean *T*-score rates, although not significantly different, but a different clinical picture emerged with regard to the percentage of patients meeting the criterion for Depression for the two groups. Both groups had identical rates of 17% of the patients meeting the criterion for depression (according to the CATI Depression scale). Also, it is of clinical importance to note that the percentage of older patients with current suicidal ideation (23%) was greater than in the younger group (13%) (although not statistically different). This finding may be of critical importance for clinicians who deal with older clinical populations, particularly those with chronic mental illnesses.

Finally, note the exceptionally high percentage of valid profiles in both of these samples of mentally ill patients (at least according to the 3-item CATI Random Responding scale). Validity statistics often are not reported for self-report measurements of the more

severely disturbed patients. The present finding that at least 85% of these patients did produce purportedly valid profiles lends support to continued use of self-report psychological measures of the more severely disturbed mental patients.

Several limitations of our study should be noted. First, Axis I diagnoses in both samples were determined by attending psychiatrists, and no reliability checks were performed. Although the psychiatrists worked closely with the patients, diagnoses likely would have been more reliable and valid if they were made on the basis of a structured interview such as the Structured Clinical Interview for DSM-IV (SCID; First *et al.*, 1995). Notably, the SCID has been shown to produce highly reliable Axis I diagnoses in a mixed outpatient and inpatient population of older adults (Segal *et al.*, 1993) and a larger outpatient group of older adults (Segal *et al.*, 1995). Likewise, use of structured interviews for Axis II diagnoses would have enhanced the study. Examples of popular and effective personality disorder interviews include the SCID for Personality Disorders (SCID-II; First *et al.*, 1994), the Structured Interview for DSM-IV Personality (SIDP-IV; Pfohl *et al.*, 1995), and the International Personality Disorder Examination (Loranger *et al.*, 1994). Another limitation is that the sample size of 60 (30 younger and 30 older participants) is relatively small. However, this fact reflects the rather specific focus of the study and the small numbers in general of institutionalized persistently mentally disabled older persons.

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