

AN ABSTRACT OF THE THESIS OF

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Title: A Comparison of MMPI-A and MMPI-2 Scores with 18
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This study investigated the comparability of MMPI-2 and MMPI-A profiles for 18 year old college students. Forty-two undergraduate students completed both the MMPI-2 and the MMPI-A. Eleven participants' profiles were discarded due to K Scale elevations. The remaining 31 participants were divided into groups of 18 women and 13 men. Two repeated measures analysis of variance were used to analyze the data, one for men and one for women. The overall F test was significant for both groups; therefore, paired t -tests were used in follow-up analyses. Correlation coefficients were also computed for each of the 3 validity and 10 clinical scales. The statistical results of these analyses suggest the MMPI-2 and the MMPI-A are not comparable instruments. Significant differences between the MMPI-2 and the MMPI-A were found on several scales, as well as several unacceptably low correlation coefficients. Future research should include information on each individual's living situation, as well as an external measure of psychopathology.

A Comparison of MMPI-A and MMPI-2 Scores with
18-Year-Old College Students

A Thesis
Presented to
the Division of Psychology and Special Education
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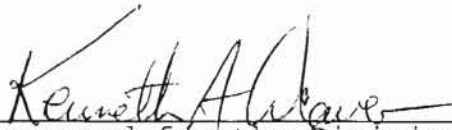
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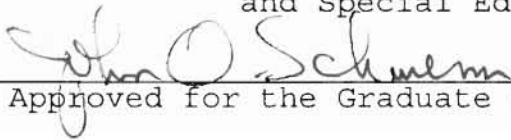
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TABLE OF CONTENTS

ABSTRACT.....	i
ACKNOWLEDGEMENTS.....	ii
LIST OF TABLES.....	iii
LIST OF FIGURES.....	iv
CHAPTER 1: Introduction.....	1
Review of the Literature.....	2
CHAPTER 2: Method.....	13
CHAPTER 3: Results.....	16
CHAPTER 4: Discussion.....	23
REFERENCES.....	26

LIST OF TABLES

TABLE 1: Comparison of Mean T-Scores on MMPI-2 and MMPI-A for Women.....	17
TABLE 2: Comparison of Mean T-Scores on MMPI-2 and MMPI-A for Men.....	18
TABLE 3: Correlation Coefficients Between MMPI-2 and MMPI-A Validity and Clinical Scales.....	22

LIST OF FIGURES

FIGURE 1: Plot of Mean Scores on MMPI-2 and MMPI-A
for Women.....20

FIGURE 2: Plot of Mean Scores on MMPI-2 and MMPI-A
for Men.....21

CHAPTER 1

Introduction

The Minnesota Multiphasic Personality Inventory (MMPI) has been used widely in the assessment of adolescent psychopathology for over a half century (Klinefelter, Pancoast, Archer, & Pruitt, 1990). However, as time has passed, several problems have arisen concerning this practice. In response to many of these problems, the MMPI-Adolescent (MMPI-A) was developed (Archer, 1992).

Statement of Problem

Since the MMPI-A is a new instrument, a limited amount of research is available to demonstrate its reliability with adolescents. Both the MMPI-2 and the MMPI-A have been deemed suitable (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989; Butcher et al., 1992) for use with 18 year olds by the revision committees. Although these two instruments are similar, they are sufficiently different to question whether the same individual would produce similar profiles. Currently, no studies are available in the literature comparing results from the MMPI-2 and MMPI-A.

Statement of Purpose

The purpose of this study is to compare scores obtained on the MMPI-A and MMPI-2 from 18 year old college students. By having a sample of 18 year old college students complete both inventories, the scores can be analyzed to determine the instruments' comparability.

Statement of Significance

This study will provide valuable information about the relationship of the MMPI-A to the MMPI-2. The data provided by this study will give practitioners a clearer picture of the differences and similarities of these two instruments. It may also provide information to aid clinicians in determining which instrument will best facilitate the assessment of 18 year olds. Future clients will also benefit from the results of this study in that clinicians will better assess personality with the more appropriate instrument. Accurately assessed clients can then be treated in the most suitable manner.

