

UNLOCKING THE POTENTIAL OF THE MCMI IN THE INDIAN FORENSIC AND LEGAL EVALUATIONS

Anant Singh Parmar^{1*}, Dr. Nishi Fatma ², Dr. Aditya Pareek³, Dr. Asha Srivastava ⁴ and D. Pavitra Madhusudan ⁵

1*Research Scholar, Department of Psychology, NIMS University, Jaipur, Rajasthan-India
2Professor & Head, Department of Psychology, Faculty of Humanities & Social Sciences, NIMS University, Jaipur, Rajasthan-India

³Assistant Professor, Faculty of Humanities & Social Sciences, NIMS University, Jaipur, Rajasthan-India ⁴Director (Rtd), Central Forensic Science Laboratory, New Delhi, under Directorate of Forensic Science Sciences, M.H.A., Govt. of India

⁵Scientist - B (Psychology) and HoD (Forensic Psychology). Central Forensic Science Laboratory, Pune under Directorate of Forensic Science Services, Ministry of Home Affairs, Govt. of India

*Correspondence Author: Anant Singh Parmar, OCRID: https://orcid.org/0009-0004-4670-8642 anantsinghnp@gmail.com¹

ABSTRACT

Millon Clinical Multiaxial Inventory as a tool, has received global recognition for its utility in helping to evaluate pervasive personality patterns and clinical syndromes. However, it has only been in recent times that MCMI has gained prominence in the field of forensic evaluations as well as legal proceedings. It is, therefore, pertinent to mention that there is also a notable scarcity on the research specifically focused on the efficacy of the usage of MCMI in the intricate and complex socio – cultural framework of the Indian legal system.

The current review paper is an attempt to critically analyze and assess the effectiveness of the Millon Clinical Multiaxial Inventory (MCMI) as a psychological assessment tool, with a special focus on the forensic and legal context within the Indian Judicial System. This review paper using exploratory analysis, also hopes to understand the applicability of MCMI within the socio-cultural landscape of India.

The technical analysis conducted by the author has, therefore tried to critically examine as well as understand the utility of MCMI and at the same emphasizing on the uniquely specific challenges that tend to be faced within a particular cultural context. In trying to do this, the current paper will hopefully be able contribute valuable insights and fill in the existing void in the literature on the use of MCMI in the Indian legal system that still remains under - explored.

Keywords: Forensic Psychology, Psychometric Testing, MCMI, Offenders, Psychological Testing

1. INTRODUCTION

Personality traits tend to be defined as enduring characteristics of an individuals that exhibit a significant degree of consistency; even with specific personality traits exhibiting themselves with a significant degree of consistency; being more pronounced in specific contexts. Chaplin, et.al. (1993) explains how personality states tends to represent transient behavioral predispositions influenced primarily by circumstances.

Thus, understanding or rather trying to quantify these personality traits had become the focus of psychologists across the various sub - fields of psychology. Over the years, it has been seen that Psychological Assessments plays a critical role in providing valuable insights into an individuals' mental states as well as behavior in specific contexts. These specific contexts include a multitude of settings; like counseling, clinical as well forensic - legal settings. Specifically, within the forensic - legal settings, psychological assessments end up with a decisive role that helps in providing an objective evaluation of individuals' mental capacities and underlying psychological conditions that may have influenced their behavior within the legal system. These assessment tools, therefore play a vital role in evaluating various factors that include but are not just limited to an individuals' competency to stand trial and the understanding of the prevalence of mental disorders and their implications for the crime



committed. These tools therefore become essential in helping the legal system in making an informed decision so as to ensure fair treatment for all individuals involved (Kohrt et al. 2020).

1.2. Criminal Behavior within the context of Forensic Psychology

Criminal Behavior, in any circumstances, can be defined and limited to crimes that have been detected, investigated and to an extent, judged by the criminal justice system. Forensic Psychology, therefore, would include using various assessment techniques or tools to measure different aspects of criminal behavior within the situational context of the crime committed. Forensic Psychologists, thus, like psychologists, use a variety of methods to achieve this goal; from assessment tools, both subjective and objective to interviews.

