



Journal Website

Article history:

Received 03 August 2024

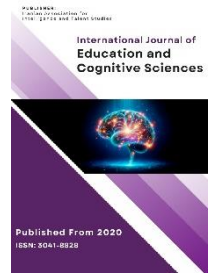
Revised 25 September 2024

Accepted 05 October 2024

Published online 16 November 2024

International Journal of Education and Cognitive Sciences

Volume 5, Issue 5, pp 68-75



E-ISSN: 3041-8828

Concurrent Validity of the Shedler-Westen Assessment Method and the Millon Clinical Multiaxial Inventory-IV in a Non-Clinical Sample from the Iranian Oil Industry

Sodeh Ali Bakhshian¹, Reza Sarafraz²*, Mohammad Reza Beliad³, Kambiz Kamkari⁴, Mehdi Haji Heydari⁵

1. PhD Student, Department of Psychology, Karaj Branch, Islamic Azad University, Karaj, Iran.
2. Assistant Professor, Department of Clinical Psychology, Shiraz University, Shiraz, Iran (Corresponding author).
3. Assistant Professor, Department of Psychology, Karaj Branch, Islamic Azad University, Karaj, Iran.
4. Associate Professor, Department of Psychology, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran.
5. PhD student, Department of Public Administration, Roudehen Branch, Islamic Azad University, Roudehen, Iran.

* Corresponding author email address: msarafraz@shirazu.ac.ir

Article Info

Article type:

Original Research

How to cite this article:

Ali Bakhshian S, Sarafraz R, Beliad M, Kamkari K, Haji Heydari M. (2024). Concurrent Validity of the Shedler-Westen Assessment Method and the Millon Clinical Multiaxial Inventory-IV in a Non-Clinical Sample from the Iranian Oil Industry. *International Journal of Education and Cognitive Sciences*, 5(5), 68-76.

<https://doi.org/10.61838/kman.ijecs.5.5.8>



© 2024 the authors. Published by Iranian Association for Intelligence and Talent Studies, Tehran, Iran. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Purpose: The study aims to evaluate the concurrent validity of the Shedler-Westen Assessment Procedure (SWAP-200) and the Millon Clinical Multiaxial Inventory-IV (MCMI-IV) in a non-clinical sample from the Iranian oil industry.

Methods and Materials: The research utilized Pearson's product-moment correlation model to assess the relationship between the scales of the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV. The study sample consisted of employees from the Iranian oil industry who participated in a psychological evaluation for managerial or contract promotion purposes.

Findings: The results demonstrated significant positive correlations between the scales of the SWAP-200 and the MCMI-IV, with correlation coefficients of 0.60 or higher at $\alpha = 0.01$ and $\alpha = 0.05$ levels. This indicates that both tools have strong concurrent validity in measuring personality disorders.

Conclusion: The study confirms that the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV exhibit concurrent validity in a non-clinical sample, supporting their effectiveness in assessing personality disorders in organizational contexts.

Keywords: Concurrent validity, Shedler-Westen Assessment Method, non-clinical sample, Iranian oil industry

1. Introduction

Considering that personality traits are complex constructs and influence various areas, they have attracted significant attention from researchers (Abagheri Meyari et al., 2024; Sadat Mousavi & Ebrahimi, 2024; Soltani et al., 2024; Yazdani et al., 2023). Most importantly, researchers have been particularly concerned with investigating the personality traits of employees, and studies in this area have been conducted. If the underlying problems among employees had been adequately addressed, many serious offenses would undoubtedly have been prevented. What further highlights the importance of this issue is the high rate of the young population in the country, with nearly half of the population being young (Gharibi, 2019).

By examining and identifying personality disorders among employees, the factors contributing to these issues can be determined, ultimately enhancing employee performance and organizational productivity. Psychological traits, as biopsychosocial phenomena, are significant for everyone, including professionals in various fields, who may be at risk of personality disorders, psychological damage, and personality harm, from which no one is immune. Approximately half of the patients visiting psychiatrists suffer from mental disorders. It is claimed that mental disorders are significant factors contributing to many psychological and psychiatric disorders, such as substance use disorders, mood disorders, impulse control disorders, eating disorders, sleep disorders, and anxiety disorders (Ben-Porath & Tellegen, 2008).

