

Research Paper

Comparison of the MMPI profile of violent crime offenders with and without crime induced post-traumatic stress disorder (PTSD)

Abstract

Introduction and Objective: Psychological disorders are more prevalent among offenders than in the general population. Violent offending may itself result in Post-traumatic stress disorder (PTSD) referred to as perpetration-induced traumatic stress (PITS). Despite its possible effects on offenders and judicial procedures, PITS has received limited attention in forensic contexts. This study aimed to compare the psychological profiles of violent offenders with and without probable PITS using Mini-Mult to develop an preliminary screening pattern for these individuals.

Research Methodology: This quantitative study employed a retrospective causal-comparative design using criterion-group strategy. The sample consisted of 114 violent offenders referred to the Tehran Police Intelligence Departments. Data was collected using the PCL- α , Mini-Mult, THQ, and a demographic information form.

Findings: Based on the PCL- α cutoff score, 41 participants (36%) had probable-PITS and 73 (64%) did not. In the total sample, the highest Mini-Mult elevations were observed on the F, Hs, Sc, D, and Pa scales. Comparisons between the two groups revealed significant differences in the validity scales, particularly F, as well as in the F-K index, whereas differences in the clinical scales were not statistically significant.

Conclusion: Probable-PITS was observed in more than one-third of violent offenders, and the overall Mini-Mult profile showed elevations on several validity and clinical scales. Differences between offenders with and without probable PITS were mainly observed in the validity scales, particularly F, and in the F-K index, while the clinical scales did not significantly differentiate the groups. These findings suggest that trauma-related psychological distress may be common among violent offenders and highlight the importance of early psychological assessment in forensic settings.

Keywords: Violent offenders, psychological profile, PITS, PTSD, MMPI.

Introduction

Clinical studies of prison populations indicate that the prevalence of psychological disorders among incarcerated individuals is significantly higher than in the general population. the most frequently reported conditions include personality disorders, mood disorders, anxiety disorders, substance use disorders (Arasteh & Sharifi Saez, ۲۰۰۹; Ashkani et al., ۲۰۰۳; Azizi Saeid et al., ۲۰۱۸; Fazel & Seewald, ۲۰۱۲; Ghaderi et al., ۲۰۱۲; Hadinezhad, ۲۰۰۸; Johnson, ۲۰۱۹; Mundt & Baranyi, ۲۰۲۰), as well as post-traumatic stress disorder (PTSD) (Connorton et al., ۲۰۱۱).

PTSD may develop following exposure to traumatic events such as life-threatening situations, witnessing death or severe injury, or experiencing acute or chronic violence, and it may impair emotional and cognitive functioning for many years (American Psychiatric Association, ۲۰۲۲). Clinically, individuals with PTSD frequently experience hyperarousal, intrusive memories, avoidance behaviors, irritability, and unpredictable emotional reactions (Evans et al., ۲۰۰۷b, ۲۰۰۷a, ۲۰۰۹). Such symptoms may increase the likelihood and severity of risky and violent behaviors (Ardino, ۲۰۱۲; Connorton et al., ۲۰۱۱). The prevalence of PTSD among prison populations has been reported to be as high as ۳۸% internationally (Baranyi et al., ۲۰۱۸) and approximately ۲۶% in Iran (Raghibi et al., ۲۰۱۶). Among incarcerated individuals with pre-existing psychological disorders, this rate may rise to ۵۶%, with perpetration of violent crime identified as the second leading cause of PTSD in this population (Spitzer et al., ۲۰۰۱).

Recent studies have demonstrated that perpetrating violent acts may itself constitute a traumatic experience capable of independently causing PTSD (Di et al., ۲۰۱۸), particularly because offenders may directly witness or participate in events involving serious injury or death during the commission of the crime (Ternes et al., ۲۰۲۰). This condition, referred to as Perpetration-Induced traumatic stress (PITS), may result in either full or partial PTSD symptoms (MacNair, ۲۰۰۵). Research on violent offenders has shown that approximately ۴۲.۶% of adult homicide offenders and ۳۳.۱% of violent offenders met diagnostic criteria for PTSD, and ۱۳.۱% demonstrated partial symptoms (Badenes-Ribera et al., ۲۰۲۱). Furthermore the likelihood of developing PTSD appears to be substantially higher among individuals with a prior history of trauma exposure (Di et al., ۲۰۱۸; Papanastassiou et al., ۲۰۰۴). Pre-existing psychological disorders may increase the risk of unintentional involvement in incidents resulting in severe injury or death, which may in turn contribute to traumatic stress, exacerbate mood disorders, PTSD symptoms, and substance use, and increase the likelihood of recidivism (Connorton et al., ۲۰۱۱; Nickerson et al., ۲۰۱۱).