Psychologists concerning themselves with understanding criminal behavior is not a new initiative, this need to understand has been the focus of psychologists throughout the history of the field. Understanding criminal behavior within a judicial context would also include various instances of "anti - social behavior"; an umbrella term that can be used to encompass criminal offending as well as other related behaviour. All behaviors that tend to be socially disruptive or that goes against the normative rules of community the individual resides or is considered to be a part of; i.e. the basic established societal norms. Thus, these behaviors would be considered "deviant" or "anti - social behavior; only moving towards criminal behavior when legal evaluation comes into discussion.

Thus, a practical way to define the field of forensic psychology would be to say that "its the application of psychological sciences to the legal matters". Other way to define this field; at its core; forensic psychology involves an interaction between the field of psychology and the legal process (Thuss, 2009). The Forensic Specialty Council created by American Psychological Association (APA) committee has provided the following the following application of forensic psychology:

"Forensic Psychology is the professional practice by psychologist within the areas of clinical psychology, counseling psychology, school psychology or another specialty recognized by the (APA) when they are engaged as experts and represents themselves as such in an activity primarily intended to provide professional psychology expertise in the Judicial System." (Forensic Specially Council, 2008)

As can be seen from the above definition, the APA's specialty guidelines for forensic psychology describes this specialty as a "professional practice wherein a psychologist who work within any sub-field of psychology including but not limited to clinical development, social and cognitive and applies the scientific technical and/or specialized knowledge of psychology to the field of law to assist in addressing the legal, technical and/or administrative matters" (APA,2013, P.T)

As can be seen above, the field of Forensic Psychology and those who practice within this sub - speciality tend to use a variety of techniques in their quest to understand the reasons and/or motivations behind criminal behavior(s). Like other specialized fields of psychology, the field of Forensic Psychology also benefits from the use of psychometric assessments . However, it is pertinent to note that there are only few reliable and validated psychometric assessment tools which have been developed specifically for the forensic set up. However, it cannot be denied that there are certain assessment tools that are quite useful when applied across different settings.

However, even with the recent acceptance of the field of Forensic Psychology, it has been seen that it has multitude of applications within this field. One of the major responsibilities of a Forensic Psychologist within the Criminal Justice System, is to try to understand the risk factors associated with the criminal population, with respect to recidivism and rehabilitation of inmates. Common risk factors that have become the focus of examination in this field includes but is not limited to history of violence; occurring throughout the developmental stage, as well



as any substance abuse, any diagnosed mental disorders (personality developmental, etc.). Assessing risk factors is not limited to convictions, but also includes assessing deception of individuals in criminal investigations and competency to stand trial for the accused.

"Psychometric assessment encompasses the procedures used to quantify psychological constructs, ensuring that test scores are reliable indicators of the construct being measured and valid for their intended use" (American Psychological Association, 2020). This practical definition clearly shows that with a wide variety of applications within this specialized field of psychology shows that psychometric assessments would be highly beneficial to the field, especially in quantifying the role of psychological constructs in understanding human behavior.

It is however, pertinent to mention that being relatively a newer field as compared to there specialities; that there are only a few reliable and validated instruments that have been designed specifically for the field of forensic psychology. There are, however, psychometric assessment tools that have been found to provide reliable support to Forensic Psychologists, including personality assessment instruments like MMPI and/or Projective Techniques like Rorsach Inkblot Test. One such psychometric assessment tool is Millon Clinical Multiaxial Inventory (MCMI); a 175 self report personality inventory that has specifically designed to assess the psychopathology with respect to personality disorders and clinical syndromes. In this current review paper, we attempt to assess the utility of this assessment tool within the forensic and legal context of the Indian judicial context.

Forensic Psychology within the Indian Criminal Justice System still remains an underdeveloped yet an emerging field, inspire of its slowly growing relevance to contemporary criminal investigations and judicial trials. On one hand, globally, Forensic Psychologists are finally getting their due recognition for the role they play w.r.t. criminal profiling, competency assessments, expert testimony and rehabilitation (Neel, 2024), their recognition within the Indian Justice System largely remained limited to techniques of Deception Detection Techniques (DDTs) such as Polygraph, Brain Electrical Oscillation Signature and Narco - Analysis Examination until recently.