Therefore, given that human resources are a fundamental and foundational element of any organization, achieving organizational goals without considering the dimensions, motivations, and intrinsic inclinations of individuals would be difficult. Organizations that are successful pay sufficient attention to the sensitivity and role of various factors in motivating individuals, understanding the different dimensions of employee behavior, uncovering potential individual talents within the organizational framework, and recognizing personality disorders, psychological harm, and personality damage. These organizations can guide and lead individuals toward the organization's overall objectives (Noorani-Pour & Akbarzadeh, 2011).

There are various ambiguities in psychological assessment, especially in measuring personality and personality disorders, making it difficult to thoroughly examine personality and its associated damages. Such ambiguities have led to numerous research studies dedicated to identifying personality disorders and employing various diagnostic tools. Consequently, it has been stated that using multiple tools for diagnosing personality disorders is not straightforward. It should be noted that until personality disorders and their causes are accurately identified, effective therapeutic approaches cannot be properly employed. These complexities necessitate the use of specialized tools for personality assessment. In this regard, the lack of psychometric information in

tools measuring psychological harm is a significant issue (Sharifi, 2020).

The Millon Clinical Multiaxial Inventory, designed primarily to assess dimensions of personality disorders in clinical populations, is also suitable for evaluating patients with a wide range of other psychiatric disorders, including anxiety disorders, mood disorders, eating disorders, substance use disorders, and somatic disorders. Such patients can be found in inpatient, outpatient, and mental health center settings. Additionally, this instrument can distinguish between normal and abnormal spectrums of personality disorders (Kamkari & Shokrzadeh, 2017).

On the other hand, the psychological assessment process is intricate, subtle, and specialized. It involves collecting comprehensive information from various measurement tools to document clients' needs for psychological services. This process is influenced by multiple factors, and skilled, experienced, and knowledgeable professionals emphasize the necessity of providing psychological services and therapeutic-educational approaches to foster personality development. Therefore, sufficient and accurate information on the psychometric properties of personality assessment tools should be obtained to prevent and treat personality disorders and related damages. The shortcomings in the psychometric properties of these tools and the lack of psychometric information regarding their effectiveness are multifaceted problems (Kamkari, 2012).

Furthermore, in our country, psychological assessment tools have been neglected and overlooked. Comprehensive and logical research must be conducted to identify and enhance their potential applications. This effort can improve the quality of psychological tools and, subsequently, psychological research, as the information surrounding psychological tools related to counseling and clinical settings remains ambiguous (Kamkari & Shokrzadeh, 2010).

It is essential to mention the significance of diagnostic tools for personality disorders and psychological damage. The Millon Adolescent Clinical Inventory (MACI-4) is a tool that can identify and measure personality disorders across the spectrum from normal to abnormal, providing comprehensive information on individuals with these disorders. This tool is not only highly effective for identifying psychological needs but also serves as a suitable means for prevention. By using psychological assessment, individuals at risk of developing personality disorders can be identified, and preventative measures can be established. Consequently, the dissemination of diagnostic and therapeutic approaches in psychometrics is crucial for using psychometric principles and techniques in counseling and clinical psychology, thus creating an appropriate environment for clinical assessment. Therefore, a thorough understanding of personality disorders is essential for developing logical solutions for prevention and treatment of this social issue (Memarpoor, 2016).

In this context, the Shedler-Westen Assessment Method (SWAP) is also based on a well-supported empirical hypothesis. It posits that psychological issues that bring individuals to therapy often have their roots in personality traits that manifest in one's life

structure, patterns of thought, emotion, behavior, coping mechanisms, and interpersonal relationships. The effectiveness of therapy increases when it addresses not only the symptoms of the disorder but also the personality patterns exacerbating these symptoms. Identifying an individual's underlying personality traits can clarify the meaning and function of disorder symptoms, providing guidance for effective treatment (Lingiardi et al., 2006).

Thus, having a tool capable of accurately diagnosing psychological damage and personality disorders is both necessary and critical. The use of personality questionnaires has proven to be an effective approach in identifying individuals' problems. These tools have been widely used in assessing aggression tendencies, personality disorders, substance abuse tendencies, and more. Although initially used for screening police personnel, they are now recognized as valid tools for describing and explaining personality disorders and related damages, providing clinical indices (Gelder, 2005).

