

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

PREVIEW

**The Immaturity Scale of the MMPI-A: An Empirical
Study of Its Relationship to Loevinger's Model
of Ego Development, Clinical Utility,
and Correlation with External Variables**

by

Pamela Schneider

A Doctoral Project Submitted in Partial Fulfillment of
the Requirements for the Degree of Doctor of Psychology
in the Department of Psychology at Pace University

NEW YORK

1996

UMI Number: 9708700

UMI Microform 9708700
Copyright 1996, by UMI Company. All rights reserved.

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

(Please type all information)

NAME: Pamela Schneider

TITLE OF PROJECT: The Immaturity Scale of the MMPI-A: An Empirical
Study of Its Relationship to Loevinger's Model of
Ego Development, Clinical Utility, and Correlation
with External Variables

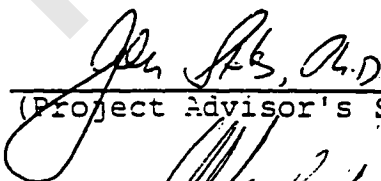
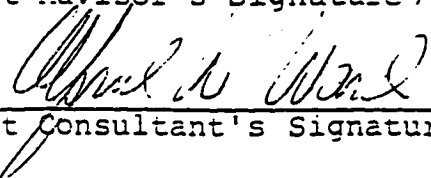
DOCTORAL PROJECT COMMITTEE:

PROJECT ADVISOR: John Stokes, Ph.D.
(Name)
Professor, Pace University
(Title) (Affiliation)

PROJECT CONSULTANT: Al Ward, Ph.D.
(Name)
Professor, Pace University
(Title) (Affiliation)

FINAL APPROVAL OF COMPLETED PROJECT:

I have read the final version of the doctoral project and certify that it meets the relevant requirements for the Psy.D. degree in School-Community Psychology.


(Project Advisor's Signature)

(Project Consultant's Signature)

11/25/96
(Date)

11/25/96
(Date)

PREVIEW

© Pamela Schneider, 1996

All Rights Reserved

iii

TABLE OF CONTENTS

Chapter	Page
List of Tables.....	vi
List of Figures.....	vii
Acknowledgements.....	viii
Abstract.....	ix
I.Introduction.....	1
Loevinger's Model of Ego Development	
The Measurement of Ego Development	
The Washington University Sentence Completion Test	
The Immaturity Scale	
Correlates of Ego Development	
Correlates of the Immaturity Scale	
Ego Development and Gender	
Ego Development and Psychopathology	
Ego Development and Externalizing Behavior	
Delinquent and Aggressive Behavior	
Running Away	
Borderline Personality Disorder	
Self-mutilating Behaviors	
Differential Assumptions between the IMM scale and the WUSCT	
Research Questions	
II.Method.....	80
Participants	
Procedures	
Materials	

Washington University Sentence Completion Test	
Immaturity Scale of the MMPI-A	
Borderline Tendency Scale of the Millon Adolescent Clinical Inventory	
Externalizing Behavior Scale of the Youth Self Report	
Aggressive Behavior Scale of the Youth Self Report	
Delinquent Behavior Scale of the Youth Self Report	
Running Away Behavior	
Self-mutilating Behaviors	
III.Results.....	88
Demographics	
The IMM scale and the WUSCT	
Identification of Optimal Cutoff Scores on the IMM scale	
Correlations between the IMM scale and the WUSCT with the Outcome Variables	
IV.Discussion.....	117
Relationship between the IMM scale and the WUSCT	
Relationship with External Variables	
Limitations of the Present Study	
Implications for School-Community Psychology	
References.....	133

LIST OF TABLES

Table	Page
1. Point Biserial Correlation Coefficients Between IMM-T, IMM-T Cutoff Scores, TPR 36, the Restrictive Model, the Traditional Model, Gender, and Age.....	91
2. Ego Level by Gender Analysis of Variance for the Immaturity (IMM-T) Subscale of the MMPI-A.....	92
3. Comparison of IMM-T Cutoff Scores for the Traditional Model	98
4. Comparison of IMM-T Cutoff Scores for the Restrictive Model.....	100
5. Sensitivity, Specificity and <u>Z</u> -Tests of IMM-T Cutoff Scores for the Traditional Model.....	105
6. Positive Predictive Values, Negative Predictive Values, and <u>Z</u> Tests for IMM-T Cutoff Scores and the Traditional Model.....	106
7. Sensitivity, Specificity, and <u>Z</u> Tests for IMM-T Cutoff Scores for the Restrictive Model.....	108
8. Positive Predictive Values, Negative Predictive Values, and <u>Z</u> Tests for IMM-T Cutoff Scores for the Restrictive Model.....	109
9. Point Biserial Correlations of IMM-T Cutoff Scores and the WUSCT Groupings with Outcome Measures.....	116