It was with their participation as scientific experts in high profile cases - such as the Aarushi Murder Case, Nithari Serial Killings and more recently the Hathras Rape and Murder Case; that Forensic Psychologists found their niche and criminal justice system understood their contribution. However, this responsibility largely remains limited to the cases that have found spotlight in the media; meaning that capability of forensic psychologists to help in cases that do not find media spotlight is still limited (Monk Prayogshala, 2017). One of the major reason is the persistent lack of awareness and training programs for Investigating Officers; as a way to create an understanding of how Forensic Psychologists could be helpful in criminal investigations. It is also pertinent to mention here that with recent advancements, forensic psychologists have expanded their technical capabilities from the DDTs to other techniques like Layered Voice Analysis Examinations; Psychological Assessments and Psychological Autopsies.

With the current review article, the authors have turned their focus on an Psychometric Assessment tool, Millon Clinical Multiaxial Inventory (MCMI) and how a clinical psychopathological scale can find its utility within investigative as well as rehabilitation efforts within the Criminal Justice System.

1.3. Millon Clinical Multiaxial Inventory (MCMI): An Overview

The Millon Clinical Multiaxial Inventory has its foundation in the theory developed by Theodore Million and was first developed in 1977 as a self - report instrument as way to assess personality disorders and clinical syndromes (Millon, 1983). A major advantage that MCMI had over other personality assessments was the fact that MCMI was constructed to align closely with the diagnostic criteria of the *Diagnostic and Statistical Manual of Mental Disorders*



(DSM), thereby offering clinicians a tool with direct clinical utility (Groth-Marnat & Wright, 2016).

This theory exploited by Theodore Millon had attempted to explain the measurable or observable acts of behavior that represent an individuals's persobnality structure and style understood within the context of the bio - psycho - social influence. Hence, why this particular theory by Theodore Millon could be considered a Bio - Social - Learning Model.

Millon assumed that the clinical science of mental functioning in an individual requires the unification of various sciences rather than each field of science growing independent of each other. While Millon founded his theory on the principle and processes of evolution, the core belief held by Millon was that these phenomenons can be manifested as well as expressed in variety of forms.

Millon Clinical Multiaxial Inventory (MCMI), therefore draws on the foundational theory on one side, while also trying to integrate psychodynamic, social learning and cognitive behavioral perspective on the other; all with the intent pf making it a holistic theory of personality.

Since its conception, this inventory has undergone several revisions - MCMI-II (1987), MCMI-III (1994), and the most recent MCMI-IV (2015) - each revision reflecting the changes in the diagnostic frameworks as well as psychometric refinements (Choca & Grossman, 2015). In the current scenario, this makes MCMI one of the most widely assessment tool in variety of areas such as clinical, forensic and research as a means to assess psychopathology and personality disorders.

2. FORENSIC AND LEGAL APPLICATIONS

The aim of the current review is to understand the implications and utility of using MCMI and its subsequent reports within the Forensic and the Legal context of the Criminal Justice System in India. This paper has tried to understand how MCMI can actually help in contributing to the nuanced understanding of the individuals entrenched within the Criminal Justice System with a focus on the potential of the individual to be involved in the criminal investigation as well as in understanding the probability of recidivism and rehabilitation of convicts. MCMI can also be seen to have an important role in areas of criminal profiling, competency assessments along with risk management.

Fakhrzadegan, S., et al. (2017) utilized structured interviews based on the DSM-IV along with a demographic characteristics questionnaire and MCMI-II (the 175-item Persian version) to conduct a descriptive-correlational study on the statistical population of 228 prisoners of Kerman, Iran. This study showed that about 87.3% women and 83.3.% men would have been diagnosed with a personality disorder at the time of committing crime whereas 46.5% of the target population also developed a substance dependence at the time of committing the crime.

Another study by **Dadfar, M., & Lester, D.** (2017) sought to examine the diagnosis of personality disorders and clinical syndromes using the Farsi version of Millon Clinical Multiaxial Inventory III (3rd ed.; MCMI-III) on Iranian psychiatric outpatients using a descriptive cross-sectional study. These 737 subjects were selected using convenience sampling during years of 2010-2015 and evaluated by the MCMI-III computerized Farsi version. The findings showed that the most frequent of personality disorders diagnosed were Depressive Compulsive and Histrionic with double code types of Depressive- Dependent (2B3); and Histrionic- Depressive combinations. It was also found that there were significant differences between women and men patients in mean scores of some MCMI-III scales. It was also seen that women had higher scores in Validity Scales of Disclosure and Debasement, Depressive, Passive-Aggressive (Negativistic), Self-Defeating and Borderline personality



disorders as compared to men. However, by contrast, Compulsive personality disorder was the most common in men compare to women. Anxiety, Somatoform, Bipolar: Manic, Dysthymia, and Post-Traumatic Stress Disorder, Thought Disorder, and Major Depression Disorder were also found to be the most common in women than men.