It is worth emphasizing that psychological assessment focuses on diagnosing and identifying psychological issues and symptoms. This approach ensures that a proper foundation is established for providing treatment services. If psychological assessment follows an incorrect path, neglecting to accurately identify psychological symptoms or signs of disorders, then psychological and counseling services will undoubtedly be less effective (Kamkari & Shokrzadeh, 2013, 2017; Kamkari et al., 2007).

Numerous studies have examined the validity, particularly the concurrent validity, of the two tools in question. However, no research has focused on the concurrent validity of the Shedler-Westen Assessment Method and the Millon Clinical Multiaxial Inventory-IV. Therefore, this study addresses their concurrent validity in a non-clinical sample from the Iranian oil industry. Among related studies on the Shedler-Westen Assessment Method, Marin-Avellan et al. (2014) conducted research titled "The Validity and Clinical Utility of Structured Personality Disorder Diagnoses in Forensic Patients," which revealed a clinically significant relationship between the SWAP-200 and the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II) among forensic patients. This finding demonstrated the concurrent validity of the two tools (Marin-Avellan et al., 2014). Moreover, Bradley, Hilsenroth, Garnacia, and Westen (2007) also investigated "The Relationship Between Clinician Assessment and Self-Report of Personality Disorders Using the SWAP-200 and the Personality Assessment Inventory (PAI)," emphasizing the association between self-reported and parallel personality assessment tools, which provided significant evidence for the concurrent validity of the SWAP-200 (Bradley et al., 2007).

Regarding the Millon Clinical Multiaxial Inventory-IV, Jones et al. (2017) studied "Personality Traits and the Onset of Psychotic Symptoms in Psychotic Patients." They examined the onset of psychotic symptoms using the Millon Clinical Multiaxial Inventory-3 and an overall functioning assessment. Findings indicated that the highest correlation was with the narcissistic scale, showing a negative relationship with anxiety and depression and a

positive one with antisocial and self-destructive traits. Although significant, the correlation was negative between the paranoid scale and the emotional dimension. Furthermore, the clinical correlation between key personality traits revealed a relationship between schizophrenia and other psychotic disorders (Jones et al., 2017). Additionally, Rushton and Irwing (2009) explored "The General Factor of Personality in the Millon Clinical Multiaxial Inventory-3, Multidimensional Personality Pathology Inventory, and Personality Assessment Inventory," finding that the correlation coefficient among the 24 scales was .31, confirming the concurrent validity of these tools (Rushton & Irwing, 2009).

In summary, a review of the literature indicates that there has been no study on the concurrent validity of the Shedler-Westen Assessment Method and the Millon Clinical Multiaxial Inventory-IV. Despite extensive research on each tool's concurrent validity with other instruments, the concurrent validity between the SWAP-200 and the MCMI-4 remains unclear. Therefore, this study focuses on the concurrent validity of these tools in a non-clinical sample from the Iranian oil industry.

2. Methods and Materials

The use of valid and reliable personality assessment tools that can effectively identify personality disorders is of significant importance. In the fields of clinical and personality psychology, diagnosing disorders, their type, and severity is crucial. Therefore, reliable and validated clinical and personality assessment tools must be employed. The Shedler-Westen Assessment Procedure (SWAP-200) is a highly credible personality assessment tool, particularly in industrial organizations, and serves as a valuable diagnostic tool for identifying personality disorders.

Since concurrent validity studies are a subset of psychometric research, and psychometric research is itself considered a subset of methodological studies, this research falls within the realm of psychometric studies. The primary aim of the present study is to evaluate the concurrent validity of the Shedler-Westen Assessment Procedure (SWAP-200) and the Millon Clinical Multiaxial Inventory-IV (MCMI-4).

The statistical population of this study comprises all employees of the oil industry who have applied for managerial positions or who have visited the Oil Industry Management Development Center for evaluation purposes, either to change their employment status or to secure contract promotion. It should be noted that since access to all members of the population is feasible and a comprehensive list of individuals can be prepared, the population of this study is considered finite.

There are various methods for estimating sample size and conducting sampling. Sample size determination is critical, and utmost care must be taken to choose the most appropriate sampling method. Given that the study population is finite and that in psychometric research, at least 10% of the population should be selected as a sample, 400 employees from the oil industry who have applied for managerial positions or for employment status change and contract promotion, and 400 clinical samples (for comparison)

were selected as a sufficient sample size using purposive convenience sampling. These individuals participated in completing the study's questionnaires.