Because attention is often focused primarily on victim and the severity of harm inflicted, the psychological consequences experienced by perpetrators are frequently overlooked. Difficulties recalling important aspects of the traumatic event, intrusive memories related to violent moments (Evans et al., ۲۰۰۷b), and partial amnesia for crime-related events may significantly affect investigative procedures. Consequently, offenders may be inaccurately perceived as deceptive, evasive, or unreliable by judicial authorities and investigators. In addition, cognitive biases among forensic evaluators and legal professionals may further influence these interpretations (Cooper & Meterko, ۲۰۱۹). These issues are particularly important because they may compromise the assessment of aggravating factors, predicting of future risk, development of appropriate clinical interventions, and even consideration of possible legal defenses (Evans et al., ۲۰۰۹).

Moreover, repeated questioning about traumatic events may intensify PTSD symptoms and contribute to psychological re-traumatization. Individuals with trauma-related symptoms often struggle to recall traumatic memories coherently, and stressful interviews may worsen concentration and memory impairments. Intrusive memories or flashbacks during questioning may lead to dissociation, emotional numbing, confusion, defensive reactions, or an inability to adequately comprehend questions and the implications of their responses (Risan et al., ۲۰۲۰). Given the broad individual and social consequences of PTSD, including an increased risk of self-harm, suicide, recurrent violence, recidivism, and impaired reintegration into society (Papanastassiou et al., ۲۰۰۴), investigating this phenomenon is of substantial importance. This condition appears to occur most frequently among violent offenders, yet it remains poorly understood in Iran. Violent crimes include offenses such as homicide, armed robbery, rape, kidnapping, hostage-taking, violent theft, and extortion (Sheikholeslami & Mahmoud Soltani, ۲۰۱۶).

the Minnesota Multiphasic Personality Inventory (MMPI) is considered a valid and effective instrument for identifying psychological profiles, personality characteristics, and psychopathology (Sellbom, ۲۰۱۹), and has demonstrated substantial accuracy in screening individuals with PTSD (Garcia et al., ۲۰۱۰; Scheibe et al., ۲۰۰۱).

Mini-Mult is a shortened version of the MMPI designed to facilitate rapid assessment while requiring less administration time and maintaining high correlations with the original MMPI scales (Kincannon, ۱۹۶۸). The Mini-Mult includes ۱۱ scales: three validity scales-lie (L), frequency (F), and Correction (K)- and eight clinical scales: Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic Deviate (Pd), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), and Hypomania (Ma) (Okhovat & Daneshmand, ۲۰۱۶).

Despite the growing importance of this field, a review of the Iranian literature indicates insufficient research examining the relationship between PTSD and MMPI patterns among violent offenders, highlighting a significant gap in this area. Therefore the present study was designed to provide a detailed analysis of the psychological profiles of violent offenders with and without PTSD, with particular emphasis on the Mini-Mult profile. Specifically, the study aimed to determine whether probable PTSD is associated with systematic differences in the clinical and validity scales of the MMPI and whether these patterns may contribute to the development of a preliminary screening model for identifying individuals with PITS.

Methodology

The present study employed a retrospective causal-comparative design using a criterion-group strategy, which is a type of between-subjects design. Two groups of violent crime perpetrators, with and without probable PTSD, were compared on the validity and clinical scales of the Mini-Mult, a shortened version of the MMPI.

Participants

Participants were recruited using a convenience sampling because institutional and legal restrictions precluded random sampling within forensic detention settings. They had been referred by judicial and law-enforcement authorities to the Tehran Police Intelligence Departments. Data were collected between Ordibehesht and Mordad ۱۴۰۴ (April–August ۲۰۲۵).

The inclusion criteria were:

۱. age ۱۸ years and older;
۲. Formal accusation of a violent offense under Iranian penal law;
۳. Adequate literacy and cognitive ability to complete the assessment instruments;
۴. Voluntary consent to participate and cooperation during the assessment process.