On the other hand, a study conducted by **Hinds A.** (2022) compared 31 male sex and 30 drug offenders by applying the Millon Clinical Multiaxial Inventory – IV (MCMI-IV). The findings clearly contend that the sex offenders showed a significantly higher score on the Compulsive Personality scale as compared to the drug offenders. On the other hand however, the drug offenders scored significantly higher on the Antisocial, Drug Abuse, and Alcohol Use scales. However, no significant difference could be found on most sub-scales on the MCMI-IV (21) when comparing both the sex offenders and drug offenders, an additional analysis was conducted to compare the child sex offenders versus adult sex offenders clearly showed that child sex offenders scored significantly higher Schizoid, Avoidant, Melancholic, Masochistic, Sadistic, Major Depression, and Persistent Depression scales as compared to adult sex offenders. This research, was an important step forward in demonstrating that the child sex offenders were found to have significantly high psychopathology scores on the MCMI-IV when compared to adult sex offenders.

While the study by **Choca & Pignolo** (2022) most importantly showed that the most current version of the Millon Clinical Multiaxial Inventory; i.e. the MCMI-IV has theoretically no literature outside of the manual itself. This indicates that that the research on the negative indicators w.r.t. the negative response bias, is therefore quite scarce in current scenario. However, it can be reasonable to hypothesize that because the scales largely overlap with those of the MCMI-III; that a similar validity may also be generalized to the newer version.

Understanding the studies that have exclusively different versions of MCMI within the criminal population shows that though, not widely utilized, MCMI has still shown its efficacy in understanding the prevalence of psychopathology within a very niche population.

However, the authors have tried to understand how this assessment tool can find its utility and usefulness within the context of then Indian Criminal Justice System.

3. SOCIO - CULTURAL CONSIDERATIONS IN THE INDIAN CONTEXT

"Culture is a key, undeniable current perspective on psychopathology ... The cultural context ... defines (mal)adjustment of human behavior ... It also shapes the threshold of distress, and the range and forms of its expressiveness that are acceptable and adaptive." Moleiro, C. (2018)

Cultural nuances have been known to influence the responses an individual may give on any psychometric assessment tool. This is specifically true when trying to understand the motivations and the reasoning behind a subject's involvement in a crime that has been committed

While purely culture free assessment tools are almost impossible to achieve, especially in the complex field of forensic psychology; as a field which requires an intricate understanding of the interplay amongst the socio - cultural context within which the crime has been committed. However as discussed some specific assessment tools have found its utility across cultures; specifically personality assessment tools like MMPI or projective techniques like Rorsach Inkblot Test. MCMI, as previously discussed, being a clinical psychopathology scale has its compatibility with the diagnostic criteria provided in the Diagnostic Statistical Manual and thus, the assumption is that to an extent, the scale can be applied in different socio - cultural circumstance. This, therefore, would make the applicability of MCMI quite helpful in providing a foundational starting point to forensic psychologists in trying to understand the underlying cause to what may be considered as anti - social behaviors.



Nigudkar, et. al (2020), conducted one of its first kind of pilot study, wherein they studied 20 men from informal settlements presenting to crisis counseling centers in Mumbai using MCMI - III, the Revised Conflict Tactics Scale Short Form, and the Attitudes toward Women scale. This study was conducted with the aim to explore clinical and personality profiles and psychosocial variables in a small cohort of male perpetrators of intimate partner violence. The results clearly showed that MCMI III profiles and scores on Grossman Facet scales suggest personality psychopathology in the profiles of 95% of the men, and 85% reported anxiety while less than 20% reported substance abuse. The men also reported mutuality of violence in the relationship and advocated moderately liberal attitudes toward women. 55% of them reported violence in the family of origin.

Sharma N, et. al. (2014) on the other hand, assessed psychiatric morbidity in 33 under trial prisoners from psychiatric inmate ward of RINPAS, Ranchi, India; and on the other hand, 33 participants were also selected from the general population; and were assessed on MCMI – III. The results showed that it was the under trial inmates who showed co – morbidity to psychiatric illness like anxiety disorders, etc; as well as pathological personality traits and disorders when compared to the general counterparts.

