# Assessing Adolescents with the MACI

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## Using the Millon Adolescent Clinical Inventory

Joseph T. McCann



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To my parents,
Mom and Hank;
Dad;
Mary and (the memory of) Joe.

## **Foreword**

The history of adolescent personality assessment is only of recent origin. We know that early interest in child guidance was stimulated by the work of Lightner Witmer, who created the first psychology clinic about 100 years ago. Despite his focus on young children and teenagers, clinicians did not seriously explore the adolescent realm insofar as enduring traits were concerned. The attention of adolescent psychologists, well into the mid-1930s, centered on appraising features such as intelligence, achievement, interest, and aptitude, rather than notions such as adolescent personality styles and psychopathology. Although it is not the first mental test to be used with troubled teenagers, the *Millon Adolescent Personality Inventory* (MAPI), initially distributed in 1974, sought to illuminate a wide range of psychological features that might increase our understanding of the clinical difficulties of young people.

The progenitor of the MAPI was the MCMI (Millon Clinical Multiaxial Inventory). This latter instrument was developed in the early 1970s in an effort to counteract the tendency of both instructors and students to develop their own methods to "operationalize" theoretical concepts that were first published in my 1969 Modern Psychopathology text. I became concerned about the quality of these diverse representations of the theory, and I protectively decided to organize an effort to construct an instrument myself that could be used by all investigators of my work. Not only would it add a degree of operational uniformity among researchers, but it would ensure, at least, a modicum of psychometric quality. Although the University of Illinois research group that I supervised in the early 1970s took on the responsibility of searching for an extant psychological instrument that might be employed to interpret the personality styles generated by the theoretical model, we found nothing that could serve that function effectively. Hence, we began constructing the MCMI, a new self-report inventory. After spending more than 6 years on this research project, we brought out the first of the three forms of the instrument in 1977.

During the years in which we developed the MCMI, several of my associates, both psychologists and psychiatrists, began to discuss the possibility of our constructing a "psychiatric test," not only for patients in mental health settings, but also for adolescents and for patients seen primarily for medical treatment. They not only encouraged, but contributed significantly to the development of what was then called the MAPI, the *Millon Adolescent Personality Inventory*, as well as the MBHI, the *Millon Behavioral Health Inventory*.

Some years after the publication of the MAPI, I noted that users of the instrument were primarily interested in matters of clinical significance. Well over 85% of those who used the MAPI preferred to employ it as a clinical tool. As a result of this awareness, we began to plan and undertake a series of modifications of the MAPI, producing changes that would prove of particular value to practicing clinicians who worked with adolescents. Notable among these changes was the inclusion of several clinical syndrome scales geared to such problematic concerns as depression, drug abuse, and anxiety. Also, the range of the personality styles/disorder scales were increased so they would accord more closely to the new *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV*, APA, 1994). The product of these efforts, published in 1993, was designated the *Millon Adolescent Clinical Inventory*, also known as the MACI.

Joseph McCann, author of this first full text on the MACI, is the best known workshop presenter on the topic. He wrote this book to provide, in a single reference source, an in-depth examination of what is now the most frequently used adolescent test on personality and psychopathology in current clinical practice. It is much more than a compilation of how to do this or that. It provides the reader with significant information concerning how the test was developed, how it can be administered, and, most importantly, how to interpret the characteristics and problems that typify troubled youngsters. Dr. McCann's desire was to provide both students and practitioners with a significant body of clinical knowledge so that the instrument could be used in a competent and thoughtful way. The use of objective psychological tests in evaluating adolescents is a major skill that must be acquired by any clinician employed in residential, outpatient, court, prison, or school settings.

There has been a marked increase in our understanding of adolescent difficulties in the past two or three decades; violence and general delinquency have been most noteworthy. Despite the growth of this knowledge, there has been no book that deals with the utility of the MACI as an assessment and diagnostic instrument. Dr. McCann has successfully remedied this problem. His book has been so carefully written as to enable the inventory to be useful to individuals with only a modest background in objective tests and/or adolescent difficulties. Moreover, the book can

serve as an introduction to a cognitive and behavioral understanding of adolescents, and may be of considerable value to undergraduates and beginning graduate students who are becoming involved in techniques for assessing adolescents and their problems. Not unimportantly, the book may also be of interest to physicians, social workers, and psychiatrists who work with adolescents in trouble.

It has been especially gratifying that objective inventories are being interpreted increasingly in terms of personality characteristics and traits. Their data are interpreted more and more in the form of configural profiles. No longer are personality functions appraised as if they were a set of independent trait scales; they are now analyzed as holistic integrations that possess clinical significance only when seen as the interrelated and Gestalt composites they are.

The development of the MACI coincided with a time when the field of psychological assessment came under severe restrictions. Owing to the attitudes and behavior of Managed Care providers, the much-maligned projective techniques were cast aside, viewed as quaint and costly tools for clinical assessment. Fortunately, the MACI (and the MCMI) came into play, providing many clinicians with a brief and largely inexpensive tool that could furnish a broad and dynamic interpretation of patients in all mental health settings. Tests such as the MACI have rapidly emerged as major new tools, not only to accommodate the economic and cultural forces seeking simple and quick-fix techniques, but also to provide extensive information for understanding the lives and troubles of adolescents.

