An Empirical Investigation of Jung's Psychological Types and Personality Disorder Features

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> In a nonclinical sample of adults, higher scores on the CATI measure of personality disorders overall were somewhat more likely to be associated with introversion, intuition, thinking, and/or perceiving.

Abstract

The present study examined how Jung's theory of psychological types (assessed by the MBTI) may relate to personality disorders or their features (measured by the Coolidge Axis II Inventory; CATI). The participants were 332 community-dwelling adults (18-89 years old). A zero-order correlation matrix revealed that personality disorders were clearly more likely to be related to the MBTI poles of introversion, intuition, thinking, and perceiving. All 14 of the personality disorder scales of the CATI had at least one significant relationship to the MBTI, and 2 personality disorders had significant relationships with all four dimensions. It appears that the MBTI may have heuristic value for understanding personality disorders.

The purpose of the present study was to determine how Jung's theory of psychological types, as operationalized by the Myers-Briggs Type Indicator (Myers & McCaulley, 1985) is related to personality disorders, as operationalized by the Coolidge Axis II Inventory (CATI; Coolidge, 1993; Coolidge & Merwin, 1992), a measure of 14 personality disorders. Previous research with the MBTI and personality disorders is sparse, but a recent study of 158 male veterans showed that IT types were more likely to have diagnoses of antisocial and avoidant personality disorders (Otis & Louks, 1997). Otis and Louks also found that IT types were more likely to suffer from

Posttraumatic Stress Disorder (PTSD). In a study of 100 male batterers, ISTJ, ISFJ, and ISFP profile types were found to be the most common (Orr & Guzie, 1995), whereas 64% of 45 PTSD Vietnam veterans had either ISTP, ISTJ, or INTP profiles.

Method

Participants and Procedure. College students were asked to volunteer for the study and to recruit older friends and family members. The students received extra credit for their participation or for recruiting others. The final sample of convenience

Journal of Psychological Type, Vol. 58, 2001 Page 33

Table 1. Correlation Matrix Between MBTI Scales and CATI Personality Disorder Scales.

Personality	MBTI Dimensions			
Disorders	E-I	S-N	T-F	J-P
Antisocial	09	.22**	27**	.27**
Avoidant	.54**	05	09	.02
Borderline	.04	.27**	.04	.14**
Dependent	.17**	.07	.08	.03
Depressive	.19**	.07	17**	03
Histrionic	29**	.09	.17**	.02
Narcissistic	.02	.13*	10	08
Obsessive-Compulsive	.27**	13*	22**	26**
Paranoid	.26**	.03	27**	.03
Passive-Agressive	.14*	.14*	10	.18**
Sadistic	04	.16*	28**	.19**
Self-Defeating	.17**	.18**	11	.08
Schizoid	.26**	08	27**	01
Schizotypal	33**	.21**	27**	.19**
*p < .05 **p < .01				

consisted of 332 community-dwelling adults (mean age = 31, age range 18-89 years; 91 males, 241 females; 80% Caucasian, 6% Hispanic, 4% Black, 4% Asian, 1% Native American, 5% missing data). Lifetime prevalence rates for personality disorders in the general population are estimated to range from 8% to 13% (e.g., Weissman, 1993). The present sample was expected to have sufficient levels of personality disorder traits or features in order to conduct the present investigation. Indeed, earlier studies support that expectation (Jang, Livesley, & Vernon, 1998; Jang, Livesley, Vernon, & Jackson, 1996). The participants completed the inventories at their homes or at the University of Colorado at Colorado Springs, and informed consent was obtained.

Materials. The CATI (Coolidge, 1993; Coolidge & Merwin, 1992) is a 225-item, self-report measure designed to assess personality disorders according to the criteria of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV; American Psychiatric Association, 1994). Responses to items on the CATI are given on a 4-point true-false scale, ranging from 1 (strongly false) to 4 (strongly true). The CATI items

represent all of the unique criteria for the 10 personality disorders and two disorders in the appendix from the DSM-IV (passive-aggressive and depressive), plus two disorders from the appendix of the DSM-III-R (1987; sadistic and self-defeating). The 14 personality disorder scales of the CATI have a mean testretest reliability of .90 (1-week interval). The median internal scale consistency (Cronbach's alpha) is .76 (range: highest, dependent scale = .87; lowest, selfdefeating scale = .66). The CATI attained a 50% concordance rate when matched to diagnoses of clinicians, and it had a median concurrent validity correlation with the Millon Clinical Multiaxial Inventory (MCMI-II; Millon, 1987) of .58 for 13 of the personality disorder scales. A full description of the psychometric properties of the CATI is given in greater detail elsewhere (Coolidge & Merwin). The MBTI (Form F) was also administered.