Review of the Literature

Since the MMPI-A is a new instrument and little information is available, the literature review will begin with the use of the original MMPI with adolescents. Some of the difficulties encountered in using the MMPI with adolescents included the use of adult norms with adolescents; the use of critical items, which are individual items used to indicate pathology, to aid in the classification of adolescents; the use of adult descriptors and code types with adolescent profiles; and the detection of response sets among adolescent respondents. These problems led researchers (e.g., Archer, 1987; Colligan & Offord, 1992) to question the feasibility of the continued use of the original MMPI with adolescents.

The original MMPI has been used in the assessment of adolescent psychopathology for more than 50 years. Archer (1992) and Archer and Klinefelter (1991) reported that the MMPI is the most widely used objective personality inventory with adolescents. Although the use of the MMPI with adolescents has grown, the research base to support its use with this population has not (Archer, 1984). Some problems (e.g., the use of adult norms, descriptors, and code types with adolescents) have raised questions about the appropriateness of the MMPI for use with this age group (Williams & Butcher, 1989a). As early as 1953, Hathaway and Monachesi made the statement that the MMPI was not a completely satisfactory test for use with adolescents. One problem was a tendency for adolescents to produce more invalid protocols than adults for unknown reasons (Hathaway & Monachesi, 1963). The adolescent participants in the original normative sample were profiled according to adult norms because no adolescent norms existed (Colligan & Offord, 1992). Hathaway and Monachesi (1963) originally discouraged the development of separate norms for adolescents, believing this would minimize the psychological differences that exist between adults and adolescents. Adult norms do enhance the differences between adults and adolescents; however, the use of adult norms also revealed an exaggerated psychopathology in normal adolescents (Archer, 1987).

Use of Adult Norms with Adolescent Respondents

Profiling adolescent response patterns on adult norms tends to result in profile exaggeration in the psychopathological direction (Archer, 1987; Ehrenworth & Archer, 1985). Both normal and inpatient adolescents showed marked elevations on Scales F (Infrequency), 4 (Psychopathic Deviate), and 8 (Schizophrenia) when profiles were based on adult norms (Archer, 1984, 1987; Ehrenworth & Archer, 1985; Williams, 1986). Pancoast and Archer (1988) also noted elevations on Scales 6 (Paranoia) and 9 (Mania), in addition to the elevations on Scales F, 4, and 8. These false positive profiles could result in subjecting adolescents to unnecessary, perhaps detrimental psychological treatment (Archer, 1987; Ehrenworth & Archer, 1985). Archer (1987) suggested there was sufficient evidence "to indicate that the use of adult norms with adolescent respondents is an inappropriate and potentially dangerous practice" (p. 30).

Several sets of adolescent norms were developed to address the problems. The age-appropriate norms developed by Marks, Seeman, and Haller (1974) are the most frequently used and more acceptable for profiling response patterns than were adult norms (Archer, 1987, 1989; Pancoast & Archer, 1988). However, Ehrenworth and Archer (1985) raised a serious question, "Why do adolescents considered to have demonstrated sufficient psychopathology to warrant psychiatric hospitalization obtain mean profiles which are

within normal limits using adolescent norms?" (p. 419). They suggested using lower cut-off levels, such as T equal to 65 instead of 70, to produce lower rates of false negatives among adolescents, particularly inpatient populations (Ehrenworth & Archer, 1985). Pancoast and Archer (1988) maintained that the Marks et al. (1974) adolescent norms "were impressively accurate at the time they were obtained, but normative changes have occurred since their publication, which render them less accurate for evaluation of contemporary adolescents" (p. 699). Pancoast and Archer (1988) also called for a revision of these adolescent norms in an attempt to more accurately profile the response patterns of contemporary adolescents.

In 1989, the MMPI-2, a revised edition of the MMPI, was published to update the instrument, eliminate some of the difficulties encountered when using the MMPI with adults, and develop new adult norms. The MMPI-2 normative sample consisted of 2,600 individuals, including 1,138 males and 1,462 females (Butcher et al., 1989). The sample was taken from Minnesota, California, North Carolina, Ohio, Pennsylvania, Virginia, and Washington (Butcher et al., 1989). Individuals ages 18 through adult were included in the sample; however, the actual number of 18 year olds was not reported in the manual. Thus, the representativeness of this age in the sample is difficult to determine.

Quite a bit of research has been conducted with the

MMPI-2. Butcher, Graham, Dahlstrom, and Bowman (1990) determined that the MMPI-2 was suitable for use with college students because their MMPI-2 profiles were very similar to those of the MMPI-2 normative sample. However, the authors advised the continued use of the original MMPI with individuals younger than 18 because the MMPI-2 was not normed for use with adolescents (Colligan & Offord, 1992).