Assessment with the MACI will enable the student and the clinician to develop a sophisticated basis for disentangling the many variations among youngsters, to assess both their assets and liabilities, to determine the presence of clinical disorders, and most importantly, to provide a full picture that can serve as the basis for making decisions regarding each adolescent's welfare, that is, to be able to outline a logical course of treatment which may prove optimally efficacious. This is one of the great values of Dr. McCann's book. It will guide the reader to transform the raw MACI test data, coordinate these data with the history of the youngster's experiences, as well as with observational and interview information, facilitating interpretive syntheses and providing thereby a basis to help link assessment to psychotherapy.

Although experienced professionals will likely want to create data syntheses that require a certain amount of clinical imagination on their part, McCann wisely includes Appendix A, which provides a series of subfacets, that is, facets that represent a series of trait subareas composing each scale. For example, he takes each personality/coping scale, and indicates not only the factors of which it is composed, but also the specific item groups contained therein. Thus, for the "Oppositional scale" (Negativistic

tendencies), he notes the following major facets: self-punitiveness, angry dominance, resentful discontent, social inconsiderateness, and contrary conduct. In describing the facets of the "Conforming scale" (Obsessive-Compulsive tendencies), he records the following: interpersonal restraint, emotional rigidity, rule adherence, social conformity, and responsible conscientiousness. In this way, he provides significant information that should reduce the clinician's need to depend on speculative hypotheses for reports.

Also of special interest to those who have used the MACI previously is Dr. McCann's recognition that the vast majority of teenagers in trouble represent what I have termed "mixed personality types." In his text, he guides the reader toward an integrated perspective of the person, and demonstrates how each elevated scale is only one relevant part of the overall configural result. Also attractive is that McCann brings the instrument to life by recognizing its complexities and its richness of detail, and does so in a manner that makes it easy for the reader to retain a focus on its essentials. Equally valuable is his objectivity, evident in numerous ways, such as taking into account not only the instrument's strengths, but also a number of its limitations.

This book fills an important gap in the clinical literature, as well as one found in many training programs. Dr. McCann is justly considered a clinician of renown, known for his acumen in personality assessment and for his exceptional teaching talents. For every instructor of a personality assessment course who seeks a way to expose students to the intriguing problems of teenage life, and for every student who worries about translating general theories into everyday clinical practice, this book will provide relevant insights as well as practical assistance. Its clear style, vivid language, and excellent organization will make it a superb text for both advanced undergraduate and graduate assessment courses. This text is insightful and comprehensive, a work of inestimable value to both practicing clinicians and students. Far more detailed than the test's official manual, this book provides readers with a basis for making unusually accurate and clinically useful analyses of adolescent behaviors and vulnerabilities.

THEODORE MILLON

## **Preface**

This book is a culmination of several years of using the Millon Adolescent Clinical Inventory (MACI) in clinical and forensic settings as well as a synthesis of information I have presented in workshops on the instrument. I have found the MACI to be an extremely valuable assessment tool when conducting psychological evaluations with adolescents. Any clinician working with this population knows that it can be challenging, and the MACI offers several distinct advantages that facilitate the assessment process. Despite the strengths of the MACI, however, I also have attempted to provide a balanced presentation that recognizes the limitations of the instrument. Although I have found the strengths to far outweigh the limitations of the MACI, sound clinical assessment practices require a fair appraisal of an instrument. Thus, I point out limits in using the MACI in certain situations.

This book is an interpretive guide directed at the novice MACI user as well as the clinician who has extensive experience with the instrument. To my knowledge, this is the first book devoted entirely to the MACI and given the apparent growing use of this test, this book will fill the void in published literature on the instrument.

The dearth of empirical research on the MACI has created some challenges in writing this book. Initially, I was somewhat hesitant in taking on the project because I had hoped that more published research would appear and thus provide a body of literature from which to draw. It seems I have had that sentiment for the past 5 years, beginning at the time the MACI was first published. Although some scattered publications are available, there are also some significant unpublished studies. I have drawn on both published and unpublished data to the extent it facilitates interpretation. I also present some new analyses on existing data in the manual to highlight key issues with interpretation.

It is unclear why the MACI has not received more extensive attention in the empirical literature because the instrument has many advantages in clinical practice. Nevertheless, I have drawn on several sources of information to provide support for the discussions in this book. In particular, I

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have drawn on data in the MACI manual, published research studies, unpublished research, theoretical literature, workshop materials I have used in the past, and my own experiences with the test.

I hope that this book meets two major goals. The first goal is that clinicians who use the MACI will find it to be a helpful guide for understanding the test, interpreting results in clinical evaluations, and making appropriate recommendations for treatment and case management. A second goal is that the book will draw more attention to the MACI as an adolescent assessment instrument and that this attention will stimulate research into the many issues that have yet to be explored.

JOSEPH T. McCANN

## Acknowledgments

As with any project of this scope, there are several individuals whose assistance and support deserve special recognition because they provided a valuable contribution and made the process of writing more bearable.