Results and Discussion

The results of the zero-order correlation matrix are presented in Table 1. From the perspective of the MBTI, one fascinating finding arose: Psycho-

Page 34 Journal of Psychological Type, Vol. 58, 2001

pathological MBTI poles were clearly more likely to be introversion, intuition, thinking, and perceiving. For example, 10 of the 14 personality disorder scales had statistically significant relationships to the E-I dimension. Nine of these 10 personality disorder scales were correlated to introversion, and only 1 (histrionic personality disorder) was correlated to the extraversion pole. This pattern was consistent throughout the four dimensions. The S-N dimension was significantly correlated to 8 of the 14 personality disorder scales. Seven of the 8 significant relationships were correlated to the intuition pole, whereas only the obsessive-compulsive personality disorder scale was correlated to sensing. The T-F dimension was significantly correlated to 8 of the 14 personality disorder scales. Seven of the 8 significant relationships were correlated to the thinking pole, whereas only the antisocial personality disorder scale was correlated to feeling. The J-P dimension was significantly correlated to 6 of the 14 personality disorder scales. Five of the 6 significant relationships were correlated to the perceiving pole, whereas only the obsessivecompulsive personality disorder scale was correlated to judging.

From the perspective of the personality disorders, two personality disorders had significant correlations with all four dimensions: The schizotypal personality disorder produced the INTP profile, whereas the obsessive-compulsive personality disorder produced the ISTJ profile. Three personality disorders had significant correlations on the MBTI with three dimensions: The antisocial personality disorder and sadistic personality disorder produced identical NTP profiles, whereas the passive-aggressive personality disorder yielded the INP profile. Six personality disorders had significant correlations with two MBTI dimensions: The paranoid, passive-aggressive, and depressive personality disorders all produced IT profiles, the borderline personality disorder produced an NP profile, the histrionic personality disorder had an EF profile, and the self-defeating personality disorder had an IN profile. Three personality disorders had only one significant correlation on a single MBTI dimension: narcissistic personality disorder with intuition, and avoidant and dependent personality disorders with introversion.

Several limitations should be noted. The present study is limited by a nonclinical sample of convenience. We suggest that future research be conducted with clinical samples in order to determine the generalizability of the present results. Further, Jungian types were not verified by any instrument other than the MBTI, and personality disorders or their features were not verified by any other instrument but the CATI. In addition, both instruments are self-report, and future studies may wish to use additional sources of assessment

such as significant other ratings or clinical interviews. A final caveat is that one should be cautious in assuming that separate pole correlations add up to a formal type.

In summary, it appears that the MBTI may have heuristic value in understanding personality disorders. Although previous use of the MBTI has been predominantly as an assessment measure for nonclinical samples, the present findings suggest that the MBTI may have some possible clinical implications as well. It was also found that four of Jung's dimensions, introversion, intuition, thinking, and perceiving, were more likely to be associated with personality disorders than were their dimensional opposites.

Also of note, the schizotypal personality disorder scale had significant correlations with all four of the MBTI poles. This finding is interesting, because the schizotypal personality disorder is considered to be one of the most severe disturbances of all the personality disorders (e.g., Millon, 1981), and it appears that the MBTI may have some value in understanding this extreme form of psychopathology. The obsessive-compulsive personality disorder scale was also significantly related to all four MBTI poles, but with a different pattern than schizotypal, suggesting, perhaps, important differential sensitivity of the MBTI. Given recent calls for greater clarity of the definitions of a personality disorder as well as the hypothesis that personality disorder traits are continuous with variations in the normal personality (e.g., Livesley, 2000), it appears that the MBTI may be useful in a broader understanding of personality disorders.

References

- American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed. revised). Washington, DC: Author.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.
- Coolidge, F. L. (1993). Coolidge Axis II Inventory: Manual. Clermont, FL: Synergistic Office Solutions, Inc.
- 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
- Jang, K. L., Livesley, W. J., & Vernon, P. A. (1998). A twin study of genetic and environmental contributions to gender differences in traits delineating personality disorder. European Journal of Personality, 12, 331-344.
- Jang, K. L., Livesley, W. J., Vernon, P. A., & Jackson,

- D. N. (1996). Heritability of personality disorder traits: A twin study. Acta Psychiatrica Scandinavica, 94, 438-444.
- Livesley, W. J. (2000). Introduction. *Journal of Personality Disorders*, 14, 97-98.
- Myers, I. B., & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.
- Millon, T. (1981). Disorders of personality, DSM-III: Axis II. New York: Wiley.
- Millon, T. (1987). Millon Clinical Multiaxial Inventory-II Manual (MCMI-II). Minneapolis, MN: National Computer Systems.
- Orr, V. L., & Guzie, T. (1995). Male batterers and psychological type. *Journal of Psychological Type*, 34, 2-7

- Otis, G. D., & Louks, J. L. (1997). Rebelliousness and psychological stress in a sample of introverted veterans. *Journal of Psychological Type*, 40, 20-30.
- Weismann, T. A. (1993). Validation strategies for the personality disorders. Journal of Personality Disorders, Supplement, 34-43.

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