LIST OF FIGURES

Figure	Page
1. The Mean IMM-T Scores Across Ego Development Levels for the Sample (<u>N</u> =219).....	95
2. The Mean IMM-T Scores for Males and Females Across Ego Development Levels (<u>N</u> =219).....	96
3. Sensitivity, Specificity, and Predictive Values Compared to the Base Rates for Preconformist and Conformist Subjects for the Traditional Model.....	113
4. Sensitivity, Specificity, and Predictive Values Compared to the Base Rates for Preconformist and Conformist Subjects for the Restrictive Model.....	114

ACKNOWLEDGMENT

I would like to express my deepest appreciation to Dr. John Stokes for his support, encouragement and faith in my ability to succeed. He has contributed enormously to both my professional and personal growth. I would like to thank Dr. Al Ward for his infinite patience and willingness to share his knowledge. His practical approach has helped me through some of the more difficult times. I would also like to express my gratitude to Dr. David Pogge. This research could not have been accomplished without his guidance and support. Finally, I would like to thank my friends Teri Pakier and Andrea Mortati for their sense of humor and constant support.

Abstract

This study examined the relationship between the Immaturity (IMM) scale of the Minnesota Multiphasic Personality Inventory - Adolescent (MMPI-A) and Loevinger's model of ego development as measured by the Washington University Sentence Completion Test (WUSCT) (Form 81). The IMM scale was recently developed as a supplementary scale on the MMPI-A to evaluate the extent to which adolescents report attitudes, behaviors, and perceptions of self and others that reflect immaturity within the areas of impulse control, judgment, cognitive complexity, and self awareness (Butcher, Williams, Graham, Archer, Tellegen, Ben-Porath, & Kaemmer, 1992). Loevinger (1970) developed the WUSCT as a measure of ego development which she defines as the "master trait" in personality that involves impulse control, character, interpersonal relations, conscious preoccupations, and cognitive complexity. Previous research has found relationships between ego development and patterns of behavior, psychopathology, and clinical syndromes. This study also examined the relationship between the IMM scale and the WUSCT with six outcome measures thought to be related to preconformist levels of functioning. The outcome measures included the Externalizing Behavior Scale, the Aggressive Behavior Scale, and the Delinquent Behavior Scale from the Youth Self Report (YSR). The Borderline Tendency Scale (BDT) from the Millon Adolescent Clinical Inventory (MACI) was used as a measure of maladaptive functioning and chart reviews were conducted to assess for self-mutilation and running away. The sample consisted of 219 inpatient adolescents ranging from 13 through 18 years of age. The relationship between the IMM scale and the WUSCT was examined through kappa

coefficients, analysis of variance, and point biserial correlation coefficients. Due to the nonlinear relationship between the measures, sensitivity and specificity values were thought to provide the best clinical indicator. In addition, two models of preconformist functioning based on the WUSCT were examined. In general, the IMM scale demonstrated poor sensitivity and good specificity. The IMM scale was not able to consistently identify preconformist adolescents as defined by the WUSCT; however, when it identified preconformist subjects it was likely that this identification was accurate. These findings were consistent with the general clinical interpretation approach and the MMPI-A model in which significant or elevated scores are interpreted to be within the clinical range. Examination of the WUSCT's relationship to external variables suggested that the WUSCT identified a range of preconformist subjects, including many individuals who did not display the behaviors encompassed by the outcome variables. The behaviors measured by the outcome variables are thought to be related to preconformist levels of ego development. The IMM scale identified preconformist subjects including a significantly higher proportion of individuals who engaged in these behaviors. The results indicated that the IMM scale was clearly more effective in the identification of high risk adolescents. The clinical utility and limitations of both instruments are discussed including applications for school-community psychologists.