Use of Critical Items in Adolescent Classification

Aside from the need for new MMPI norms for adolescents, the use of MMPI critical items with adolescents was also being questioned. Critical items classify respondents as schizophrenic, depressed, and so forth by comparing their responses on certain critical items to members of a specific crisis group (Archer & Jacobson, 1993). However, Archer (1984) describes this developmental stage as a time during which deviant behavior may be more common than normal behavior. Adolescents are more likely to acknowledge symptoms suggesting pathology, rebellion, impulse control problems, social isolation, and family conflict than adults (Archer, 1984). These behaviors seem to be consistent with theories that describe adolescence as a time of turbulence.

In contrast, however, Offer (1975) reported data from psychological testing and personal interviews that were directly contradictory to this view of turbulent adolescence. In this sense, the personality traits and psychological characteristics of adolescents may be viewed

as unstable (Archer, 1989). Archer and Jacobson (1993) found that adolescents responded in the abnormal direction to MMPI critical items nearly twice as frequently as the MMPI-2 normative sample of adults. Of these critical items, those scored on Scales F, 4, and 8 were answered in the abnormal direction with a particularly high frequency (Archer & Jacobson, 1993). A study by Archer and Jacobson (1993) has shown that adolescents in both normal and clinical groups responded abnormally to critical items at a high rate; therefore, the use of critical item lists in the assessment of adolescents may not be appropriate.

Use of Adult Empirical Descriptors with Adolescents

Another problem found in using the MMPI with adolescents involved the relative absence of empirical descriptors for adolescent populations. The interpretations of adolescent profiles were being based on descriptors derived from adult samples (Williams & Butcher, 1989a). Williams and Butcher (1989a) conducted a study with adolescents that revealed that all the clinical scales except Scale 5 (Masculinity-Femininity) had descriptors fairly consistent with those found in the adult literature. This provided support for using adult descriptors in adolescent MMPI narratives. However, Gallucci (1993) reported narratives for adolescent profiles with Scale K (Defensiveness) scores below T equal to 60 were more accurate when derived from adolescent norms. Williams and

Butcher (1989b) also cautioned against using the code type method to interpret adolescent profiles for lack of its validity with adolescent populations. Instead, they recommended creating profile narratives from the individual scale descriptors (Williams & Butcher, 1989b).

Detection of Response Sets in Adolescent Profiles

One final difficulty in using the MMPI with adolescents involved detecting response sets, such as faking good, faking bad, and random response patterns, in adolescent profiles. Archer, Gordon, and Kirchner (1987) determined a notable number of adolescents in an inpatient sample were able to fake-good (i.e., respond in the same manner as a normal adolescent would) on the MMPI without being detected by any of the validity scales. However, Archer et al. (1987) found adolescents attempting to fake-bad (i.e., responding in a manner indicating severe psychopathology) were rather easily detected by an elevation on Scale F of T equal to 130, and elevations on all the clinical scales except Scales 5 (Masculinity-Femininity) and 0 (Social Introversion).

The random response pattern produced when adult norms are used is somewhat different than that found with the use of adolescent norms. The two random response profiles are similar in elevation, but the profile plotted using adolescent norms has a different configuration and is more difficult to detect than the random response profile

obtained using adult norms (Archer et al., 1987). Thus, random response sets may be difficult to recognize in adolescents (Archer et al., 1987).

Development of the MMPI-A

Because of all these difficulties associated with using the original MMPI with adolescent populations, the MMPI Adolescent Project Committee was established in July, 1989 to consider developing a separate form of the MMPI for adolescents (Archer, 1992). The committee of James N. Butcher, Beverly Kaemmer, Auke Tellegen, and Robert P. Archer was appointed by the University of Minnesota Press (Archer, 1992; Butcher et al., 1992). The main goals of this project were (a) to develop a representative national normative sample, (b) to shorten the test to 500 or fewer items without losing substantial clinical data, (c) to maintain continuity from the original MMPI to the MMPI-A, particularly the validity and clinical scales because of their demonstrated validity, (d) to develop items and scales pertinent to the developmental stage of adolescence, and (e) to aid in the standardization of adolescent assessment (Archer, 1992).