I am particularly grateful to those who have shared so many interesting MACI cases with me over the years. The numerous participants in workshops I have presented have helped me to learn more and I appreciate their input and feedback. Also, I thank my colleagues at the Binghamton Psychiatric Center, Pam Vredenburgh, Allan Hochberg, Connie Kinch, and Linda Huntley, for sharing their cases with me. Martha Mason deserves a special note of thanks for the lending of her excellent library skills that have so reliably helped to track down and secure articles for my research.

Other people have been consistent sources of support and professional stimulation: Chuck Ewing, Frank Dyer, and Robert Tringone have willingly discussed cases and professional issues with me.

At NCS Assessments, Virginia Smith, Kristi Everson, Mark Caulfield, Kathy Gailucca, and Ann Stocker have consistently been supportive and responsive over the years. I am extremely grateful for their support. Also, Jeff Kim was able to secure copyright permission to reproduce selected materials that contribute to the overall presentation of the material. MACI<sup>TM</sup>, MCMI-III<sup>TM</sup>, and Millon<sup>TM</sup> are trademarks of DICANDRIEN, Inc. and permission to refer to them in this book is appreciated.

As always, Ted Millon has provided me with support in my work. He was one of the major motivating forces behind this book, and I very much appreciate his encouragement. In addition to his highly respected and valued work, I am indebted to him for the advice he has offered to me over the years. Also, Roger Davis at the Institute for Advanced Studies in Personology and Psychopathology has been extremely helpful. He answered several critical questions about development of the MACI and also made his research available for inclusion in the book. As such, his contributions are very much appreciated.

## xiv Acknowledgments

Finally, I want to recognize the considerable support of my family. My wife Michele continuously gives her love and guidance and provides me with the inspiration to continue my work. My son Alexander has given me a newfound appreciation for learning and he is a constant source of joy. Whereas this book is the product of my physical and mental efforts, it is the product of their generosity and support.

J.T.M.

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## CHAPTER 1

## Basic Issues and Theoretical Foundations

The past decade has not been particularly kind to teenagers because many alarming trends have received a great deal of media attention. During the 1997–1998 academic year, five schools became sites of tragedy when a student opened fire with a weapon on a group of teachers or classmates. In Mississippi, a teenager shot and killed two girls, one of whom had broken up with him earlier. In Kentucky, a 14-year-old shot and killed three students and wounded five others for reasons that were never made clear in media coverage. In Arkansas, an 11-year-old and 13-year-old student lured teachers and peers outside a middle school by pulling a fire alarm and then shot at them; in the end, four students and a teacher were killed. Although national statistics have shown a decline in violent crime overall in recent years, the data mask an alarming increase in violent crime perpetrated by teenagers. According to statistics published by the Federal Bureau of Investigation (1993), the arrest rate for violent crime rose 45% among teenagers between 1988 and 1992. Although juvenile homicide apparently dropped 30% between 1994 to 1996, more than 2,000 juvenile homicides were still reported in 1996 (Schiraldi, 1998).

Criminal violence is not the only concern for young people in this country. Over a 30-year period going back to 1957, the overall suicide rate for people age 15 to 24 tripled (Berman & Jobes, 1991). After a peak suicide rate in the late 1970s, suicide among young people appears to have leveled off, but the rate remains high nevertheless, with about 12 suicide deaths per 100,000. These statistics point to an increased demand for assessing and treating the mental health problems of adolescents. Where inpatient and outpatient clinics once focused on adults, and the occasional child or adolescent, there are now specialized outpatient clinics

and inpatient hospital units, residential treatment programs, and substance abuse units that focus on adolescents.

The mental health problems of adolescents and their increasing involvement in the criminal justice system have created a pressing need for accurate and useful methods for assessing adolescent personality and psychopathology. This book presents information on clinical use of the Millon Adolescent Clinical Inventory (MACI; Millon, Millon, & Davis, 1993), including an overview of the instrument's development, approaches to interpretation, and use of the test results for developing treatment plans for adolescents receiving mental health services. This chapter provides a brief overview of the MACI, followed by a discussion of general issues that set forth a context in which both novice and experienced MACI users can understand how to utilize the results from this psychological test.

The first portion of this chapter provides a brief summary of the MACI, including its format and foundations. This section is followed by an overview of adolescent development and the assessment of psychopathology in adolescence. A complete analysis of these issues is beyond the scope of this chapter; however, this discussion points out the unique psychological processes that occur in this critical period of development. The chapter then closes with a summary of Theodore Millon's theory of personality and psychopathology. An understanding of this theoretical model is critical to the interpretation of MACI test results because the theory served as a guiding framework for development of the instrument. Moreover, the theory is a major source of information for interpretation of the MACI.

#### OVERVIEW OF THE MACI

The MACI is a 160-item, 31-scale self-report inventory designed to assess personality styles, significant problems or concerns, and clinical symptoms in adolescents. Using a true-false format, the MACI surveys a wide range of personality characteristics and clinical symptoms that tend to be a focus in psychological evaluations of teenagers who either have or are suspected of having emotional or behavioral difficulties. Responses of adolescents on the MACI items are scored and individual scales are plotted in a profile as illustrated in Figure 1.1. The MACI can be used in several settings to evaluate the psychological status of adolescents: inpatient and outpatient mental health clinics; residential treatment centers; correctional facilities; and educational institutions where professionals suspect psychological difficulties are affecting a teenager's school performance.

