

# The Utility of MMPI-2 Scores with a Correctional Population & Convicted Sex Offenders

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The MMPI-2 is a widely used objective personality measure across all settings. It is especially useful in correctional settings due to its objectivity with standardized administration and scoring This helps aid many factors including volume, legal accountability, the nature of the clientele, and the need for security. Since assessments provide very useful information about prisoners for correctional staff, these factors make the MMPI-2 a very valuable test to use in prison. Studies have found no significant differences between African Americans and Caucasians, however have found subtle differences between MMPI-2 scores of males and female offenders. One specific area the MMPI-2 has been used for in prison is with sex offenders. Previous studies have aimed to use the MMPI-2 to identify high and low risk sex offenders, as well as differentiate between general sex offenders and internet sex offenders. Not only has it been used to identify certain sex offenders, it has been used in examining the predictors of completion of sex offender treatment programs.

Keywords: MMPI-2, Correctional Settings, Sex Offenders

#### **Introduction of MMPI-2**

The MMPI-2 is the most widely used psychological test in the United States and is often used in other countries around the world (Graham, 2006). This test and the original MMPI, have been the most widely researched personality assessment instruments. They have a research base of over 15,000 published books and articles that explore the various applications of the tests (Butcher, 2006). The original Minnesota Multiphasic Personality Inventory (MMPI) was introduced as a means of understanding the psychological problems of patients in psychiatric and medical settings in 1940 (Butcher, 2006). Since then, the test has been revised with the final version of the revised MMPI (MMPI-2) including 567 true/false items. The MMPI-2 is similar in most ways to the original MMPI, as one goal in the creation of the revised version of the test was to not lose the thick research base that had already been completed (Graham, 2006).

In order to produce meaningful MMPI-2 results, the test taker must be able to read at a sixth-grade reading level to comprehend the content of the items and be able to respond appropriately (Graham, 2006). The information gained from the MMPI-2 can be very useful in providing a convenient overview of personality style for the individual being tested (Butcher, 2006). The test yields validity scale scores which provide important information about test-taking attitudes of the individual (Graham, 2006). While providing us useful information, if the scores on the validity scales are too extreme, it could invalidate our test information. If it is decided that the profile is valid, the next step is to look at the clinical scales. The clinical scales give us information on personality and psychopathology on the dimensions each scale assesses for (Graham, 2006). When elevations are present on the clinical scales, more information can be gained from the content scales. The Harris-Lingoes subscales provide us rationally based information of a grouping of items where the content is similar within a standard clinical scale (Graham, 2006). Since this information comes from facevalid items, we are able to say the individual specifically endorsed items pertaining to this content matter.

The RC, PSY-5, and supplementary scales can also provide us with information about the personality style of an individual. The major advantage of looking at the restructured clinical (RC) scales is that demoralization was factored out from the rest of the scales. With demoralization factored out, the core component of each original clinical scale was determined and then the creation of the RC scales was formed (Graham, 2006). The Personality Psychopathology Five (PSY-5) scales tap a broad area of personality traits that influence normal functioning and clinical problems (Harkness & Mcnulty, 2006). Finally, the supplementary scales are ones that provide additional, more specific information about a certain area of personality functioning that may be applicable to a certain individual (Graham, 2006). Some of these include the Addiction Acknowledgement Scale (AAS), Addiction Potential Scale (APS), Overcontrolled-Hostility (O-H) Scale, and many more.

#### Use of the MMPI-2 in a Correctional Setting

One of the appealing things about the MMPI-2 is that it can be used in a variety of settings including inpatient and outpatient mental health settings, medical centers, employment screenings, and correctional settings (Graham, 2006). There are many differences between correctional and other settings. Megargee (2006) discusses the four major differences as the volume of cases, the degree of legal accountability required, the nature of the offender population, and the consequent need to maintain security.

#### Volume

As of December 31, 2009, state and federal correctional institutions housed 1,613,656 prisoners which was an increase of 3,897 prisoners from yearend 2008 (West, 2010). Offenders who are detained or incarcerated in jails and prisons must be screened upon entry. They are screened for a variety of possi-

bilities including mental illness, developmental disabilities, self-destructive tendencies, and their potential for dangerous or violent behavior. Following this screening process, case managers must determine which facilities and programs are best suited for each individual's specific needs (Megargee, 2006). Research tells us that many offenders are emotionally disturbed or mentally ill. The Bureau of Justice Statistics reported that 283,800 or 16% of all state and federal inmates could be considered mentally ill, and another 15% - 20% requires some sort of mental health services at some point during their incarceration (Anno, 1991).