The measurement tools used in this study are the Shedler-Westen Assessment Procedure (SWAP-200) and the Millon Clinical Multiaxial Inventory-IV (MCMI-4), with the following psychometric properties described:

Shedler-Westen Assessment Procedure (SWAP-200): This tool integrates clinical and empirical approaches to personality, combining their strengths. It relies on clinical experts to perform tasks they excel at: observing and describing individual patients or clients they know. This method utilizes statistical approaches to optimize the integration of information and to generate valid insights (Bradley et al., 2007; Lingiardi et al., 2006; Marin-Avallen et al., 2014). The aim is to provide a scientifically and clinically valid tool for conceptualizing and assessing personality.

Clinicians categorize 200 descriptive statements written on cards into eight bins based on how well each statement describes the patient. The first bin (Bin 0) contains statements that are irrelevant, untrue, or unknown to the clinician regarding the patient. This is the largest bin. The next bin (Bin 1) includes statements that apply minimally, followed by Bin 2, which includes statements that apply slightly more, and so forth, until Bin 7, which contains statements that most accurately and comprehensively describe the patient's core personality traits. Many SWAP items are designed to capture subtle psychological processes. Evaluating these items requires clinical inferences that go beyond the patient's explicit behaviors and words.

Several methods exist for selecting items for a diagnostic scale, and SWAP-200 employs a prototype matching approach. SWAP-200 consists of 200 descriptive statements that allow a clinician to detail a patient's psychological functioning comprehensively. These psychological details are quantified, enabling a precise diagnosis based on 200 variables. The diagnostic prototype describes an idealized version of a recognized personality disorder. Diagnostic prototypes for various personality disorders have been developed through research, including disorders listed in the DSM-IV (e.g., paranoid personality disorder), as well as others not specified, such as high-functioning depressive personality.

The SWAP-200 software generates three personality profiles:

1. **Personality Disorders (DSM-IV):** This profile provides scores for each DSM-IV personality disorder and can be used for formal Axis II diagnoses. It also includes a mental health index that highlights the patient's personality strengths.
2. **SWAP Personality Syndromes (T Scores for Q Factors):** This profile provides scores for an empirically derived alternative diagnostic system, addressing limitations of the DSM-IV by representing clinically relevant patterns and syndromes. (The items in this section reflect clinicians' insights about personality traits associated with various personality disorders.)

3. **T Scores for Factors:** This profile shows scores for twelve personality factors derived through factor analysis of the 200 SWAP items. These factor scores provide a more nuanced understanding of personality functioning (Lingiardi et al., 2006).

Personality disorder scores reflect the degree of resemblance or "fit" between the patient and each idealized Axis II disorder pattern in the DSM-IV. These diagnostic prototypes are based on expert consensus and are more comprehensive than DSM-IV criteria. The personality disorder profile includes the ten DSM-IV personality disorders, plus depressive personality disorder (included in the DSM-IV appendix). A high fit score suggests a likely diagnosis based on expert consensus, while a moderate score indicates subthreshold features. If two or more scales have scores above $T=60$, the highest score is used as the primary Axis II diagnosis.

Millon Clinical Multiaxial Inventory-IV (MCMI-4): The fourth edition of the Millon Clinical Multiaxial Inventory (2015) consists of 195 items and evaluates 30 scales related to personality disorders and clinical syndromes (Millon et al., 2015). Emphasizing content validity, this tool includes five domains: validity scales or modifiers, personality styles or clinical personality patterns, severe personality pathology, clinical syndromes, and severe clinical syndromes. It has demonstrated good reliability and validity, with diagnostic validity in clinical groups (Kamkari & Shokrzadeh, 2017; Kamkari et al., 2007). The domains and scales are as follows:

- **Validity Scales or Modifiers:** Validity, inconsistency, disclosure, desirability, debasement.
- **Personality Styles or Clinical Personality Patterns:** Schizoid, avoidant, melancholic, dependent, histrionic, turbulent, narcissistic, antisocial, sadistic, compulsive, negativistic (passive-aggressive), masochistic.
- **Severe Personality Pathology:** Schizotypal, borderline, paranoid.
- **Clinical Syndromes:** Generalized anxiety, somatic complaints, bipolar spectrum, persistent depression, alcohol use, drug use, post-traumatic stress.
- **Severe Clinical Syndromes:** Schizophrenic spectrum, major depression, delusional disorder.