Multiscale personality inventories such as the MACI are designed to improve the clinician's understanding of an adolescent's personality and clinical symptoms, but there are other reasons for using such instruments. The MACI can be helpful in formulating diagnostic hypotheses,

MACI<sup>TM</sup> Clinical Interpretive Report ID 8681 Page 2

PERSONALITY CODE: -"7463//-"F"-//-"-"EECC// WALID REPORT DATE: 12/17/97 CATEGORY PROFILE OF BRISCORES SCORE DIAGNOSTIC SCALES RAW BR D 60 78 85 115 DISCLOSURE MODIFYING 37 NDICES 15 78 DESIRABILITY DEBASEMENT Z 35 17 36 NTR OVERSIVE B 28 MHIBITED 7 31 DOLEFUL 46 SUBMISSIVE 68 74 DRAMATIZING PERSONALITY 6 47 68 EGOTISTIC PATTERNS UNRULY 68. 26 45 FORCEFUL 68 18 CONFORMING 62 62 14 33 OPPOSITIONAL 16 SELF-DEMEANING DENTITY DIFFUSION 31 SELF-DEVALUATION 16 BODY DISAPPROVAL c 7 Ď SEXUAL DISCOMFORT EXPRESSED D 24 51 CONCERNS E ø 54 PEER MISECURITY 37 76 SOCIAL INSENSITIVITY 40 FAMILY DISCORD CHILD HOOD ABUSE EATING DY BRUNCTION 6 AA Ė SUBSTANCE-ABUSE PROVENESS 88 DELINQUENT PREDISPOSITION CC 66 CLINICAL MPBLSIVE PROPENSITY 27 DD SWNDROMES EE 28 71 ANXIOU BFEELING 6 FF DEPRESSIVE AFFECT 60 SUICIDAL TEMPERON

Figure 1.1 The MACI profile. Copyright © 1993 DICANDRIEN, INC. All rights reserved. Published and distributed exclusively by National Computer Systems, Inc. (NCS). Reproduced with permission by NCS.

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confirming clinical diagnoses, formulating treatment plans, or making decisions about case management and disposition planning. In addition, the MACI can be used as an outcome measure to evaluate changes in an adolescent's functioning as a result of treatment and intervention. The MACI can also be effective in research studies to investigate a range of

issues that pertain to adolescent psychopathology, personality, and treatment response.

In the following chapters, numerous issues will be discussed on development of the MACI, its psychometric properties, interpretation of results, and its use in assessing a wide range of diagnostic and treatment issues. However, some basic principles are relevant to understanding the full range of applications of the test and warrant discussion here. The MACI is based on an approach to test development that departs from the way clinicians approached adolescent assessment a decade ago. Traditionally, adolescents were often viewed as "miniadults": personality assessment instruments developed on adult populations were administered to adolescents with the adoption of specific age-referenced norms. However, some problems, social pressures, and developmental considerations are unique to adolescents, and adult personality measures tend not to capture these issues. The MACI was developed specifically for adolescents and the item content and scales were designed with these unique issues in mind. In addition, the MACI, like its adult counterpart the Millon Clinical Multiaxial Inventory-III (MCMI-III; Millon, Davis, & Millon, 1997), is based on a comprehensive theory of personality and psychopathology (Millon, 1969, 1981, 1990; Millon & Davis, 1994). Many clinical assessment instruments are not necessarily grounded in a comprehensive theoretical model; however, the theory developed by the MACI author, Theodore Millon, offers a logical, coherent, and internally consistent model for developing item content, scale composition, and a general framework for understanding test results. Therefore, the theoretical model can inform test interpretation in the same way that psychometric properties and research results can inform the interpretive process.

In light of these issues, it is important to recognize the unique problems that adolescents encounter and the underlying theory of personality and psychopathology on which the MACI rests. The remainder of this chapter describes these issues and will provide MACI users with a context for understanding the material in the remainder of this book.

#### ADOLESCENT DEVELOPMENT

In everyday language use, adolescence is a term that generally refers to the teenage years. However, strict chronological age can be problematic in defining when specifically adolescence occurs. Among most people who study this period of development, there is a consensus that adolescence is a stage of considerable transition. As noted by Coleman (1992):

The transition, it is believed, results from the operation of a number of pressures. Some of these, in particular the physiological and emotional

pressures, are internal; while other pressures, which originate from peers, parents, teachers, and society at large, are external to the young person. Sometimes these external pressures carry the individual towards maturity at a faster rate than he or she would prefer, while on other occasions they act as a brake, holding the adolescent back from the freedom and independence which he or she believes to be a legitimate right. It is the interplay of these forces which, in the final analysis, contributes more than anything to the success or failure of the transition from childhood to maturity. (pp. 10-11)

This observation by Coleman captures the many different pressures and struggles that characterize adolescence. Biological, psychological, and social pressures contribute to the tension between independence and dependence on the family.