The final sample consisted of ۱۱۴ adult defendants, including ۱۱۲ men and ۲ women, ranging from ۱۸ to ۵۶ years ($M=۳۳.۸۷$, $SD=۸.۹۰$). Among participants ۶۹.۴% were between ۲۵ and ۴۳ years old. Approximately ۴۶% of the sample reported a history of prior arrests or involvement in violent incidents. Additional demographic and descriptive characteristics are presented in table ۱.

Table ۱. Demographic and descriptive characteristics of the participants

variables	frequency
Sex	men ۱۱۲ (۹۸/۲٪)
	women ۲ (۱/۸٪)
Relationship Status	Single ۵۵ (۵۱٪)
	married ۴۷ (۴۳/۵٪)
	divorced ۶ (۵/۵٪)
Education Status	below High school diploma ۴۹ (۴۳/۳۶٪)
	High school diploma ۳۳ (۲۹/۲٪)
	post graduate ۱۰ (۸/۸۵٪)
	Bachelor's degree ۱۷ (۱۵٪)
	Master's degree and above ۴ (۳/۵٪)
Occupation	Self-employed ۶۹ (۶۲/۷۳٪)
	Employee ۱۷ (۱۵/۴۵٪)
	Manual laborer ۹ (۸/۱۸٪)
	unemployed ۱۵ (۱۳/۶۴٪)
Cause of arrest	Homicide and suspect of homicide ۱۹ (۱۶/۶۷٪)
	Violent robbery ۳۶ (۳۱/۵۸٪)
	Violent residential burglary ۴ (۳/۵۱٪)
	Armed robbery ۵ (۴/۳۹٪)
	kidnapping ۷ (۶/۱۴٪)
	Assault and physical altercation ۱۲ (۱۰/۵۳٪)
	unspecified ۳۱ (۲۷/۲٪)

The sample was divided into two subgroups based on PCL- ϕ cutoff score of 31. The probable-PTSD group comprised 41 participants (36%) who met or exceeded the PCL- ϕ cutoff score, indicating probable PITS. The non-PTSD group comprised 57 participants (54%) whose scores fell below the clinical threshold.

Research instruments

Post-Traumatic Stress Disorder checklist for DSM- ϕ (PCL- ϕ)

The PCL- ϕ is a DSM- ϕ based self-report instrument used to assess PTSD symptoms severity, identify provisional diagnostic status, and evaluate clinical changes over time (Wortmann et al., 2016). The questionnaire consists of 17 items rated on a 5-point Likert scale ranging from 1 ("not at all") to 5 ("extremely") and typically requires approximately 5-10 minutes to complete.

The instrument assesses four major PTSD symptom clusters: intrusion and re-experiencing, avoidance of trauma-related stimuli, negative alterations in cognition and mood, and hyperarousal/reactivity. Belvins et al. (2010) reported strong internal consistency (Cronbach's $\alpha = 0.94$) and test-retest reliability ($r = 0.82$). Convergent validity was supported by strong correlations with other PTSD measures, including the PCL-S ($r = 0.80$), PDS ($r = 0.80$), and DAPS ($r = 0.84$) and PAI-ARD-T ($r = 0.74$) (Blevins et al., 2010). For the Persian version Cronbach's alpha coefficient was 0.94. Its convergent validity was supported by a significant correlation with MCCP ($r = 0.74$), while its divergent validity was supported by a significant correlation with CD-RISC ($r = 0.46$) (Varmaghani et al., 2018).

According to the National Center for PTSD, affiliated with the U.S. Department of Veterans Affairs, scores in the range of 31-33 indicate clinically significant PTSD symptoms and may identify individuals who could benefit from PTSD-related interventions (National Center for PTSD, 2013). Similar cutoff scores have been supported in other studies (Bovin et al., 2016; Krüger-Gottschalk et al., 2017). Therefore, a cutoff score of 31 was adopted in the present study.

Short form of Minnesota Personality inventory (Mini-Mult)

The Mini-Mult is a shortened version of the MMPI consisting of 151 dichotomous (yes/no) items selected from the original MMPI. Administration time is approximately 30-40 minutes. Initial studies reported substantial correlations between Mini-Mult scales and the standard MMPI scales, supporting the instrument's concurrent validity (Kincannon, 1968). Test-retest reliability coefficients have also demonstrated acceptable stability across the validity and clinical scales.