While the authors did their best to find researches within the Indian cultural and legal context, as can be seen, there is clearly a dearth of researches focusing on using MCMI in this specific setting or a particular sub section of a population especially in the recent times.

4. APPLICABILITY IN CORRECTIONAL ADMINISTRATION IN INDIA

Evaluating the efficacy of MCMI while addressing the challenges faced by the policy makers and forensic psychologists at a practical level, i.e. issues of overcrowding in prisons; prevalence of mental health disorder among inmates as well in assessing inmates or the accused to verify the veracity of the statements when involved in a criminal investigation. All of these issues and more have now recently become important issues within the criminal justice system. The Indian correctional system, therefore operates within a complex socio-cultural framework, posing unique challenges that necessitate tailored assessment tools. This review article has tried to critically evaluate the efficacy of MCMI in addressing these challenges, including issues related to overcrowding, understaffing, and the prevalence of mental health disorders among inmates.

However, the use of the Millon Clinical Multiaxial Inventory (MCMI) in forensic settings, including family court evaluations, is controversial due to its questionable psychometric and normative referencing qualities (Sellbom, 2022). It was also seen that MMPI as a personality inventory has seen a solid empirical foundation for use in forensic mental health; as a tool in rehabilitation. MMPI, thus, is especially useful when trying to detect invalid responding as well as in assessing psychological functioning (Ben-Porath, 2021). It is pertinent to mention that including those using MCMI and MMPI is entirely but surely depending on the standard operating procedures and instrumentation that is used by expert along with the training that was imparted to the expert (Acklin, 2012).

The author is currently pursuing his doctoral research on relationship between personality patterns and anti - social behavior using the psychometric assessment tool; MCMI - III on inmates, currently under trial or convicted of murder and rape, specifically and are currently imprisoned in central jails across India. The main aim is to understand, at least on a pilot level, if the application of an assessment tool such as MCMI can help provide a clear image of the mental health issues the inmates maybe suffering from; as a way to initiate rehabilitation process or to understand the probability of recidivism.



CONCLUSION

The current review paper has tried to critically assess the efficacy of Millon Clinical Multiaxial Inventory (MCMI – III) within the Indian cultural context with a special focus on its usage in the forensic and correctional administration setting. However, as it can be seen that there is a dearth of studies that focus specifically on the Indian context. This showcases the need of intense and rigorous research and empirical validation to understand the issues that tend to contribute to the identification and management of mental health issues among inmates; which can aid in rehabilitation efforts and promoting overall correctional outcomes.

The author, therefore recommends that first; there needs to be an official translated version, as well as validated of MCMI – III to Hindi, a language that has been spoken widely in India. This translated and validated version of MCMI – III, could also potentially benefit the integration MCMI into forensic and correctional practices in India. Secondly, the psychologists/experts working within the Indian legal system need to be properly trained in using the psychometric assessment tools like MCMI, MMPI, etc w.r.t. its scoring and interpretation focusing on how the specific environmental and socio - cultural framework that the subjects are a part of. Third and lastly, evidence based researches need to undertaken to find to specifically understand the implications of using MCMI - III within the correctional administration with regards to their individual jurisdictions and cultural relevancy.

MCMI – III, as can be seen, has shown quite the capability of helping mental health professionals, legal practitioners and correctional administrators, in multitude of cultures; in order to understand the psychopathology of various populations and has shown that MCMI's theoretical foundations can contribute to a nuanced understanding of individuals within the criminal justice system, addressing issues such as recidivism and rehabilitation potential.

4. DECLARATIONS

4.1. Ethical Approval

As this is a review article, this declaration is not applicable for the current manuscript.

4.2. Conflict of Interest

The Corresponding Author/Author 1 has no conflict of interest to declare.

Author 2 has no conflict of interest to declare.

Author 3 has no conflict of interest to declare.

Author 4 has no conflict of interest to declare.

4.3. Author Contributions

AP and DPM conceived the idea behind the manuscript. AP conducted the thorough review of literature. Both AP and DPM were involved in writing and revising the manuscript. Dr.AP and Dr. AS contributed to future recommendations of research areas in the manuscript. All authors have read and approved the manuscript.