There are many ways to define adolescence (Petersen, 1988). Chronological age is one means, but this approach is limited because it does not fully identify this period's developmental aspects. If one assumes the teenage years of 13 to 19 define adolescence, then these age parameters do not encompass other essential features. Puberty is often a biological marker that is used to mark the onset of adolescence; however, some teenagers reach puberty prior to age 13 while others may have a delayed onset. Thus, chronological age is not often an accurate marker. Other gauges have included specific grade levels (e.g., junior and senior high school), cognitive factors such as the onset of formal operations, or the structure of an individual's social environment (e.g., involvement with certain peer groups, leaving the parental home). Some have viewed adolescence broadly as encompassing the second decade of life (Petersen, 1988).

In this book, adolescence is generally conceptualized as the teenage years from 13 to 19. Although this definition has limitations, it also defines the age range for which the MACI can be appropriately utilized. Within the developmental stage of adolescence, several factors are significant. The transitional nature of this period creates a tension between adequate adjustment and turmoil. This conflict is characterized in the quotation from Coleman's (1992) work cited at the beginning of this section. Moreover, it is implicit in this characterization of adolescence as a transitional period that a certain degree of emotional and psychological upheaval is to be expected. Despite these challenges, evidence supports the conclusion that whereas most teenagers can cope with the demands and turmoil of adolescence, some cannot and come to the attention of the mental health or juvenile justice system (Petersen, 1988).

Adolescents can potentially experience problems with adjustment in several areas of functioning. In the biological realm, adolescents experience physical changes related to puberty, and marked changes in hormonal activity bring on increased sexual interest and tension. Therefore, adolescents can experience concerns about their physical development, sexuality, and body image. Some of these concerns may be transient and relatively common, but others may reflect psychological discomfort and maladjustment. In the psychological realm, adolescents face changes in identity, self-concept, and cognitive maturity in response to gradually increasing demands to select a career path and set of life goals. Again, these challenges may be relatively common, but in some cases the adolescent may develop marked discomfort or confusion about his or her identity or self-worth. In the social realm, adolescents face tension between developing greater interests with peers or adopting group norms and the demand to maintain some emotional and financial dependence on parents. This tension again can be the source of normal conflict between the adolescent and the family, but it can also escalate into marked disturbances such as insecurity among peers, oppositional or defiant acting-out, or a lack of empathy toward others.

The unique challenges of adolescence dictate that the assessment of adolescents must include measures that take these issues into account. In many respects, the MACI addresses these issues by including scales that measure concerns that are of most salience in the lives of adolescents.

#### ASSESSING ADOLESCENT PSYCHOPATHOLOGY

It should come as no surprise that the transition's adolescence and the turmoil that characterizes this stage of development create unique challenges for the clinician who is assessing for psychopathology. The *Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV;* American Psychiatric Association, 1994) constitutes the most widely adopted diagnostic framework in clinical practice and is therefore a useful starting point for analyzing the diagnosis of psychopathology, or mental disorders, in adolescents.

The *DSM-IV* defines a mental disorder as "a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress... or disability... or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom" (p. xxi). This definition emphasizes that the behavioral or psychological syndrome must be a source of distress for the person or a cause of some impairment in functioning and not merely a deviation from normality. With respect to diagnosing a mental disorder in adolescents, the *DSM-IV* approach makes two general provisions that offer some guidelines. The first is the identification of specific disorders that are usually diagnosed during infancy, childhood, or adolescence and the second is a special section of "Specific Culture, Age, and Gender Features" for other disorders that may be diagnosed in children, adolescents, or adults (e.g., major depression). Despite these provisions, there are still

difficulties associated with the practice of diagnosing psychopathology in adolescents.

Although specific disorders in DSM-IV are identified as being first diagnosed in childhood and adolescence (e.g., conduct disorder, oppositional defiant disorder, mental retardation), sometimes these disturbances are not identified until adulthood. For example, attention deficit hyperactivity disorder is included in the "Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence," but in some cases the symptoms may not be accurately identified as being due to this condition until much later in life, even though the individual might have had some difficulties in childhood or adolescence. Also, the DSM-IV notes that the identification of specific disorders as having their onset in childhood or adolescence should not prevent clinicians from exploring other diagnoses that may be present in young people (e.g., major depression, posttraumatic stress disorder, schizophrenia). In those disorders that are found throughout the DSM-IV, the clinician must thus attend to the particular age features outlined for a specific disturbance.

The DSM-IV makes a number of provisions for diagnosing disorders in adolescence based on factors such as the specific age of the individual, the duration of time that symptoms should be present, and the expected age of onset for a particular form of psychopathology. Moreover, many of these provisions take into account research findings on the manifestation of psychopathology in adolescents. For example, antisocial personality disorder has as one of its criteria that the diagnosis cannot be made unless the person is at least 18 years of age. If a teenager below the age of 18 exhibits symptoms such as antisocial acting-out, chronic impulsivity, violation of the rights of other people, and similar features associated with antisocial personality, then a diagnosis of conduct disorder is appropriate. Moreover, DSM-IV notes that conduct disorder is an appropriate diagnosis only when "the behavior in question is symptomatic of an underlying dysfunction within the individual and not simply a reaction to the immediate social context" (American Psychiatric Association, 1994, p. 88). More importantly, research shows that conduct disorder in adolescence does not predict antisocial personality disorder in adulthood because some forms of adolescent antisocial behavior are limited to this phase of development, whereas other forms of such behavior are indicative of a life course of antisocial disturbance (Moffitt, 1993).

