NOTE FROM THE FIELD

MACI Personality Scale Profiles of Depressed Adolescent Suicide Attempters: A Pilot Study

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Employing the Millon Adolescent Clinical Inventory (MACI), we examined differences in the maladaptive personality style profiles of clinically referred, depressed adolescents presenting with \( n = 26 \) and without \( n = 23 \) a history of previous suicide attempts. Relative to the comparison group, adolescent attempters experienced more severe overall levels of personality dysfunction. At the trait level, attempters obtained higher scores on the forceful and borderline tendency scales and lower scores on the submissive and conforming scales of the MACI, reflecting negative mood regulation deficits (e.g., anger control problems) and persistently high levels of aggressive impulsivity. These preliminary findings suggest that MACI personality scales may be useful in discriminating adolescents with and without previous suicidal behavior, especially among depressed outpatient samples © 2000 John Wiley & Sons, Inc. J Clin Psychol 56: 1381–1385, 2000.

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Recent epidemiological investigations of adolescent suicide have implicated personality disorder as a primary diagnostic risk factor for nonfatal attempts (Brent et al., 1993; Brent, Zelenak, Bukstein, & Brown, 1990; Johnson, Brent, Bridge, & Connolly, 1998; Lewinsohn, Rohde, Seeley, & Klein, 1997) and completed suicide (e.g., Brent et al., 1994), based generally on the observation that suicidal adolescents obtain higher rates of personality disorder diagnoses relative to controls. Notably, borderline personality disorder appears to be prominent among Axis II diagnoses associated with suicide for this age group (e.g., Brent et al., 1993).

Whereas the majority of these studies have relied almost exclusively on categorical methods of classification (e.g., structured diagnostic interviews) to examine the relationship between suicide-related behavior and personality psychopathology in adolescent samples, the present study was designed to explore this association employing an explicitly dimensional approach to personality assessment. Certainly, the development of structured interviews has resulted in improved reliability and validity with respect to diagnostic decision-making (e.g., Matarazzo, 1983). However, dimensional models provide quantitative information (e.g., relative severity of dysfunction) not obtainable using categorical methods and, as such, may more accurately reflect the heterogeneity of psychopathology found in actual clinical populations (Widiger, 1997). More specifically, we evaluated the extent to which the various personality style scales of the Millon Adolescent Clinical Inventory (MACI; Millon, Millon, & Davis, 1993) discriminated clinically referred, depressed adolescents presenting with and without a history of previous suicide attempts. Whereas comparable measures such as the Millon Clinical Multiaxial Inventory (MCMI; Millon, 1983) have been used to examine similar relationships in adult samples (e.g., Hull, Range, & Goggin, 1992), younger age groups have not been the focus of such investigation. We describe preliminary results that address this issue.

**Method**

**Sample**

Participants were 49 outpatient admissions to the Adolescent Depression and Suicide Program (ADSP) at Montefiore Medical Center in the Bronx, NY. The sample consisted of 10 males (20.4%) and 39 females (79.6%) ranging in age from 12 to 19 years ($M = 15.31, SD = 1.93$). Thirty-eight participants (77.6%) identified themselves as Hispanic, 7 (14.3%) African American, and 4 (8.2%) Caucasian. Hispanic participants were of predominantly Dominican and Puerto Rican ethnic descent. Axis I diagnoses were of predominantly Dominican and Puerto Rican ethnic descent. Axis I diagnoses were assigned for each participant on the basis of ratings obtained from the Structured Clinical Interview (SCID; Spitzer & Williams, 1990) for the *Diagnostic and Statistical Manual of Mental Disorders*, Third Edition-Revised (DSM-III-R; American Psychiatric Association, 1987). Primary diagnoses included Major Depressive Disorder (MDD)-Single Episode (22.5%), MDD-Recurrent Episode (20.4%), Dysthymic Disorder (24.5%), Bipolar Disorder (8.2%), Depressive Disorder N.O.S. (4.1%), Adjustment Disorder (14.3%), PTSD (2.0%), and Schizoaffective Disorder (4.1%).

Participants reporting any history of suicide attempts, in response to an item on the Harkavy–Asnis Suicide Survey (HASS; Harkavy-Friedman & Asnis, 1989) were identified as “attempters” ($n = 26$). Those remaining were designated “nonattempters” ($n = 23$). The two groups were found to be comparable with respect to age, gender, ethnicity, and prevalence rates for specific diagnoses. The most recent attempt reported by participants occurred within two weeks of the assessment in 6 cases (23.1%), within the last month in 15 cases (57.7%), and within the last year in 19 cases (73.1%). Methods used in these attempts most often involved pill ingestion (61.5%) and cutting (23.1%).