Chapter One

Introduction

The study of ego development during adolescence offers an opportunity to expand our awareness and understanding of adolescent psychopathology. The recent revision of the Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A) (Butcher, Williams, Graham, Archer, Tellegen, Ben-Porath, & Kaemmer, 1992) included the addition of the Immaturity scale (IMM) which is intended to objectively measure ego development. Although the development of the IMM scale was based on Loevinger's (1976) model of ego development there has been limited research relating the IMM scale to Loevinger's Washington University Sentence Completion Test (WUSCT). The purpose of the current study was to determine the relationship between these measures. In addition, their relationship to six outcome measures was examined to determine if they related in similar ways to constructs that have been associated with ego development in the clinical literature. A summary of Loevinger's (1976) model of ego development will be followed by a discussion about the measurement of ego development. A review of the literature will focus on the correlates of ego development with an emphasis on psychopathology. Specifically, the relationship between ego development and externalizing behaviors, aggressive behaviors, delinquent behaviors, running away, borderline personality disorder, and self-mutilating behaviors will be examined.

Loevinger's Model of Ego Development

The assessment of adolescent psychopathology is affected by a variety of developmental processes. These include cognitive, moral, social, and biological factors (Archer, Pancoast, & Gordon, 1994; Gfeller, 1986). However the assessment of ego development provides the unique potential for an increased understanding of adolescent psychopathology by fostering an awareness of how an adolescent assigns a framework of meaning to his experience of self and others (Borst & Noam, 1993).

Loevinger's (1976) conception of ego development is probably one of the most familiar and well researched theories in developmental personality theory. Loevinger (1976) cites her interest in ego development in part as emerging from the need to understand social problems such as delinquency, character defect, and psychosis. She conceptualizes ego development as one of four lines of human development in addition to physical, intellectual, and psychosocial development (Loevinger, 1966). Loevinger (1966) concedes that the distinction among these lines of development may not seem logical. She notes that cognitive elements influence both ego and intellectual development, and both psychosocial and ego development affect motivation. Loevinger (1966) emphasizes that ego development is not equivalent to the development of all the functions of the ego. It must be understood as conceptually different from the other lines of development without influencing its relationship to all of them. In order to provide clarification, Loevinger (1976) gives the example of height and weight.

Although they do not vary independently, they remain conceptually discreet. An estimation of one may be influenced by the other; however,, an actual measurement of either will not (Loevinger, 1966).

Loevinger refers to the ego "as a process not a thing...The striving to master, to integrate, to make sense of experience is not one ego function among many but the essence of the ego" (Loevinger, 1976, p. 59). According to Loevinger (1976) ego development is the complex central construct in personality which involves impulse control, character, interpersonal relations, conscious preoccupations, and cognitive complexity. Ego development is conceptualized as the "master trait" that takes into account the individual's overall frame of reference as well as integrative processes (Hauser, 1976). Loevinger (1984) suggests that her theory of ego development can be conceptualized as part of self-theory. She refers to as a kind of filter through which an individual experiences the world.

Hauser (1993) suggests that three themes emerge from within the construct of ego development as an individual progresses towards advanced levels of ego development. The first theme is what Hauser (1993) refers to as psychological-mindedness which falls within the area of conscious preoccupations. Hauser (1993) describes this in terms of differing degrees of awareness. Specifically, recognition that one's feelings are separate from others'; awareness that inner feelings are not totally isolated from others; and awareness that one's actions, feelings, and verbalizations effect others' psychological well being. The second

theme that emerges within the framework of ego development is the integration and coherence of cognitions and perceptions (Hauser, 1993). Hauser (1993) differentiates between integration that is achieved through simplification and the integration that is achieved as an individual advances in ego development. The latter type of integration is achieved through the gradual connectedness of thoughts that relates to the current situation. Hauser (1993) refers to the third theme as "Agency, active mastery" (p. 25). Although similar to the theme of psychological-mindedness, this theme refers to the idea that an individual plays an active role in her environment and can therefore exert influence on her environment. The individual gains an increasing awareness of how he or she can influence the environment and can therefore reflect on their own contributions towards past events as well as plan for the future (Hauser, 1993). The individual's relationship and interaction with the environment has implications for the evolution of ego development. According to Loevinger (1976) "ego development occurs by progressive restructuring of the child's relationship to the environment and correlative internal restructuring of the child, not by changing the relation to fixed objects" (p. 381). The child is seen as constantly changing and growing in an attempt to interpret the world.