Another provision made by DSM-IV that is relevant to use of the MACI in clinical assessment is the specific caution made about diagnosing personality disorders in adolescents. Widiger and his colleagues (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995) urge caution in making personality disorder diagnoses in adolescents because many personality traits do not stabilize until the third decade of life and personality disorder diagnoses show limited stability from adolescence into early adulthood. As such, *DSM-IV* permits the diagnosis of all personality disorders except antisocial in children or adolescents, so long as "the individual's particular maladaptive personality traits appear to be pervasive, persistent, and unlikely to be limited to a particular developmental stage or an episode of an Axis I disorder" (American Psychiatric Association, 1994, p. 631). Moreover, the *DSM-IV* requires that the features of a personality disorder must be present for at least one year before making a diagnosis.

The overall structure of the MACI reflects this level of caution, as well as the controversy surrounding personality disorder diagnosis in adolescents. In particular, the Personality Patterns scales have names that reflect intermediate levels of disturbance. Although each of these scales parallels a specific *DSM* personality disorder, the scale names do not directly reflect these diagnoses as do the names of the personality scales on the adult version of the Millon inventories, the MCMI-III. Thus, Scale 1 on the MACI, while based on the construct of schizoid personality disorder, is called Introversive; Scale 2 on the MACI is named Inhibited instead of Avoidant, and so on. This subtle name alteration reminds MACI users that although the scales are designed to measure disturbed personality traits, judicious use of the scales and a conservative approach to diagnosis of personality disorders in adolescents are warranted.

In light of the challenges that arise when assessing psychopathology in adolescence, it is extremely helpful to have some guiding framework for making a diagnosis. The literature on adolescent psychopathology and specific diagnostic criteria as outlined in *DSM-IV* help to inform the assessment process. Instruments specifically designed for adolescents, such as the MACI, are another useful source of information. A unique aspect of the MACI is that it is based not only on traditional psychometric principles, but also on a comprehensive theory of personality and psychopathology. An understanding of this theoretical framework is necessary for a full appreciation of the MACI's development and for interpreting the test results. The remainder of this chapter describes the theoretical model on which the MACI rests. For readers who want a more detailed review of Theodore Millon's theory, Millon and Davis (1994) provide the most comprehensive and updated presentation.

## MILLON'S THEORETICAL MODEL

The human personality can be studied and defined in many ways including descriptive or explanatory perspectives that focus on psychological, social, and biological factors. The theoretical approach to personality and psychopathology developed by Theodore Millon is a comprehensive and integrative approach to personality that is biopsychosocial in nature.

Originally formulated within a social learning model (Millon, 1969, 1981), the theory has expanded into an evolutionary one (Millon, 1990; Millon & Davis, 1994) in which the underlying constructs and principles are rooted in evolutionary theory and reflect many of the principles found in all sciences.

The most basic notion is the principle that individual personality traits lie along a continuum from normal traits and styles, to intermediate levels of disturbance, to abnormality involving disorders of personality. A central framework used to describe this continuum includes the concept of three dimensions, or polarities, each defining a separate aspect of human personality. The first polarity consists of pain versus pleasure and refers to the notion that human existence is directed toward maximizing pleasurable or life-enhancing experiences, and minimizing painful or life-threatening experiences. As such, individuals are generally oriented to seek out pleasure and minimize discomfort. A second polarity consists of active versus passive and refers to the typical ways of behaving that permit the person to seek out pleasure and minimize pain. The two ways of achieving pleasure include active means, such as manipulating and changing one's environment, and passive means such as accommodating and adapting to one's environment. The third polarity is self versus other and represents the source of reinforcing or life-enhancing experiences. This polarity recognizes the social nature of human existence in that some life-enhancing experiences come about through the self, such as getting what one wants or having one's needs met; and some experiences involve others, such as performing altruistic acts or having close interpersonal relationships. At the heart of this theory is the notion that normal functioning involves flexibility and adaptability because the person has a healthy balance between all these polarities. That is, flexibility exists between self and others and the capacity to be active or passive as the situation requires. Moreover, the normal personality is characterized by a clear focus on maximizing pleasurable life experiences and coping effectively with painful situations.

Disturbances in personality arise when the person becomes more rigid in a particular approach to coping, perpetuates vicious cycles in which the same difficulties arise in the person's life, and there is greater susceptibility to psychological distress or decompensation. Moreover, clinical symptoms such as anxiety, depression, or thought disorder are viewed as extensions of personality disturbances. Using the three polarities, Millon outlines five disruptions that can occur in the person's functioning that give rise to personality disturbances and psychopathology. The first disruption can arise in the person's instrumental style of coping in that he or she becomes fixated on either an active or a passive mode of coping. The second disruption in functioning can arise in the source of the person's life-enhancing experience when there is an excessive reliance on either the self (independent) or others (dependent). The three other disruptions all arise in the pain versus pleasure polarity. The person can be detached, with an unwillingness or inability to experience pleasure in life. Another disruption can occur when the individual reverses the polarities of pain and pleasure, deriving pleasure from experiences that are normally painful and pain in situations that are normally pleasurable; this disruption is called a discordant personality pattern. The other disruption occurring in the pain versus pleasure realm is the ambivalent pattern whereby the person is conflicted between seeking out self-oriented versus otheroriented experiences.