### **Legal Accountability**

Prisoners must completely rely on the institution for their health care which means the correctional health care system is subject to external and even judicial review (Megargee, 2006). Due to this, strict standards have been established for the assessment and treatment of prisoners. These standards require that prisoners have access to mental health services and place emphasis on the need for assessment by capable and credentialed mental health professionals. Assessments also should use instruments that are reliable, valid, and suitable for correctional settings (American Association for Correctional Psychology, 2000). Also, psychologists in a correctional setting may be called on to testify in court regarding their evaluations so they must be prepared to explain their findings to a judge or jury and be able to defend their choice of tests as well as administration and interpretation (Pope, Butcher, & Seelen, 2000).

#### The Nature of the Clientele

Obviously, the clientele in a correctional setting is going to be different than in most other settings. The most significant difference between corrections and other settings is probably the antisocial nature of the individuals. In most settings, we can assume that the individual being assessed will be cooperative and will share the basic goal with the clinician of developing an accurate picture of the person to help aid in treatment (Megargee, 2006). This is not usually the case with prisoners, and they may act deviant on purpose. They may do this because of the authority nature a psychologist holds in prison and therefore, the clinician may need to adapt administrations and interpretations of testing in this setting (Megargee, 2006).

### **Need for Security**

The need to maintain security is one of the main goals of any correctional institution. This affects correctional mental health practice in a few ways. First, the physical safety of mental health professional staff must be maintained, which means tests must be administered in a suitable setting by well-trained individuals that can maintain control of the testing situation. Also the security of test data, reports, and assessment files must be maintained so inmates should not be used to administer, score or file test data. Finally, reports should not be left anywhere that they could be seen or stolen by anyone including inmates and cleaning crews (Megargee, 2006).

#### **Reasons for Assessment in Correctional Settings**

Most assessments in corrections focus on three issues that include mental health screening, risk assessment, and needs assessment (Megargee, 2006). The AACP (2000) standards for mental health services in jails and prisons mandates that each new intake must receive a mental health screening upon entering the facility and before being placed in a cell or holding area

with other inmates. This includes both a direct examination of offenders as well as a review of their records. If the screening shows any indication that an offender is in need of mental health care, a more thorough examination is done. Next, risk assessment is essential for correctional populations. It involves evaluating the dangers the offender poses to the community at large, the correctional staff, other inmates, and to themselves (Megargee, 2006). Offenders must be assigned to the leastrestrictive facility that matches their needs for security and control: open camps, low security, medium security, or maximum security facilities. Identifying the potential for violent behavior is a very difficult and complex task for correctional staff to take on, and one broad measure cannot be sure to capture the risk itself (Megargee, 2006). The final major assessment purpose in correctional facilities is a needs assessment. This assessment aims to determine each offender's management and treatment needs. The goal of treatment is to help offenders become responsible and productive members of society and their families once they re-enter the community (Megargee, 2006). Needs assessments can help identify those who would benefit from mental health interventions as well as identify those who may benefit from educational programming and vocational training (Megargee, 2006).

#### Why Use the MMPI-2 in Prison Then?

Given all the information about how a correctional setting differs from other settings and the main reasons for assessment in a correctional setting, why is the MMPI-2 a good option for correctional populations? The MMPI-2 can be administered in a group setting where a lot of offenders can do the test at the same time, which takes care of the number of cases issue and then the need for security can be handled within this one administration of a handful of offenders. Also when looking at legal accountability, since the MMPI-2 is a widely used objecttive personality assessment measure, it is not difficult for correctional psychologists to justify its use with criminal offenders and may actually be more difficult to defend omitting it from a battery (Megargee, 2006). The MMPI-2 has a standard set of items that are administered and scored in a standardized manner, which leaves little subjectivity for the test (Butcher, 2006). Due to the nature of offenders in correctional settings, the clinician may need to adapt administrations and interpretations of testing (Megargee, 2006). The MMPI-2 does a very good job at identifying those who are mentally ill or emotionally disturbed. Since there is such a high number of people being brought into the jails at all times of the day and night, this volume of people and limited resources available generally does not allow for the use of the MMPI-2 in the initial screening process. However, once a mental health screening shows indication of mental health problems, the MMPI-2 can aid in the more thorough mental health assessment (Megargee, 2006). When assessing the potential for violent behavior, a very difficult and complex task, personality tests such as the MMPI-2 are not very well suited (Heilbrun & Heilbrun, 1995). So although Megargee's MMPI-2 offender classification system (Megargee et. al, 2001) can separate more predatory offenders from those likely to be victimized, the MMPI-2 is best used along with criminal history data and more narrowband instruments specifically focused on dangerous behavior when assessing risk. Finally, one very useful part of the MMPI-2 that is especially relevant for correctional settings are the validity scales designed to detect deviant test-taking attitudes including defensiveness and malingering. These scales can help psychologists detect motivation of an offender to present themselves in unrealistically positive

and negative ways (Butcher, 2006).