The Persian version of the Mini-Mult has demonstrated satisfactory validity through comparison with psychiatric clinical diagnoses, and factor-analytic findings have supported its conceptual structure. Reliability coefficients using Cronbach's alpha have ranged between 0.62 and 0.80 across different scales, indicating acceptable reliability in both clinical and research settings (Mirzamani et al., 2006). Additional studies on Iranian samples have reported Cronbach's alpha coefficients of approximately 0.80 for Hypochondriasis (Hs), 0.70 for Depression (D), 0.80 for Hysteria (Hs), 0.77 for Psychotic Deviation (Pd), 0.87 for Paranoia (Pa), 0.79 for Psychasthenia (Pt), 0.82 for Schizophrenia (Sc), and 0.71 for Hypomania (Ma) (Anoshirvani et al., 2019). The Mini-Mult is applicable to individuals aged over 16 years, or individuals with at least eight-grade level of literacy (Okhovat & Daneshmand, 2016).

Trauma History Questionnaire (THQ)

The Trauma History Questionnaire (Norris, 1990) is a self-reported instrument designed to assess lifetime exposure to potentially traumatic experiences across multiple domains, including crime-related events, interpersonal violence, natural disasters, accidents and physical or sexual trauma. This questionnaire consists of 24 dichotomous (yes/no) items with additional information obtained regarding the frequency and timing of endorsed events. The Persian version of the THQ, demonstrated acceptable internal consistency (Cronbach's alpha = 0.704). Evidence of construct validity was demonstrated by significant correlations with SLESQ ($r = 0.569$), as well as with stress ($r = 0.587$), depression ($r = 0.409$), and anxiety ($r = 0.549$) measured by the DASS-21, and PTSD symptoms measured by the PCL ($r = 0.569$). Test-retest analyses also indicated satisfactory reliability for most trauma-event items, with kappa coefficients exceeding 0.60 for 23 trauma-event items (Alavi et al., 2023).

Demographic characteristics

Demographic information was collected using a questionnaire developed by Ebrahimi-Gavam and Manani (2010). Variables relevant to the objectives of the present study were selected and adapted, including age, gender, educational level, marital status, occupation, ethnicity, place of residence, history of physical and psychological disorders, and medication or substance use. Crime-related information included criminal history, age at onset of

criminal behavior, frequency of offenses, history of residence in juvenile correctional facilities during adolescence, reason for arrest, presence of accomplices, weapons or instruments used during the offense, and the method and motivation underlying the commission of the offense.

Procedure

Assessments were conducted individually in a private room within the detention facility to ensure confidentiality and minimize environmental distractions. Participation was entirely voluntary and consistent with ethical principles governing forensic psychological research. Before the assessment, participants received a standardized verbal explanation of the study purpose, confidentiality procedures, and the fact that assessment results would have no effect on judicial decisions or sentencing outcomes. This procedure was intended to reduce defensiveness, response distortion, and malingering. Two written informed-consent forms were completed, one of which was remained by the participant.

All assessment instruments were administered in paper-and-pencil format under the supervision of trained forensic psychologists with graduate-level qualifications. Examiners monitored participants for signs of fatigue, confusion, resistance, or difficulty understanding the items and provided clarification when necessary. The average administration time for the full assessment was approximately two hours.

Questionnaires were scored manually according to established scoring procedures and normative guidelines. The PCL- α was used to classify participants into probable-PTSD and non-PTSD groups.

Statistical Analysis

Data were analyzed using IBM SPSS Statistics, version 27. Before analysis, the data were screened for missing values, outliers, and violations of the normality assumption. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were calculated for demographic variables, trauma-history variables, and MMPI scales.

Differences between defendants with and without probable PITS were analyzed using independent-samples t-tests to determine whether mean validity and clinical scores differed significantly between the groups. When the homogeneity of variance assumption was violated, Welch's correction was applied. Effect sizes were calculated using Cohen's d and interpreted according to conventional criteria: small ($< .2$), medium ($> .2$), and large ($\geq .8$). Statistical significance was established at $p < .05$ (two tailed).

In addition, exploratory correlational analyses were conducted to examine associations between total PCL- α scores and elevations on individual MMPI scales. Because the study used a retrospective causal-comparative, non-experimental design, these associations were interpreted cautiously.

Demographic characteristics were compared between the probable-PTSD and non-PTSD groups. Age was compared using Welch's independent-samples t-test, while educational level, marital status, and occupational status were compared using chi-square tests with Monte Carlo estimation of p-values because of small expected cell frequencies.