These disturbances in polarities can be used to form a 2 (active-passive) ×5 (independent-dependent-discordant-ambivalent-detached) table that represents 11 basic personality styles. Table 1.1 outlines each of these styles with the labels reflecting intermediate levels of disturbance and the corresponding DSM personality disorder in parentheses. The activeindependent personality is characterized by manipulation and selfcentered acting-out that is represented in the unruly personality, corresponding to the antisocial personality disorder. The passive-independent style is characterized by a lack of empathy for others, feelings of entitlement, and grandiosity that define the egotistic personality, or the narcissistic personality disorder. Active-dependent personality is defined by gregariousness, attention-seeking, and emotionality that is meant to draw attention to one's self and to make others want to be around the person; this dramatizing style corresponds to the histrionic personality disorder. The passive-dependent personality is characterized by submissiveness, passivity, and inadequacy and reflects a submissive style that parallels the dependent personality disorder. The active-discordant style is characterized by hostile acting-out, the intentional infliction of pain, either verbally or physically, and excessive efforts to exert power over others; this forceful style corresponds to the sadistic personality disorder. Passive-discordant

**Table 1.1**Personality Disorders in Millon's Theoretical Framework

	Polarity Disruption				
Instrumental Style	Independent	Dependent	Discordant	Ambivalent	Detached
Active	Unruly (Antisocial)	Dramatizing (Histrionic)	Forceful (Sadistic)	Oppositional (Negativistic)	Inhibited (Avoidant)
Passive	Egotistic (Narcissistic)	Submissive (Dependent)	Self-Demeaning (Self-Defeating)	Conforming (Compulsive)	Introversive (Schizoid) Doleful (Depressive)
Severe Patterns	Paranoid	Borderline	Borderline/ Paranoid	Borderline/ Paranoid	Schizotypal

types are self-loathing and pessimistic, and they feel deserving of their suffering and unhappiness; this self-demeaning type corresponds to the self-defeating personality disorder. The active-ambivalent personality experiences excessive irritability and moodiness, skepticism, and oppositional behavior; this style corresponds to the negativistic personality disorder. Passive-ambivalent types are conflicted and overcompensate by adopting a rigid adherence to rules and order, tight controls over emotions, and inflexibility; this conforming style corresponds to the compulsive personality disorder. In the detached personality type, there is an active variant that is characterized by withdrawal from others, heightened social anxiety, and the expectation of rejection and ridicule by others; this inhibited type corresponds to the avoidant personality disorder. Finally, there are two variants of the passive-detached style. The introversive style, corresponding to the schizoid personality disorder, is characterized by bland emotions, a lack of interest in relationships, and a lethargic and unemotional demeanor. The doleful style, corresponding to the depressive personality disorder, is characterized by pessimism, hopelessness, and chronic unhappiness. The major distinguishing feature between these two passive-detached types is that the introversive style is generally devoid of any emotional experience whereas the doleful style passively accepts a painful and dysphoric existence.

Millon also conceptualizes three personality disorders, the schizotypal, borderline, and paranoid, as severe variants of the more basic personality disorders. These three disorders are considered more severe because of the manifestation of transient psychotic episodes, severe disruption in identity, and more extreme levels of emotional dysregulation. Only the borderline personality is represented on the MACI because of the wide clinical interest in borderline disturbances in adolescents. The other two severe personality disorders are not represented on the MACI due to the low prevalence of these disturbances in the clinical sample that made up the instrument's normative sample.

The theoretical framework outlined here and schematically displayed in Table 1.1 has direct application to the clinical interpretation of the MACI. The individual scales on the MACI profile are arranged in accordance with this theoretical framework. In Figure 1.1, Scales 1, 2A, and 2B are arranged side by side and correspond to the inhibited, introversive, and doleful personalities; all three of these scales thus reflect the detached personality types in Millon's theory. Scales 3 and 4 in Figure 1.1 represent the submissive and dramatizing personality styles and also correspond to the dependent types. Scales 5 and 6A represent the egotistic and unruly personalities, which have the independent polarity disruption as the unifying theme. Scales 7 and 8A represent the conforming and oppositional personalities and have the ambivalent polarity disruption as their unifying theme. Only the two discordant types, forceful and self-demeaning, are placed next to scales that have similar behavioral and clinical presentations, but do not comprise a discordant dimension in side-by-side scales.