The normative sample consisted of 815 girls and 805 boys from California, Minnesota, New York, North Carolina, Ohio, Pennsylvania, Virginia, and Washington State (Butcher et al., 1992). In addition to geographic location, the sample was also stratified according to age, sex, ethnic

origin, parental educational level, and the adolescents' current living situation (Archer, 1992). The current living situation is defined as whether the adolescent lives independently from parents and is in high school, college, or the military. Since all of the participants were tested at either a junior or senior high school, drop-outs and those frequently absent from school were probably not included (Butcher et al., 1992). A clinical sample including 420 boys and 293 girls was also taken from inpatient facilities in the Minneapolis, Minnesota area (Butcher et al., 1992). The normative sample ranged in age from 14 to 18, with only 87 18 year olds in the total sample of 1,620 participants (Butcher et al., 1992). The number of boys and girls comprising this age group was not indicated, strongly suggesting that 18 year olds were not adequately represented in the sample. According to Salvia and Ysseldyke (1991), a minimum of 100 participants would be necessary for each norm group to achieve sufficient representation. Thus, at least 200 18 year old participants, 100 boys and 100 girls, should have been included in the normative sample for it to be representative.

The sample was administered the 704 item MMPI Form TX, which consisted of 550 original MMPI items, 58 new items, and 96 adolescent-specific items (Archer, 1992; Butcher et al., 1992). In addition to the MMPI-A normative sample, a

subsample of 45 boys and 109 girls participated in a test-retest reliability study (Butcher et al., 1992). Butcher et al. (1992) reported correlation reliabilities ranging from $r = .49$ on Scale F1 to $r = .84$ on Scale 0. Butcher et al. (1992) also conducted an internal consistency study using the Cronbach Coefficient Alpha. For boys, the internal consistency estimates ranged from a rather low alpha of $.34$ on Scale 6 to an adequate alpha of $.85$ on Scales 7 and 8. For girls, the internal consistency estimates ranged from an alpha of $.37$, which is considered low (Salvia & Ysseldyke, 1991), on Scale 5 to an alpha of $.87$ on Scale 7, which is an acceptable level (Butcher et al., 1992). These statistics suggest that the MMPI-A is a reliable instrument for use in adolescent assessment. However, a single study of reliability does not prove the test is reliable.

In January 1990, upon review of the normative data, the MMPI Adolescent Project Committee suggested the project of developing the MMPI-A be continued (Archer, 1992; Butcher et al., 1992). The basic validity and clinical scales from the original MMPI were continued in the MMPI-A, although 58 items were deleted, the majority of which were scored on Scales F, 5 and 0 (Archer, 1992). Some new Content Scales, as well as a one new Supplementary Scale were included in the MMPI-A (Butcher et al., 1992). The final form of the MMPI-A consists of 478 items.

Butcher and Pope (1992) stated that the clinical and validity scales were basically left intact from the original MMPI to the MMPI-A, although some items were deleted and others were reworded. The continuity was also maintained from the original MMPI to the MMPI-2 (Tellegen & Ben-Porath, 1993; Butcher, Graham, Dahlstrom, & Bowman, 1990). Thus, the MMPI-A is similar to both the original MMPI and the MMPI-2, which could suggest that the research with adolescents on the original MMPI and on the MMPI-2 may apply to the MMPI-A also (Archer, 1992). However, further research on the MMPI-A will be necessary to determine if this is the case.

Summary

Because the MMPI may be outdated and inadequate as an adolescent assessment instrument, the MMPI-A was developed. Other than the normative studies conducted at the time of its development, very little research has been done with the MMPI-A. In addition, the MMPI-A normative sample included only 87 participants who were 18 years of age, which may not be an adequate national sample. The MMPI-2 was also normed with participants as young as 18 years old. Therefore, the current study was designed to compare adolescent MMPI-A profiles with their MMPI-2 counterparts.

CHAPTER 2

Method

Participants

Forty-two 18-year-old students (14 men and 28 women) from introductory psychology classes at Emporia State University volunteered to participate in this study. Of the 42, only 31 participants successfully completed both testing sessions.

Design

Participants were blocked on gender then completed the MMPI-2 and MMPI-A in a counterbalanced fashion. The dependent variable was the test scores and the within subjects independent variable was the tests.

Procedure

The researcher submitted an application for approval to use human subjects to the Human Subjects Review Committee. Upon approval, the researcher posted a sheet for individuals to sign their names and telephone numbers to participate in the study. Each volunteer was then contacted, and a testing appointment was arranged. The researcher telephoned each volunteer again the day before the first testing session to confirm the scheduled appointment.