# Using the MMPI-2 with Ethnic Minorities in a Correctional Setting

Several studies have addressed the possibility of MMPI-2 differences between African-Americans and Caucasians in correctional populations, but not much has yet been done on any other minority group. One study looked at the association between race and MMPI-2 scores in African-American and Caucasian men who underwent court-ordered forensic psychological evaluations and found that the two groups of men produced highly comparable MMPI-2 scores. They found that there was no significant difference on any of the validity or clinical scale scores, but did find that the African-American men scored higher than Caucasians on the Cynicism and Antisocial Practices content scales (Ben-Porath, Shondrick, & Stafford, 1995). Other studies have produced similar results and although there is only limited data comparing characteristics of the majority and minority groups in correctional populations, Butcher (2006) suggests that data from other settings would tell us that MMPI-2 scores will be equally accurate for Caucasian and African Americans in a correctional setting. It is important to note that while there have been some studies done comparing African American and Caucasian MMPI-2 scores in correctional settings, there are also other minority groups in prisons including Hispanics, American Indians, and Asian-Americans that should be addressed.

# Using the MMPI-2 with Different Genders in a Correctional Setting

Megargee, Mercer, and Carbonell (1999) examined the differences between male and female prisoners on the MMPI-2. One of the three goals of the study was to compare MMPI-2 scores of male and female offenders. One difference they found was on scale 5 where female offenders scored high and male offenders scored low. This means that both groups, males and females, scored in the masculine direction. Other than that difference, on the standard, content, and supplementary scales, male and female profile patterns tended to be very close to one another. However, one major difference between males and females that was found is that the effect sizes for female offenders were significantly higher than male offenders. This tells us that female offender MMPI-2 scores deviated from the norms more than male offender scores. Since women represent less that 5% of the prison population, it makes sense that it is more socially deviant for a woman to be incarcerated than a man (Megargee, Mercer, & Carbonell, 1999).

# Using the MMPI Profile to Identify Sex Offenders

Davis and Archer (2010) conducted a review of the literature to distinguish sex offenders from non-offender control groups as well discriminate sex offenders from other types of offenders based on objective personality measures. Most of the research has been conducted on the MMPI, and their review updated the literature and included the few studies that used the PAI and MCMI-III, as well as the MMPI-2. Based on their review of 37 articles, they found that 33 of the articles utilized the MMPI to assess psychopathological characteristics of sex offenders. In

all the studies reviewed, none of the validity or basic clinical scales were found to have moderate or large effect sizes except for the Pd scale. Graham (2006) notes that the Pd scale looks at constructs involved with antisocial behaviors that include lying, cheating, stealing, use of substances, and sexual acting out. Davis and Archer (2010) pointed out that there are several reasons why Pd scale elevations were found in the research they reviewed with one major reason being that Pd elevations could be reflective of general antisocial or criminal behaviors and not specific characteristics of sex offenders. They also point out that a higher Pd score could suggest the chronicity of criminal behavior. In other words, the more times someone is arrested, the higher that score would be elevated. Again, the Pd score would be suggesting general criminal behavior and nothing specific to sex offenders.

Since the Pd scale has five Harris & Lingoes subscales, studies have been conducted looking at the subscales with sex offenders, although very few. Results of the Panton (1978) study found that offenders with no priors score lower on Authority Problems subscale as well as the Sc basic scale. The study also found a difference between child molesters, child rapists, and adult rapists on the Pd subscales. Both of the rapists groups scored similarly, endorsing items associated with Social Alienation and Authority Problems subscales, while child molesters endorsed items associated with the Self-Alienation and Familial Discord subscales. Davis & Archer (2010) noted a major limitation when reviewing literature for their study was that the available literature on sex offenders overwhelming focuses on male Caucasian offenders, so this should be taken into account when looking at the findings of their literature review and other studies conducted.