5. REFERENCES

American Psychological Association, 2013. Specialty guidelines for forensic psychology. *The American Psychologist*, 68(1), pp.7-19.

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association.

Ben-Porath, Y.S., Heilbrun, K. and Rizzo, M., 2022. Using the MMPI-3 in legal settings. *Journal of Personality Assessment*, 104(2), pp.162-178.

Chaplin, J.E., 1993. A systems analysis of the employment problems of people with epilepsy (Doctoral dissertation, City University London).

Choca, J. P., & Grossman, S. D. (2015). *The Millon Clinical Multiaxial Inventory-IV (MCMI-IV)*. American Psychological Association. https://doi.org/10.1037/14670-000



- Choca, J.P. and Pignolo, C., 2022. Assessing negative response bias with the millon clinical multiaxial inventory-IV (MCMI-IV): A review of the literature. *Psychological Injury and Law*, 15(1), pp.48-55.
- Dadfar, M. and Lester, D., 2017. Prevalence of personality disorders and clinical syndromes using the Millon Clinical Multiaxial Inventory III (MCMI-III) in an Iranian clinical sample. *IJBECS*, *3*, pp.36-47.
- Fakhrzadegan, S., Gholami-Doon, H., Shamloo, B. and Shokouhi-Moqhaddam, S., 2017. The relationship between personality disorders and the type of crime committed and substance used among prisoners. *Addiction & health*, 9(2), p.64.
- Ghose, S., Das, S., Poria, S. and Das, T., 2019. Short test of mental status in the detection of mild cognitive impairment in India. *Indian Journal of Psychiatry*, 61(2), pp.184-191.
- Groth-Marnat, G., & Wright, A. J. (2016). *Handbook of psychological assessment* (6th ed.). Wiley.
- Handel, R.W., Archer, R.P., Elkins, D.E., Mason, J.A. and Simonds-Bisbee, E.C., 2011. Psychometric properties of the Minnesota Multiphasic Personality Inventory—Adolescent (MMPI–A) clinical, content, and supplementary scales in a forensic sample. *Journal of Personality Assessment*, 93(6), pp.566-581.
- Hinds, A., 2022. The Millon Clinical Multiaxial Inventory-IV (MCMI-IV) Personality and Clinical Scales of Male Sex Offenders versus Male Drug Offenders at an Outpatient Forensic Site (Doctoral dissertation, Adler University).
- Hill, J.S., Pace, T.M. and Robbins, R.R., 2010. Decolonizing personality assessment and honoring indigenous voices: A critical examination of the MMPI-2. *Cultural Diversity and Ethnic Minority Psychology*, 16(1), p.16.
- Kohrt, B.A., Schafer, A., Willhoite, A., Van't Hof, E., Pedersen, G.A., Watts, S., Ottman, K., Carswell, K. and van Ommeren, M., 2020. Ensuring Quality in Psychological Support (WHO EQUIP): developing a competent global workforce. *World Psychiatry*, 19(1), p.115.
- Millon, T. (1983). Millon Clinical Multiaxial Inventory (MCMI): Manual (2nd ed.). National Computer Systems.
- Moleiro, C. (2018). Culture and psychopathology: New perspectives on research, practice, and clinical training in a globalized world. *Frontiers in Psychiatry*, 9, Article 366. https://doi.org/10.3389/fpsyt.2018.00366
- Nigudkar, A., Wandrekar, J., Osrin, D. and Daruwalla, N., 2020. Male perpetrators of intimate partner violence: MCMI III profiles, Grossman Facet Scales, family of origin experiences and attitudes toward women in a small cohort of men in India. *Journal of Psychosexual Health*, 2(3-4), pp.265-269.
- Rokade, M.S.P. and Shrivastava, G., An efficacy of forensic technology in crime investigation and administration of justice: Narco analysis and DNA mapping.
- Sharma, N., Prakash, O., Sengar, K.S. and Singh, A.R., 2014. Psychiatric Morbidity in Under Trial Prisoners. *International Journal of Health Sciences and Research*, pp.177-184.
- Sellbom, M., Flens, J., Gould, J., Ramnath, R., Tringone, R. and Grossman, S., 2022. The Millon Clinical Multiaxial Inventory-IV (MCMI-IV) and Millon Adolescent Clinical Inventory-II (MACI-II) in legal settings. *Journal of Personality Assessment*, 104(2), pp.203-220.