Prior to the testing sessions, a red line was drawn after item 350 on the MMPI-A answer sheets and after item 370 on the MMPI-2 answer sheets indicating the participant should stop there. The 3 validity and 10 clinical scales

are contained within these items on each inventory. Thus, by truncating both inventories the administration time was reduced from 1.5 hours to 45 minutes while still allowing the researcher to score the necessary scales.

On each of the testing days, the researcher, a 25-year-old, Caucasian woman, was present to administer the MMPI-A or MMPI-2. The instruments were administered in a counterbalanced sequence to reduce the possibility that taking one test first affected responses on the second test.

Upon arrival, each participant read and signed an informed consent form. After signing, one test booklet, one answer sheet and a pencil were given to each participant and the following instructions read aloud while the participants read the instructions in the test booklet:

"You are here to take the MMPI-A (or the MMPI-2). Answer each item either True or False, as it applies to you, and fill in the appropriate circle on your answer sheet. Try to answer every item. Please complete only the first 350 items of the MMPI-A (the first 370 items of the MMPI-2) to where the red line has been drawn on your answer sheet. Once you have completed the inventory, I will schedule a time for you to return and take the second inventory. Thank you for your time."

As each participant finished, the researcher assigned a number to that participant and recorded it on a separate sheet of paper, as well as on the participant's

MMPI-A or MMPI-2 answer sheet. The researcher then asked the participant to choose a time within two weeks to return to complete the other inventory. This same procedure was carried out with each participant.

The same procedures were followed during the second testing session. The instructions read to the participants before they began were the same as those read at the first administration except for the name of the test. Upon completion of both inventories, the participants provided their signatures along with their psychology instructors' names. This paper was then turned in to the psychology office for the participants to receive credit for their participation.

Each MMPI-A and MMPI-2 was scored by the researcher using the hand-scoring templates. A profile sheet was plotted for each participant for both the MMPI-A and the MMPI-2. Any profile that had a Cannot Say (?) Scale raw score of greater than or equal to 35, a T-score of greater than or equal to 65 on the K Scale, or a T-score on Scale F greater than or equal to 120 was considered invalid, and the individual's data on both instruments were discarded.

CHAPTER 3

Results

Forty-two participants completed the testing. Of those, the protocols of 10 women and one man were discarded due to elevations of T above 65 on Scale K of the MMPI-A. This left a total of 18 women and 13 men.

Since separate norms are used for men and women, two repeated measures analysis of variance were used to analyze the data, one for women and one for men. The overall F test was significant for both men, $F(1,13) = 7.87$, $p < .05$, and women, $F(1,18) = 7.08$, $p < .05$. For both groups, scores obtained on the MMPI-2 and the MMPI-A differed. Follow-up tests (paired t -tests) were computed for each of the 13 validity and clinical scales to determine where those differences were located. The results of the t -tests are presented in Table 1 for the women and Table 2 for the men. Note that for the women, a significant difference was found between several of the MMPI-2 and MMPI-A scores. The mean scores on Scales L and K were significantly higher on the MMPI-A, whereas the mean scores on Scales F, 1, 4, 6, 7, 8, and 9 were significantly higher on the MMPI-2 (see Figure 1).

A significant difference was also found between the MMPI-2 and MMPI-A scores for the men. The mean score on Scale K was significantly higher on the MMPI-A, while the mean scores on Scales F, 6, 7, 8, and 9 were significantly

TABLE 1

Comparison of Mean T-Scores on MMPI-2 and MMPI-A for
Women (n=18)

Scale	MMPI-2 (SD)	MMPI-A (SD)	t
L	43.94 (7.27)	48.39 (8.45)	-3.15**
F	53.72 (14.60)	41.78 (2.84)	3.86**
K	43.00 (8.79)	48.89 (8.08)	-4.16**
1	52.33 (12.08)	48.44 (8.38)	2.46*
2	51.22 (6.41)	49.50 (5.65)	1.86
3	45.33 (8.07)	45.61 (8.74)	-.14
4	47.50 (8.59)	44.50 (7.21)	2.45*
5	54.44 (13.79)	49.89 (8.92)	1.82
6	53.50 (10.47)	47.06 (6.83)	3.60**
7	56.22 (12.67)	49.22 (6.80)	3.11**
8	55.78 (14.34)	45.56 (8.42)	4.62***
9	54.28 (12.84)	45.89 (10.38)	5.36***
0	53.94 (7.23)	54.83 (8.93)	-.63