All scales exhibit satisfactory reliability, with coefficients above 0.81. The overall reliability coefficient is calculated at 0.85.

Finally, Pearson's product-moment correlation coefficient was used to examine the concurrent validity between the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV.

3. Findings and Results

Does the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV show concurrent validity in a non-clinical sample from the Iranian oil industry?

Table 1

Examining the correlation between SWAP and "Clinical Personality Pattern Styles" of MACI-4 for criterion validity of the "concurrent validity" type in a non-clinical sample from the Iranian oil industry

SWAP Clinical Scales	Clinical Personality Pattern Styles	Correlation Coefficient	Significance Level
Paranoid	Negativistic	*0.58	0.05
Schizoid	Schizoid	**0.69	0.001
Schizotypal	Schizoid	**0.65	0.001
Antisocial	Negativistic	**0.62	0.001
Borderline	Depression/Melancholia	*0.56	0.05
Histrionic	Histrionic	**0.66	0.001
Narcissistic	Narcissistic	**0.68	0.001
Avoidant	Avoidant	**0.69	0.001
Dependent	Dependent	**0.62	0.001
Obsessive	Compulsive	**0.68	0.001
Depressive	Depression/Melancholia	*0.65	0.05
Passive-Aggressive	Sadistic	*0.54	0.05

Given that the correlation coefficients are all 0.60 or higher, significant positive correlations at $\alpha = 0.01$ and $\alpha = 0.05$ levels exist between some of the SWAP clinical scales and the "Clinical Personality Pattern Styles" of the MACI-4. Therefore, it can be

concluded that the SWAP clinical scales have concurrent criterion validity with the "Clinical Personality Pattern Styles" of the MACI-4.

Table 2

Examining the correlation between SWAP and "Severe Personality Pathology" of MACI-4 for criterion validity of the "concurrent validity" type in a non-clinical sample from the Iranian oil industry

SWAP Clinical Scales	Severe Personality Pathology	Correlation Coefficient	Significance Level
Paranoid	Schizotypal	*0.57	0.05
Schizoid	Schizotypal	**0.58	0.05
Schizotypal	Schizotypal	**0.62	0.001
Antisocial	Paranoid	*0.53	0.05
Borderline	Borderline	**0.67	0.001
Histrionic	Borderline	*0.53	0.05
Narcissistic	Borderline	*0.50	0.05
Avoidant	Paranoid	*0.51	0.05
Dependent	Borderline	*0.54	0.05
Obsessive	Borderline	*0.51	0.05
Depressive	Borderline	*0.50	0.05
Passive-Aggressive	Paranoid	*0.53	0.05

The correlation coefficients, mostly around or above 0.60, indicate significant positive correlations at $\alpha = 0.01$ and $\alpha = 0.05$ levels between some SWAP clinical scales and the "Severe Personality Pathology" scales of the MACI-4. Hence, it is

concluded that SWAP clinical scales have concurrent criterion validity with the "Severe Personality Pathology" scales of the MACI-4.

Table 3

Examining the correlation between SWAP and "Clinical Syndromes" of MACI-4 for criterion validity of the "concurrent validity" type in a non-clinical sample from the Iranian oil industry

SWAP Clinical Scales	Clinical Syndromes	Correlation Coefficient	Significance Level
Paranoid	Delusional Disorder	**0.60	0.001
Schizoid	Schizophrenic Spectrum	**0.60	0.001
Schizotypal	Schizophrenic Spectrum	**0.61	0.001
Antisocial	Bipolar Spectrum	*0.51	0.05
Borderline	Bipolar Spectrum	*0.50	0.05
Histrionic	Generalized Anxiety	*0.51	0.05
Narcissistic	Generalized Anxiety	*0.50	0.05
Avoidant	Major Depression	*0.53	0.05

Dependent	Generalized Anxiety	**0.61	0.001
Obsessive	Generalized Anxiety	**0.65	0.001
Depressive	Persistent Depression	**0.66	0.001
Passive-Aggressive	Generalized Anxiety	*0.52	0.05

Correlation coefficients above or around 0.60 indicate significant positive correlations at $\alpha = 0.01$ and $\alpha = 0.05$ levels between some SWAP clinical scales and the "Clinical Syndromes"

of the MACI-4. Thus, it is concluded that SWAP clinical scales have concurrent criterion validity with the "Clinical Syndromes" of the MACI-4.