# Using the MMPI-2 to Identify High and Low Risk Sex Offenders

Coxe and Holmes (2009) aimed to distinguish between high and low risk sex offenders on 26 variables that included things such as intelligence, age, criminal history, victim's age, denial patterns, measure sexual interest in children, admission of measure sexual interest, childhood history of sexual abuse, and personality variables. They used a variety of measures including the MMPI-2 for their study and found that only four of the 26 variables significantly predicted membership in the high-risk group. These four variables were age, prior number of felonies, the cognitive distortion score, and the MMPI-2 infrequency scale score. When looking at the MMPI-2 results, Coxe and Holmes (2009) found that the high-risk group scored significantly higher than the low-risk group with an average score of 69 compared to 51. Graham (2006) notes that a high inferquency score could be an indication of persons who are very psychologically disturbed. Coxe and Homes (2009) also found differences between the clinical scales of high and low risk offenders. For the low-risk group, they found no clinical scale averages above the standard score of 65. However, for the highrisk group, they found three scales elevated above the standard score of 65 which were scale 4, 6, and 8. They concluded then that the high-risk group is associated with a greater degree of psychological maladjustment than the low-risk group.

## Using the MMPI-2 to Identify General Sex Offenders from Internet Sex Offenders

Tomak, Weschler, Ghahramanlou-Holloway, Virden, and

Nademin (2009) conducted a study aimed at comparing the differences between general sex offenders and internet sex offenders using the MMPI-2. In one section of their results, they focused on demographic differences between the two groups of offenders. They found that ISOs were more likely to be Caucasian while GSOs were more likely to be Hispanic or African American. They also noted that ISOs were more likely to be married than GSOs who were more likely to have never been married or widowed. In regards to education differences between the two groups, ISOs were more likely to have attempted college while GSOs were more likely to have come close to completing high school. It is important to note however, that the GSOs were incarcerated while the ISOs were at a private facility which may make a difference on demographic variables, especially the ethnic group finding. Also, this study only included 121 people, which should be kept in mind when examining the demographic differences between the two groups of sex offenders.

When comparing the validity and clinical scales of the two groups, only four scores provided significant differences between the ISOs and GSOs. There were significant differences found on the L and F validity scale scores in which the ISOs scored significantly lower than the GSOs. When looking at the clinical scale scores, the ISOs again scored significantly lower than the GSOs on the Pd and Sc scales. The authors conclude that although there are behavioral differences between GSOs and ISOs, they have a similar goal of sexual gratification and are heterogeneous in terms of personality characteristics. They do not feel there is a personality profile common to the present ISO sample or the GSO sample. However, they do note the significantly lower scores of ISOs than GSOs on the L, F, Pd, and Sc scales and suggest there are some differences that obviously exist between the two groups (Tomak, Weschler, Ghahramanlou-Holloway, Virden, & Nademin, 2009).

# Using the MMPI with Sex Offender Treatment Programs

There has been little research done on factors that reduce recidivism in sexual offenders. Some people may believe that sex offenders cannot change; however, more often than not sex offenders are released back into the community at some point in their lifetime, and it can be beneficial to try to identify some factors to help with treatment. Geer, Becker, Gray, and Krauss (2001) aimed to identify predictors of treatment completion of sex offenders serving prison sentences. They identified two groups in their study as completers and non-completers. They used a variety of assessment measures prior to voluntary participation in a sex offender treatment program and then compared the groups following the program. One measure they used in the battery was the MMPI. Although they found significant differences between the two groups on the L and PD scales, the differences did not stand a statistical regression, and they therefore did not place much emphasis on them. However, with these results, comparisons are able to be made between offenders who complete treatment and those who don't, with those who do not complete treatment having higher L and PD scores on the MMPI.

Another study conducted by Miner, Marques, Day, Nelson (1990) examined the Sex Offender Treatment and Evaluation Project (SOTEP) that the California Legislature funded in 1984. Although an older study, results provided valuable information that can be used in future program development. The project

involved a pre-post assessment of change from intake to discharge. In using the MMPI as one assessment measure, researchers found significant changes in the Si, or social introversion scale. This difference provides evidence that those who are participating in the treatment program are learning to accept responsibility and consequences of their behavior. The researchers expected two results from this evidence. First, they believed this change would allow the participants to have more confidence in their own ability to positively change their lives and second the acceptance of responsibility and consequences of their behavior should decrease the likelihood of antisocial behaviors.