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

TABLE 2

Comparison of Mean T-Scores on MMPI-2 and MMPI-A for
Men (n = 13)

Scale	MMPI-2 (SD)	MMPI-A (SD)	t
L	45.00 (7.23)	48.23 (10.29)	-.92
F	62.46 (15.15)	45.08 (7.89)	4.07**
K	42.15 (8.13)	48.00 (8.29)	-4.95***
1	55.77 (13.08)	56.62 (18.61)	-.25
2	55.23 (13.34)	52.69 (16.69)	.87
3	52.00 (10.31)	53.00 (10.50)	-.62
4	53.31 (8.09)	49.62 (5.99)	1.77
5	54.77 (12.55)	52.69 (13.38)	.97
6	57.15 (10.87)	46.77 (9.84)	2.88*
7	63.62 (12.67)	54.00 (13.85)	2.77*
8	68.15 (16.30)	50.92 (11.80)	5.22***
9	60.31 (11.84)	52.15 (6.49)	3.33**
0	56.54 (11.95)	52.62 (12.88)	1.56

Note: * $p < .05$ ** $p < .01$ *** $p < .001$

higher on the MMPI-2 (see Figure 2).

The correlation coefficients between the MMPI-2 and MMPI-A validity and clinical scales are presented in Table 3. Scales L, F, 4, and 6 for the men produced particularly low correlations. For the women, only Scales F and 3 showed moderately high correlations; the rest were above .60. However, 10 of the women's protocols were discarded because of K Scale elevations. Excluding these profiles may have eliminated scores which would have otherwise suppressed the scale correlations.

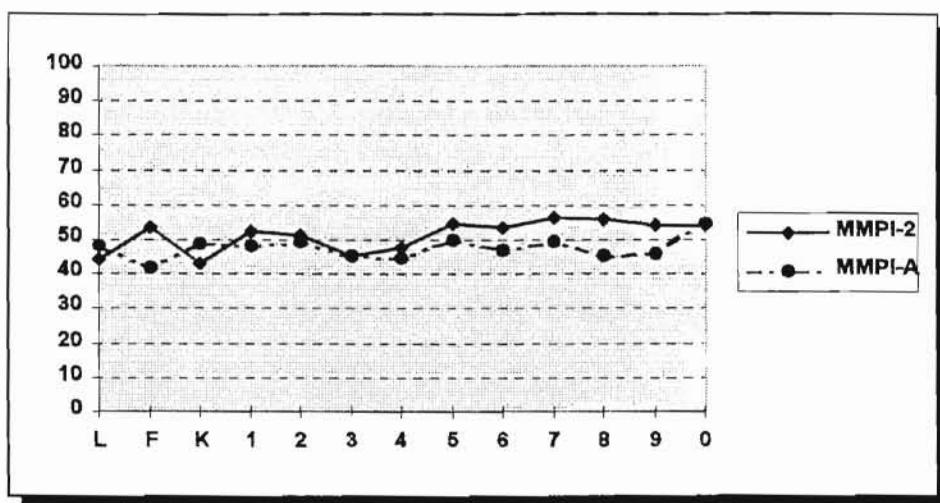


Figure 1. Plot of Mean Scores on MMPI-2 and MMPI-A for Women.