Loevinger (1976) conceptualizes ego development as comprised of an invariant sequence of stages leading to increased psychological maturity (Redmore & Loevinger, 1979). The progression into a new stage is based on the preceding stage and no stages can be skipped (Lorr &

Manning, 1978). Loevinger (1976) emphasizes that these stages may be correlated with age but should be considered independent of age. This hierarchic model suggests that there is one level that is characteristic for each individual (Loevinger, 1966). Although this model may appear to be somewhat simplistic, Loevinger (1966) believes that this is necessary in order for an efficient method of measurement to be possible. Loevinger (1966) also indicates that frequently there will be evidence that an individual is functioning at different levels. She refers to Piaget's concept of horizontal decalage and suggests that the construct of ego development is complex in nature (Loevinger, 1966). Hauser (1993) describes Loevinger's model of ego development as "a hierarchy of vertically connected stages and horizontally connected elements within the stages" (p. 23).

Novy (1993) provided additional evidence of horizontal decalage through an investigation of the progressive sequence of ego development levels through use of the Washington University Sentence Completion Test (WUSCT) (Loevinger, 1985) in relation to 12 objective measures. The study was designed to measure some of the characteristics of the impulse control, conscious preoccupations, interpersonal relations, and cognitive complexity. The measures included five of the subscales from Lorr's Interpersonal Style Inventory, two subscales from Shostrom's Personal Orientation Inventory, Cateel, Eber and Tatsuoka's Experimenting versus Conservative Scale (Q1), and two subscale's from Heath's Perceived Self Questionnaire (cited in Novy, 1993). Novy (1993)

reported that the criteria for selection included that the measures were conceptually or empirically related to ego development, that they were constructed independently of the WUSCT and that they demonstrated adequate reliability and validity. In addition, the measures demonstrated evidence of a linear relationship with ego development. The sample consisted of 229 adults. An investigation of the underlying construct through examination of the sequence of mean scores of the external measures provided empirical support for the progression of ego development levels (Novy, 1993). The large standard deviations in relation to the mean scores were consistent with the theory of decalage and suggested the existence of overlap among levels of ego development (Novy, 1993).

A true understanding of ego development takes into consideration four factors: (1) stages have the potential to become fixation points and therefore characterize children and adults; (2) the stage theory is structural and has an inner logic; (3) specific research instruments exist that address the study of ego development; and (4) the theory of ego development is appropriate for all ages and generates a wealth of information concerning the events of adolescence (Loevinger, 1976).

Loevinger's (1976) model of ego development involves a series of seven stages and three transitional stages. Each stage is more complex than the previous stages. The stages and character styles are operationally defined (Hauser, 1976). Accordingly, one can hypothesize the representative style of an individual's character development, impulse

control, interpersonal relations including self concept, and conscious preoccupations (Loevinger, 1966). The first stage (I-1) is comprised of the Presocial and the Symbiotic Phases. During the Presocial Phase the infant does not have an ego. The child is only concerned with immediate need gratification and has not differentiated himself from his surroundings. During the Symbiotic Phase the child has a strong attachment to the mother and is able to distinguish her from the rest of the world. However he does not yet differentiate himself from the mother. According to Loevinger (1976), the development of language plays an important role in the development of a separate sense of self. The second stage (I-2) is called the Impulsive Stage. At this stage an individual is governed by impulses and actions are seen as "good" or "bad". Rules are not recognized and the child's orientation is in the present rather than to the past or the future.

The third stage (Delta) is called the Self-Protective Stage and it is at this stage that the individual learns to anticipate immediate consequences. Although rules are now understood the individual is concerned only with self-interest. The individual at this stage is typically guarded and manipulative and operates from a "don't get caught" perspective. However, at the Self-Protective stage there is less dependency on others than at the Impulsive level. The Delta/3 Stage is a transitional stage between the Self-Protective and the Conformist stages. At this phase the individual continues to have an opportunistic orientation

however he is beginning to acknowledge rules and socially appropriate behavior.

The Conformist stage (I-3) occurs when the individual begins to identify his welfare with that of the group. Loevinger (1976) believes that in order for this to occur there must be an element of basic trust. At this stage, rules are obeyed because they exist and individuals are concerned with materialistic things, appearance, and reputation. At the conformist level inner conflicts are not acknowledged. The Self-Aware Stage (I-3/4) is a transition from the Conformist to the Conscientious stage. Loevinger (1976) reports that this is the modal level for adults in our society. During this stage there is an increase in self-awareness as well as an acknowledgment that right and wrong may be related to situational factors. In other words, the self-aware person is able to see alternatives and becomes more interested in interpersonal relationships.