#### **Conclusions**

The MMPI-2 is the most widely used objective personality measure in all settings. It is especially useful in correctional settings due to its objectivity with standardized administration and scoring. In evaluating its use with sex offenders, it seems that certain scales including the L, F, Pd, and Sc scales are elevated with this population of offenders. However recent research is differentiating between sex offender typologies and finding that there are differences between groups of sex offenders on their MMPI-2 scores. This information tells us that although sex offenders may have the same goals but different behaviors for meeting those goals, they also may have different personality styles in general. When looking at the treatment of sex offenders, there is not ne treatment program that will help reduce recidivism across all offenders due to the different typologies and personality styles across these offenders. However, some research shows differences in scores on the MMPI-2 in regards to completion of a treatment program as well as which scores change after successfully completing a treatment program that may help aid in reducing recidivism for these offend-

#### References

American Association for Correctional Psychology, Standards Committee (2000). Standards for psychological services in jails, prisons, correctional facilities, and agencies. *Criminal Justice and Behavior*, 27, 433-494.

Anno, B. J. (1991). Prison health care: Guidelines for the management of an adequate delivery system. Chicago: National Commission on Correctional Health Care.

Ben-Porath, Y. S., Shondrick, D. D., & Stafford, K. P. (1995). MMPI-2 and race in a forensic diagnostic sample. *Criminal Justice and Behavior*, 22, 19-32.

Butcher, J. N. (2006). Pathways to MMPI-2 use: A practitioner's guide to test usage in diverse settings. *MMPI-2: A practitioner's guide* (pp. 3-13). Washington, DC: American Psychological Association.

Coxe, R., & Holmes, W. (2009). A comparative study of two groups of sex offenders identified as high and low risk on the static-99. *Journal* of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 18, 137-153. doi:10.1080/10538710902743925

Davis, K. M., & Archer, R. P. (2010). A critical review of objective personality inventories with sex offenders. *Journal of Clinical Psychology*, 66, 1254-1280. doi:10.1002/jclp.20722

Geer, T. M., Becker, J. V., Gray, S. R., & Krauss, D. (2001). Predictors of treatment completion in a correctional sex offender treatment program. *International Journal of Offender Therapy and Com*parative Criminology, 45, 302-313.

Graham, J. R. (2006). MMPI-2: Assessing personality and psychopathology (4<sup>th</sup> ed.). New York, NY: Oxford University Press.

Harkness, A. R., & McNulty, J. L. (2006). An overview of personality:

Using the MMPI-2 personality psychopathology five (psy-5) scales. *MMPI-2: A practitioner's guide* (pp. 73-97). Washington, DC: American Psychological Association.

- Heilbrun, K., & Heilbrun, A. (1995). Risk assessment with MMPI-2 in forensic evaluations. In Y.S. Ben-Porath, J. R. Graham, G. C. N. Hall, R. D. Hirschman, & M. S. Zaragoza (Eds.), Forensic applications of MMPI-2 (pp. 160-178). Thousand Oaks, CA: Sage.
- Megargee, E. I. (2006). Use of the MMPI-2 in correctional settings. *MMPI-2: A practitioner's guide* (pp. 327-360). Washington, DC: American Psychological Association.
- Megargee, E. I., Carbonell, J. L., Bohn, M. B., Jr., & Sliger (2001). Classifying criminal offenders with the MMPI-2: The Megargee system. Minneapolis: University of Minnesota Press.
- Megargee, E. I., Mercer, S. J., & Carbonell, J. L. (1999). MMPI-2 with male and female state and federal prison inmates. *Psychological As*sessment, 11(2), 177-185. doi:10.1037/1040-3590.11.2.177
- Miner, M. H., Marques, J. K., Day, D. M., & Nelson, C. (1990). Impact of relapse prevention in treating sex offenders: Preliminary findings.

- Annals of Sex Research, 3, 165-185. doi:10.1007/BF00850869
- Panton, J. H. (1978). Personality differences appearing between rapists of adults, rapists of children and non-violent sexual molesters of female children. Research Communications in Psychology, Psychiatry & Behavior, 3(4), 385-393.
- Pope, K. S., Butcher, J. N., & Seelen, J. (2000). The MMPI, MMPI-2, and MMPI-A in court: A practical guide for expert witness and attorneys (2nd ed.). Washington, DC: American Psychological Association.
- Tomak, S., Weschler, F. S., Ghahramanlou-Holloway, M., Virden, T., & Nademin, M. E. (2009). An empirical study of the personality characteristics of internet sex offenders. *Journal of Sexual Aggres*sion, 15, 139-148. doi:10.1080/13552600902823063
- West, H. C. (2010). *Prisoners at yearend 2009- advanced counts*. Retrieved January 29, 2011 from US Bureau of Justice Statistics, Washington, DC.
  - http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2272