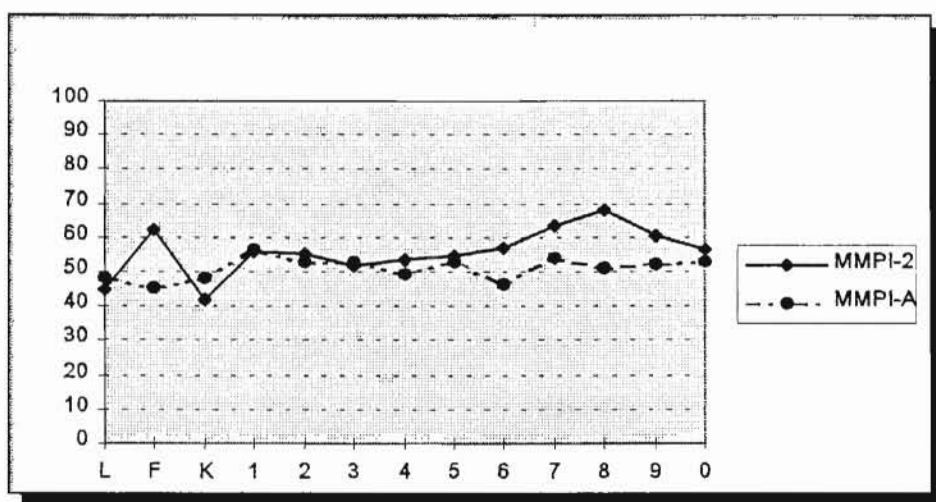


Figure 2. Plot of Mean Scores on MMPI-2 and MMPI-A for Men.

TABLE 3

Correlation Coefficients Between MMPI-2 and MMPI-A
Validity and Clinical Scales

<u>Scale</u>	<u>r for women</u>	<u>r for men</u>
L	.719**	-.021
F	.590**	.228
K	.749**	.866**
1	.846**	.765**
2	.796**	.779**
3	.528*	.845**
4	.798**	.463
5	.636**	.824**
6	.688**	.215
7	.672**	.557*
8	.780**	.684**
9	.858**	.677*
0	.744**	.735**

Note: * $p = .05$ ** $p = .01$

CHAPTER 4

Discussion

The purpose of this study was to determine the comparability of MMPI-2 and MMPI-A profiles for 18-year-old college students. The results indicated significant differences between the MMPI-2 and the MMPI-A on 9 of the 13 scales for the women and 6 scales for the men.

Of the validity scales, Scales F and K were significantly different for both the men and women, as well as Scale L for the women. The validity scales are used to determine whether a profile should be interpreted. If the same individual produces markedly different scores on the validity scales of the two inventories, one profile may be rendered uninterpretable, while the other may be within the valid range.

Across the 10 clinical scales, the MMPI-2 consistently produced higher mean scores than the MMPI-A for both men and women. This could mean the MMPI-2 tends to exaggerate in the psychopathological direction. However, it could also indicate the MMPI-A tends to underestimate the level of an individual's psychopathology. Conversely, it is possible the MMPI-A and the MMPI-2 should be different. Perhaps these discrepancies reflect the psychological differences that exist between adolescents and adults.

The significant mean differences on several validity and clinical scales and the unusually low correlations on

some of the scales suggest these two instruments are not comparable. Because the national normative sample inadequately included only 87 18-year-olds, the MMPI-A may not be a suitable instrument to use with 18-year-olds. A more representative sample may have invalidated the inventory with this age group. The unusual results of this study may simply be a reflection of an improperly normed instrument.

This study also raises one additional concern. Twenty-six percent of the original sample had to be discarded because of defensive responding, which is an unusually high percentage. All of the 11 invalid protocols were invalidated by the participants' responses on the MMPI-A. The majority (73%) of the invalid profiles were produced during the second testing session rather than the first. Although not formally examined, these results point to the possibility that taking the MMPI-2 first may result in a carryover effect that contaminates responses given to the MMPI-A.

In addition to a possible sequencing effect, gender may also effect the invalid protocols. All but one of the participants excluded due to an invalid K Scale were women. Although no conclusions can be drawn based on the current data, perhaps women are more responsive to the hypothesized carryover effect than men.

Although this apparent carryover effect is of concern

in the present study, it has only limited real-world applicability. Under normal circumstances, these two tests would not be given to the same individual. However, similar tests could feasibly produce the same response set. Additional research is necessary to rule out this possibility.

Conclusion

This study has revealed a significant difference between mean scores on several scales of the MMPI-2 and the MMPI-A for 18-year-old college students. A number of correlation coefficients computed for this data showed modest to low correlations. Therefore, these two instruments do not appear to be comparable. Further research is needed to determine which inventory is more accurate with individuals of this age. A study that considers each participant's living situation, such as living independently or in the parental home, may be beneficial in making this decision. Including an independent measure of psychopathology could also aid in determining which inventory produces the more valid profile. Another area of research to consider is the possible carryover effect among women on the MMPI-A.

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Melinda K. Kendall

Signature of Author

May 4, 1995

Date

A Comparison of MMPI-A and MMPI-2
Scores with 18-Year-Old College
Students

Doug Cooper

Signature of Graduate Office Staff
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May 5, 1995

Date received

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