Confidentiality

To maximize response honesty and reduce concerns about legal consequences, no personally identifying information was collected. Participants were informed that all data would remain strictly confidential and would be used solely for research and statistical purposes.

Results

Using a T-score of 65 as the conventional threshold for clinically meaningful elevation on the Mini-Mult (Duckworth & Anderson, 1995), analysis of the total sample showed elevations on several key scales, most notably F (76/43), Hs (68/43), Sc (66/72), D (66/29), and Pa (60/53).

To examine whether PTSD status was associated with differences in Mini-Mult profiles, the probable-PTSD and non-PTSD groups were compared across the major validity and clinical scales. Based on the pcl- α cut-off score of 31, 41 of the participants (36%) were classified as having probable PITS, while 73 participants (64%) were classified as not having probable PTSD.

Demographic characteristics were also compared between the probable-PTSD and non-PTSD groups. The mean age was 22.31 ± 6.98 years in the probable-PTSD group and 24.70 ± 9.70 years in the non-PTSD group, with no statistically significant difference between the groups (Welch's $t = -1.01$, $p = .313$). No significant between-group differences were observed in educational level ($\chi^2 = 11.37$, Monte Carlo $p = .119$),

marital status ($\chi^2 = 1.4$, Monte Carlo $p = .12$), or occupational status ($\chi^2 = 3.4$, Monte Carlo $p = .01$). Overall, the two groups did not differ significantly in the examined demographic characteristics.

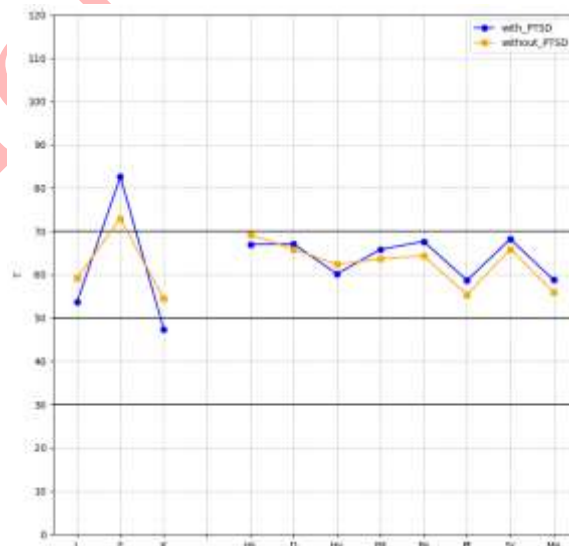
The descriptive statistics for Mini-Mult scales in the two groups are presented in table 1.

Table 1. Descriptive Statistics for Mini-Mult scales by two group

Scales	PTSD	No.	Mean	Std. Deviation	Std. Error Mean
L	probable-PTSD	41	53.0971	10.6809	1.66790
	non-PTSD	73	59.1482	11.12048	1.30100
F	probable-PTSD	41	82.6090	16.04100	2.08327
	non-PTSD	73	72.9601	20.23798	2.05388
K	probable-PTSD	41	47.4106	10.83312	1.69180
	non-PTSD	73	54.4386	13.42000	1.07128
Hs	probable-PTSD	41	67.0022	14.19233	2.21647
	non-PTSD	73	69.2300	14.84800	1.73789
D	probable-PTSD	41	67.0029	11.77001	1.83903
	non-PTSD	73	60.8006	12.31124	1.44092
Hy	probable-PTSD	41	60.1680	12.89680	2.01414
	non-PTSD	73	62.3418	12.93232	1.01361
Pd	probable-PTSD	41	60.7966	13.17220	2.05716
	non-PTSD	73	63.6320	10.69949	1.20228
Pa	probable-PTSD	41	67.6076	10.72972	1.67070
	non-PTSD	73	64.3400	13.0079	1.03270
Pt	probable-PTSD	41	58.6746	11.42684	1.78407
	non-PTSD	73	50.3340	10.74600	1.20772
Sc	probable-PTSD	41	68.0900	14.36181	2.24294
	non-PTSD	73	60.8821	14.03879	1.64312
Ma	probable-PTSD	41	58.7710	16.48823	2.07003
	non-PTSD	73	50.9073	14.00921	1.70403

The profiles of the two groups are depicted in Figure 1. The blue line indicates individuals with the probable PTSD, whereas the orange line indicates individuals without probable PTSD.

figure 1. Mini-Mult profiles of the probable-PTSD and non-PTSD groups



Preliminary analyses were conducted to evaluate the assumptions of normality and homogeneity of variance. Although Shapiro-Wilk tests indicated significant deviations from normality for several MMPI scales, skewness and kurtosis values remained within acceptable ranges (absolute values < 1), supporting the use of parametric procedures. Homogeneity of variance was assessed using Levene's test. The assumption of Equal variances was met for all scales except F; therefore, Welch's correction was applied where appropriate.