During the Conscientious Stage (I-4) morality has become internalized and inner rules now take precedence over societal expectations. Rather than fearing punishment when a rule is broken, an individual at the Conscientious level experiences guilt. According to Loevinger (1976), all the necessary ingredients for an adult conscience are now present. These include self-evaluation, long-term goals, responsibility, and differentiated self-criticism. At this stage, an individual strives for achievement and considers himself to be "his brother's keeper". The third transition stage is called Individualistic Stage (I-4/5) and is characterized by the ability to tolerate paradox and an increased sense of

individuality as well as emotional dependence. There is a greater capacity for intimacy and the ability to tolerate contradiction leads to greater cognitive complexity.

The Autonomous Stage (I-5) is characterized by the ability to acknowledge and deal with inner conflict directly rather than ignoring it. There is an increased toleration for ambiguity as well as increased cognitive complexity. One of the major goals of this stage of development is self-fulfillment. Interpersonal relationships are characterized by an awareness of mutual interdependence. The highest stage is the Integrated Stage (I-6) which is characterized by a cherishing of individual differences as opposed to toleration of them. There is a consolidation of the sense of self which is similar to Maslow's concept of self-actualization (Loevinger, 1976). However, because this level of ego development is rare, there is little empirical data regarding this stage. Loevinger (1966) believes that it is a mistake to hold any one stage as the ideal. Each stage has its difficulties and paradoxes which simultaneously offer the opportunity for growth as well as maladjustment. Loevinger (1966) illustrates this by making reference to the dilemma of negotiating dependency needs with autonomy during the Autonomous stage.

Loevinger (1966) refers to milestone sequences that characterize different levels of ego development. She defines milestones as "observable behaviors that tend to rise and then fall off in prominence as one ascends the scale of ego maturity" (p. 202). Each stage has milestones within the four areas outlined by Loevinger (1976): Impulse

Control and Character Development; Interpersonal Style; Conscious Preoccupations; and Cognitive Style. During the Presocial and Symbiotic stages the child is described as attempting to differentiate the self from non-self. During the Impulsive Stage (I-2) the person is fearful of retaliation and interpersonal style is characterized by dependency and exploitation. Conscious preoccupations center around bodily states, specifically sexual and aggressive feelings. Conscious preoccupations are marked by conceptual confusion and stereotyping (Loevinger, 1976).

The Self-protective stage is marked by an opportunistic approach and an externalization of blame. Interpersonal style is characterized as manipulative and conscious preoccupations center around self-protection, maintaining advantage, and control. The Conformist stage (I-3) is marked by the emergence of guilt and shame for breaking external rules and interpersonal style is marked by superficiality. Conscious preoccupations are concerned with appearance, banal feelings and social acceptability. Although cognitive style is more advanced it remains conceptually simplistic with the frequent use of stereotypes (Loevinger, 1976).

The Conscientious-Conformist (I 3/4) stage is characterized by a differentiation of goals and a sense of self in relation to the group. Interpersonal style is characterized by helpfulness and conscious preoccupations are related to adjustment, problems, and opportunities. Cognitive style is now more complex and described in terms of multiplicity. Impulse control and character development during the Conscientious (I-4) stage focuses on self-criticism, internal standards, guilt related to

consequences, and the ability to formulate long term goals. Interpersonal style is characterized by intense and mutual relationships where communication is stressed as well as responsibility. Feelings are now more differentiated and achievements as well as self-respect are important. Cognitive style continues to become more complex and is marked by the idea of patterning. The Individualistic stage (I 4/5) includes the advancements made during the previous stage with the addition of the respect for individuality and an awareness that dependence may be emotionally problematic. Conscious preoccupations are characterized by a focus on development, social problems, and continued differentiation of internal from external life. Cognitive style is marked by an awareness of the difference between process and outcome (Loevinger, 1976).

Character development and impulse control during the Autonomous stage (I-5) includes the addition of the ability to cope effectively with inner needs and increased toleration. There is a respect for independence as well as interdependence. Feelings are well communicated and there is an integration of the physical and psychological sense of self. Self-fulfillment is emphasized and cognitive style is marked by increased complexity and objectivity as well as the ability to tolerate ambiguity. The Integrated stage (I-6) is characterized by a reconciliation of inner conflict and an acceptance of goals that are not attainable. There is a cherishing of individuality and an integrated identity.