Table 4

Examining the correlation between SWAP and "Severe Clinical Syndromes" of MACI-4 for criterion validity of the "concurrent validity" type in a non-clinical sample from the Iranian oil industry

SWAP Clinical Scales	Severe Clinical Syndromes	Correlation Coefficient	Significance Level
Paranoid	Delusional Disorder	**0.64	0.001
Schizoid	Schizophrenic Spectrum	*0.57	0.05
Schizotypal	Delusional Disorder	**0.65	0.001
Antisocial	Delusional Disorder	*0.50	0.05
Borderline	Major Depression	*0.52	0.05
Histrionic	Major Depression	*0.51	0.05
Narcissistic	Major Depression	*0.52	0.05
Avoidant	Major Depression	*0.50	0.05
Dependent	Major Depression	**0.61	0.001
Obsessive	Major Depression	**0.65	0.001
Depressive	Major Depression	**0.67	0.001
Passive-Aggressive	Major Depression	*0.50	0.05

Correlation coefficients of 0.60 or higher indicate significant positive correlations at $\alpha = 0.01$ and $\alpha = 0.05$ levels between some SWAP clinical scales and the "Severe Clinical Syndromes" of the MACI-4. Therefore, it is concluded that SWAP clinical scales have concurrent criterion validity with the "Severe Clinical Syndromes" of the MACI-4.

4. Discussion and Conclusion

To evaluate an assessment tool, various types of evidence must be collected, some of which fall under logical domains and others under empirical domains. Logical evidence is derived from human critical thinking and semantic analysis, whereas empirical evidence relies on statistical analyses and quantitative calculations. Although some psychometric experts place greater emphasis on empirical evidence with a statistical approach, they cannot disregard the significance of logical evidence when assessing the validity of a test, particularly its construct validity. To accurately determine the psychometric properties of a test and thoroughly assess the validity of the measurement tool, special attention must be given to collecting both empirical and logical evidence (Kamkari et al., 2007).

The psychometric literature shows that several methods are used to estimate the validity of a test, including content validity, logical validity, criterion validity, construct validity, concurrent validity, predictive validity, trait validity, statistical validity, empirical validity, face validity, convergent validity, and divergent validity. The use of various terms and prefixes related to validity can create confusion; therefore, it is recommended to avoid excessive

terminology in the context of validity (Kamkari & Shokrzadeh, 2013).

Estimating the psychometric properties, particularly the validity of psychological tests, is a complex and challenging task. This is because psychological variables are abstract concepts, such as intelligence, anxiety, and personality, which do not have tangible and objective external realities and must be inferred indirectly (Ganji, 2016). Therefore, concurrent validity, which is the focus of this study, is crucial for identification and diagnosis and can have significant implications in clinical and therapeutic contexts.

Given the importance of personality disorders and their impact on employee performance and organizational productivity, the present study used Pearson's product-moment correlation model to examine the relationship between the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV (MCMI-IV). The concurrent validity of these two tools was analyzed in a non-clinical sample from the Iranian oil industry. The findings, based on the main research question, are as follows:

To address the research question, Pearson's product-moment correlation model was used, and the findings indicated significant positive correlations between the scales of the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV at $\alpha = 0.01$ and $\alpha = 0.05$ levels. Therefore, it can be concluded that since all scales related to "personality disorders" are significant, both the Shedler-Westen Assessment Procedure and the Millon Clinical Multiaxial Inventory-IV exhibit concurrent validity in the non-clinical sample from the Iranian oil industry.

Finally, by comparing the findings of the present study with previous research on the psychometric properties, emphasizing the

concurrent validity of the "Shedler-Westen Assessment Procedure" and the "Millon Clinical Multiaxial Inventory-IV," it can be stated that the results are consistent with those of Marin-Avellan et al. (2014), who investigated the "Validity and Clinical Utility of Structured Diagnoses of Antisocial Personality Disorder in Forensic Patients" and found a clinically significant relationship between the Shedler-Westen Assessment Procedure (SWAP-200) and the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II) in forensic patients, demonstrating concurrent validity between the two tools (Marin-Avellan et al., 2014). Similarly, Bradley et al. (2007) investigated "Clinical and Self-Assessment of Personality Disorders Using SWAP-200 and PAI" and reported significant correlations between self-assessment and parallel personality assessment tools, further demonstrating the concurrent validity of the Shedler-Westen method with other tools (Bradley et al., 2007). Jones et al. (2017) studied "Personality Traits and the Onset of Psychotic Symptoms in Psychotic Patients" and found the highest correlation on the narcissistic scale (Jones et al., 2017). Lastly, Rushton and Irwing (2009) explored "The General Factor of Personality in Millon Clinical Multiaxial Inventory-3, Multidimensional Personality Pathology Inventory, and Personality Assessment Inventory," reporting a correlation coefficient of 0.31, indicating concurrent validity among the tools examined (Rushton & Irwing, 2009).