This arrangement of the MACI scales has some practical implications for interpretation because some MACI profiles with multiple scale elevations can be understood using the theoretical framework. If Scales 1, 2A, and 2B are all elevated, a general social detachment and lack of pleasure in life is represented in the profile. If Scales 2A and 2B are elevated, but Scale 1 is not, then social detachment associated with painful emotional experiences is being tapped. Likewise, if Scales 5 and 6A are elevated, the MACI profile is reflecting a general self-centeredness that may be manifest in both entitlement and expectation of special treatment as well as manipulative and antisocial acting-out. Because the discordant and ambivalent types experience conflict either in the nature or source of reinforcement, Scales 6B, 7, 8A, and 8B reflect a cluster of scales that reveal how the adolescent deals with internal conflict and tension. This issue is discussed in Chapter 5.

Another important concept in Millon's theory of personality is the prototypal model of individual personality types. A prototype represents a common set of features or characteristics describing members of a category that constitutes an ideal standard to evaluate individuals in the real world (Everly, 1995). What makes the prototypal model useful is that it provides different domains of personality to allow for the heterogeneity among people in actual practice. For example, clinicians rarely encounter a "pure" narcissistic or antisocial personality disorder; rather, people represent mixes and blends of personality styles, or two individuals with a specific personality disorder (e.g., narcissistic) may manifest different clusters of traits of the disorder.

The concept of domain of personality is important because it provides the basis for understanding the different personality styles discussed earlier. Millon defines two general features of personality: structural and functional. Structural attributes of personality "represent a deeply embedded and relatively enduring template of imprinted memories, attitudes, needs, fears, conflicts, and so on that guide experience and transform the nature of ongoing life events" (Millon & Davis, 1994, p. 144). Functional attributes of personality "represent dynamic processes that transpire within the intrapsychic world and between the individual's self and psychosocial environment" (p. 141). These structural and functional domains of personality are then organized at four levels: behavioral, phenomenological, intrapsychic, and biophysical.

The behavioral level of personality domains represents those aspects that deal with what a person does and what can be directly observed. The two domains of personality at this level are expressive acts and interpersonal conduct. Expressive acts are "readily observable by others" and "enable the clinician to define, through inference, valuable qualities of the patient's overall characterological presentation" (Everly, 1995, p. 29). Interpersonal conduct is "the way one relates to others" and "allows the clinician to declare qualities of personal competence, self-esteem," and needs for affiliation (p. 29). Both expressive acts and interpersonal conduct are functional attributes of personality.

At the phenomenological level, there are three domains of personality. These have the common theme of deciding how the person experiences him- or herself in the world. The three domains at this level are cognitive style, object representations, and self-image. Cognitive style represents how people "perceive events, focus their attention, process information, organize their thoughts, and communicate their reactions and ideas to others" (Everly, 1995, p. 30). Object representations constitute "an inner imprint, a structural residue composed of memories, attitudes, and affects" that are products of significant experiences with others and which guide perceptions and reactions to current life events (p. 30). Self-image refers to the perception that people have of themselves and their consistent image of who they are. Of these three domains of personality, cognitive style is a functional attribute and object representations and self-image are both structural attributes.

The intrapsychic level of functioning encompasses two domains of personality representing unconscious processes that reflect how the person deals with internal conflict. The two domains at the intrapsychic level are regulatory mechanisms and morphologic organization. Regulatory mechanisms are internal psychological processes that provide self-protection, self-defense, need gratification, and conflict resolution when the person experiences internal or external psychological threats; they are generally inferred and unobserved features of the personality. Morphologic organization refers to the general configuration of the internal psychic structure, including the degree of cohesiveness, balance, and tension that exists among the internal personality structures. The regulatory mechanisms constitute a functional attribute of personality, whereas morphologic organization is a structural component of personality.

The fourth level of data on personality functioning is the biophysical level, which encompasses one domain, namely mood or temperament. This is a structural attribute and represents the persistent moods and emotional features that occur in a wide range of experiences and across various relationships.

In all, eight domains of personality are organized around the two general themes of the dynamic nature of the domain (i.e., structural and functional) and the level of data they represent (i.e., behavioral,

phenomenological, intrapsychic, and biophysical). This domain model permits a description of each personality style in Millon's prototypal approach to be defined at each of these levels. In Appendix A, each of the personality styles measured by the MACI Personality Patterns scales is presented along with the individual domains for each personality style. These descriptions represent Millon's theoretical prototypic descriptions of each personality style at each level and domain of personality. More importantly, these tables in Appendix A can serve as reference materials when interpreting the MACI Personality Patterns scales. When an elevation occurs on a particular scale, the table for that scale can be consulted to generate diagnostic and clinical hypotheses.

#### SUMMARY

Many challenges occur in the assessment of adolescents. Because this transitional period of development sometimes requires unique provisions when assessing psychopathology in young people, clinicians must have specialized techniques and instruments to assess the most significant concerns and difficulties of adolescence. The Millon Adolescent Clinical Inventory (MACI) was designed specifically for adolescents and is a theory-based instrument with a wide range of applications. This chapter provides a general overview of the issues relevant to adolescent development and the assessment of psychopathology in teenagers. In addition, it summarizes Millon's theory of personality and psychopathology, which served as the guiding framework for developing the MACI. The text stresses the relevance of adolescent development and assessment and the principles in Millon's theory to clinical use of the MACI. This introductory chapter thus gives a context for the material presented in the remaining chapters.