**Procedure**

Each participant completed the Millon Adolescent Clinical Inventory (MACI; Millon
et al., 1993) as part of a comprehensive clinical assessment. The MACI is a 160-item, self-report inventory that provides ratings for 31 scales, which in turn comprise three domains of psychopathological functioning: personality styles, expressed concerns, and clinical syndromes. Analyses for the present study were based on scores derived from the 12 personality scales of the MACI: introverted, inhibited, doleful submissive, dramatizing, egotistic, unruly, forceful, conforming, oppositional, self-demeaning, and borderline tendency. Scores for each scale are obtained by transforming raw scores into base rate (BR) scores. The conversion provides a basis for establishing valid scale cutoff points by considering the relative prevalence rates of scale attributes. Scale score cutoff points established at 75 and 85 (Millon et al., 1993) indicate the presence and prominence of traits, respectively.

Results

Means and standard deviations for the 12 MACI personality scales are presented for both attempter and nonattempter groups in Table 1. A series of t-tests for independent samples (two-tailed) was conducted to explore differences between the groups on each of the selected MACI scales. Relative to nonattempters, the suicide attempters obtained higher scores on the forceful and borderline tendency scales and lower scores on the submissive and conforming scales. We computed the average effect size in standard deviation units for these four scales (d = .65) and found it to be more than two times greater than that obtained for the remaining scales (d = .26), that is, the introverted, inhibited, doleful, dramatizing, egotistic, unruly, oppositional, self-demeaning, and borderline tendency scales. Both groups showed mean score elevations, albeit subclinical, on the doleful and introverted scales. An observable difference between groups was also evident in the total number of suicide attempters (57.7%) and nonattempters (30.4%) who obtained at least one BR score elevation of 85 or greater; however, this difference was not significant, \( \chi^2(1) = 2.65, p = .10 \).

Discussion

Consistent with the range of diagnoses that characterized our sample, elevations on the
introversive and doleful scales of the MACI were found among both attempter and non-attempter groups. This resemblance among adolescents at various levels of risk for suicide may simply reflect the anhedonia, hopelessness, and social isolation that characterize many chronic depressive experiences. Notwithstanding, attempters in our study presented with more severe overall levels of personality dysfunction (i.e., a greater number of “prominent” pathological traits) than did nonattempters.

Somewhat distinctive personality scale profiles also suggest qualitative differences between the two groups. Relative to nonattempters, adolescents with suicide-attempt histories obtained higher scores on the forceful and borderline tendency scales of the MACI, reflecting core deficits in the regulation of negative mood states (e.g., anger) and aggressive impulses. High scores on these scales indicate persistently elevated levels of interpersonal hostility and resentment when perceived needs are not met. The attempters’ relatively lower scores on the submissive and conforming scales of the MACI also reflected these traits. Although previous studies found an association between the indirect expression of hostility (i.e., a passive–aggressive style) and suicidal ideation in adults (Hull et al., 1992), our findings indicate that adolescents who attempt suicide engage not only in passive–aggressive behaviors but often resort to overt acts of aggression in the service of achieving desired goals. In fact, Shaffer and Craft (1999) recently proposed a heuristic model stating there must be an underlying condition (e.g., aggressive traits) present for an adolescent to commit suicide. Thus, although we did not specify any a priori hypotheses in the present study, our results are consistent with other recent work in this area.

Although obtained mean scale values fell below clinically significant cutting scores (e.g., 75 and 85), these preliminary findings suggest that MACI personality subscales may be useful in discriminating depressed adolescents with and without suicide attempt histories. Maladaptive personality traits that seemingly predispose adolescents to engage in a full range of suicide-related behavior have, to date, been the focus of few empirical studies. Adequate assessment of personality traits in adolescents has significant treatment implications. For example, targeting these maladaptive traits in an adolescent’s treatment may prevent the development of a full-fledged Axis II syndrome in early adulthood while reducing the risk of suicide.

At the same time, it is clear that personality psychopathology in adolescents may be state dependent in cases of severe depression (e.g., Kutcher & Marton, 1989), thus highlighting the need for longitudinal assessments of ostensibly stable maladaptive behaviors. The interpretability of our findings may be limited to the extent that we did not conduct a follow-up assessment of traits, that is, after the initial presentation of acute depressive symptomatology.

The generalizability of these findings may be restricted insofar as our sample was most representative of depressed, ethnic minority adolescents (e.g., Latinos and African Americans) from urban areas. Observed effects should therefore be interpreted with caution when applied to nonminority (e.g., Caucasian) youth. The small size of our sample resulted in low statistical power, which also limits our ability to interpret these findings. Therefore, although the present study identifies dimensional trait variables likely to be relevant in the relationship between adolescent depression and suicidal behavior, larger scale cross-validation studies are needed.

References
Profiles of Adolescent Suicide Attempters