All these studies highlighted that the Shedler-Westen method and the Millon Clinical Multiaxial Inventory have significant correlations with other personality disorder assessment tools, confirming their concurrent validity. However, none of the studies specifically addressed the concurrent validity between the two tools in question, making comparisons in this area impossible. Nonetheless, the present study is novel in this regard. Overall, the findings align with previous research, supporting the concurrent validity of the present study.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We hereby thank all individuals for participating and cooperating us in this study.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Each participant received an informed consent form to understand the study's objectives.

References

- Abagheri Meyari, A., Dokaneifard, F., & Behbodi, M. (2024). Providing a Model for Predicting Children's Differentiation Based on Communication Patterns and Personality Structure with the Mediation of Dysfunctional Attitudes in Parents Attending Counseling Centers in Tehran. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 3(1), 139-159. <https://doi.org/10.22034/pdmd.2024.444918.1053>
- Ben-Porath, Y. S., & Tellegen, A. (2008). Empirical correlates of the MMPI-2 Restructured Clinical (RC) Scales in mental health, forensic, and non-clinical settings: An introduction. *Journal of Personality Assessment*, 90, 119-121. <https://doi.org/10.1080/00223890701845120>
- Bradley, R., Hilsenroth, M., Guarnaccia, C., & Westen, D. (2007). Relationship between clinician assessment and self-assessment of personality disorders using the SWAP-200 and PAI. *Psychological assessment*, 19, 225-229. <https://doi.org/10.1037/1040-3590.19.2.225>
- Ganji, M. (2016). *Psychopathology, Volume 1*. Savalan Publications. <https://ravabook.ir/%D8%A2%D8%B3%DB%8C%D8%A8-%D8%B4%D9%86%D8%A7%D8%B3%DB%8C-%D8%B1%D9%88%D8%A7%D9%86%DB%8C-%D8%A8%D8%B1%D8%A7%D8%B3%D8%A7%D8%B3-dsm-5-%D8%AC%D9%84%D8%AF-%D8%A7%D9%88%D9%84-%DA%AF%D9%86%D8%AC%DB%8C-%D8%B3%D8%A7%D9%88%D8%A7%D9%84%D8%A7%D9%86>
- Gelder, M. (2005). *Psychiatry*. Oxford University Press Inc. <https://books.google.com/books/about/Psychiatry.html?id=Co-1QwAACAAJ>
- Gharibi, Z. (2019). *Standardization of the Fourth Edition of the Millon Clinical Multiaxial Inventory for Clients at Counseling Centers in Tehran* [Master's Thesis, Islamic Azad University, Islamshahr Branch].
- Jones, J. S., Dominguez, P. C., Matilla, A. L., Calvo, I. P., Eizaguirre, A. E., Kustner, B. M., & Ochoa, S. (2017). Personality traits and psychotic symptoms in recent onset of psychosis patients. *Comprehensive Psychiatry*, 74, 109-117. <https://doi.org/10.1016/j.comppsy.2017.01.006>
- Kamkari, K. (2012). *Standardization of the Addiction Inclination Scale (Emphasizing MMPI-ZRE) in High School and Pre-University Students*. http://publisher.dchq.ir/storage/pubs/No_26.pdf
- Kamkari, K., & Shokrzadeh, S. (2010). Psychometric Properties of the Reconstructed Form of the Minnesota Multiphasic Personality Inventory-2 (MMPI-2RF) in Iranian National Team Athletes. *Iranian Psychological Association Semi-Annual Journal*, 5. <https://elmnet.ir/doc/10704656-98128>
- Kamkari, K., & Shokrzadeh, S. (2013). *Study of Personality Traits in Female Methamphetamine Users*. http://publisher.dchq.ir/storage/pubs/No_26.pdf
- Kamkari, K., & Shokrzadeh, S. (2017). *Assessment of Personality Traits (Focusing on the Reconstructed Form of the Minnesota Multiphasic Personality Inventory-2)*. Islamic Azad University, Science and Research Branch Publications. <https://srb.iau.ir/Files/books-pic/347.pdf>
- Kamkari, K., Shokrzadeh, S., & Kiumarhi, F. (2007). *Measurement and Assessment (Emphasizing the Structure of Intelligence)*. Islamic Azad

- University, Islamshahr Branch Publications.
<http://ensani.ir/fa/article/download/341527>
- Lingiardi, V., Shedler, J., & Gazillo, F. (2006). Assessing personality change in psychotherapy with the SWAP-200: A case study. *Journal of Personality Assessment*, 86, 23-32.
https://doi.org/10.1207/s15327752jpa8601_04
- Marin-Avallen, L., McGauley, G., Campbell, C., & Fonagy, P. (2014). Using the SWAP-200 in a personality-disordered forensic population; is it valid, reliable and useful? *Journal of Criminal Behavior and Mental Health*, 15(1), 28-45. <https://doi.org/10.1002/cbm.35>
- Memarpour, M. (2016). *Diagnostic Validity of the Reconstructed Form of the Minnesota Multiphasic Personality Inventory-2 (MMPI-2RF) in Families Referring to Counseling Centers in Islamshahr* [Master's Thesis, Islamic Azad University, Saveh Branch].
- Millon, T., Grossman, S., & Millon, C. (2015). *Millon clinical multi-axial inventory-IV manual*. Pearson Assessment.
<https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Personality-%26-Biopsychosocial/Millon-Clinical-Multi-axial-Inventory-IV/p/100001362.html>
- Noorani-Pour, R., & Akbarzadeh, A. H. (2011). Examining the Relationship Between Personality Traits and Job Satisfaction Among Employees of Tabriz Petrochemical Company, 2011. *Quarterly Journal of Education and Evaluation*, 14, 25-44.
<https://www.sid.ir/paper/183448/%D8%AE%D8%B1%DB%8C%D8%AF%20%D8%A7%D9%82%D8%B3%D8%A7%D8%B7%DB%8C%20%DA%AF%D9%88%D8%B4%DB%8C%20%D8%A2%DB%8C%D9%81%D9%88%D9%86%2014>
- Rushton, J. P., & Irwing, P. (2009). A general factor of personality in the Comre Personality Scales, the Minnesota Multiphasic Personality Inventory, and the Multicultural Personality Questionnaire. *Personality and individual differences*.
<https://doi.org/10.1016/j.paid.2008.11.015>
- Sadat Mousavi, S., & Ebrahimi, A. (2024). Structural Model of the Effect of Psychological Capital on Innovative Behavior in Teaching: The Mediating Role of Conscientiousness Personality Trait. *International Journal of Education and Cognitive Sciences*, 4(4), 1-10.
<https://doi.org/10.61838/kman.ijecs.4.4.1>
- Sharifi, H. P. (2020). Principles of Psychometry and Psychological Testing.
<https://behnavannews.ir/wp-content/uploads/2024/01/%D8%AE%D8%A8%D8%B1%D9%86%D8%A7%D9%85%D9%87-%D8%B2%D9%85%D8%B3%D8%AA%D8%A7%D9%86-%D8%A7%D9%86%D8%AC%D9%85%D9%86-%D8%B1%D9%88%D8%A7%D9%86%D8%B4%D9%86%D8%A7%D8%B3%DB%8C-%D8%A7%DB%8C%D8%B1%D8%A7%D9%86.pdf>
- Soltani, M., Kamyabi, M., Bahrainizadeh, A., & Andishmand, V. (2024). Design and Presentation of a Model for the Relationship Between the Five Dimensions of Personality and Problem-Solving Skills and Academic Help-Seeking in Female Students. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 3(1), 175-186.
<https://doi.org/10.22034/pdmd.2024.449713.1066>
- Yazdani, N., Ganji, H., Pasha Sharifi, H., & Abolmali Alhosseini, K. (2023). Prediction of Test Anxiety based on Personality Traits and Intelligence Beliefs with the Mediation of Academic Self-Efficacy. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 2(3), 37-49. <https://doi.org/10.22034/pdmd.2023.185277>