Independent-samples t-tests were then conducted to compare MMPI validity and clinical scale scores between defendants with and without probable PTSD. Significant between-group differences emerged on the MMPI validity scales, whereas differences on clinical scales did not reach statistical significance. These findings suggest that defendants with probable crime-related PTSD differed primarily in response-style and distress-related validity indicators rather than in core clinical psychopathology scales.

To further evaluate the practical significance of group differences, effect sizes were calculated using Cohen's *d*, Hedges' *g*, and Glass's Δ . Moderate effect sizes were observed for the L and K scales, indicating that these differences may have practical and clinical relevance beyond statistical significance.

Findings regarding previous exposure to traumatic events showed that 106 of participants (93%) reported Crime-related experiences, 86 (70.4%) reported a history of natural-disaster-related incidents, and 28 (21%) reported Physical and sexual experiences.

Discussion and Conclusion

The psychological profiles of violent offenders in the present study demonstrated mean T-scores within the normal range on the L (27/2) and K (21/9) validity scales, suggesting generally acceptable level of self-control and response patterns. However, a proportion of participants had elevated L-scale scores, which may reflect defensiveness or social desirable responding rather than deliberate deception. One thing that should be considered when interpreting the L-scale, is the educational composition of the sample. Most participants had no university education and a considerable proportion had not completed secondary education. Previous research has shown that educational attainment may influence scores on certain MMPI validity scales (Duckworth & Anderson, 1995). Therefore, relatively limited educational attainment observed in the present sample may provide relevant context for interpreting the L-scale scores. However, because the association between educational level and MMPI scores was not directly examined in the present study, education should not be considered an explanatory factor for the observed profile. More broadly, previous studies have reported an association between lower educational attainment and criminal behavior (Farrington et al., 2016; Harlow, 2003), although the direction and mechanisms of this relationship cannot be determined from the present data. At the same time, elevated L-scale scores should be interpreted cautiously within the Iranian cultural context. Previous findings have indicated that average L-scale scores in Iranian population tend to be higher than those reported in some other cultural groups (Rahiminezhad, 2003). Therefore elevated scores in the current sample may be better interpreted as reflecting a tendency to minimize psychological difficulties and present oneself in a more socially acceptable manner rather than as evidence of intentional dishonesty or malingering.

The demographic characteristics examined in this study, did not differ significantly between the probable-PTSD and non-PTSD groups in terms of age, educational level, marital status, and occupational status. This suggests that the two groups were generally similar in terms of the demographic characteristics and the differences observed in their MMPI profiles were unlikely to be related to demographic differences.

Among all validity and clinical scales, the F scale showed the highest elevation ($T=76/43$). This finding may be interpreted from several perspectives. First, because participants had not yet received a final judicial verdict, elevated anxiety and emotional distress would be expected. Second, despite explanations regarding the independence of the study from legal proceedings, some participants may have exaggerated symptoms in hopes of obtaining sentence reduction or legal advantage (Duckworth & Anderson, 1995). However, the most plausible interpretation is the genuine presence of severe or unusual psychological distress. Elevated F scores are frequently observed in forensic populations and among individuals with PTSD and may reflect intense psychological symptoms rather than intentional malingering (Mirzamani & Bolhari, 1999). Because significant differences in F-scale elevations remained after participant were categorized according to PTSD symptoms severity, these elevations may be more strongly associated with trauma-related distress than with involvement in judicial proceedings alone.

The overall pattern of elevated F scores combined with relatively lower K scores resembles the response configuration frequently reported in individuals with PTSD (Mirzamani & Bolhari, 1999). Although this pattern may indicate relatively open and non-defensive responding (Keane et al., 1984), in trauma populations it is commonly interpreted as reflecting genuine psychological distress rather than symptom fabrication (Duckworth & Anderson, 1995). In this context, the profile may reflect authentic emotional suffering and trauma-related symptomatology rather than malingering. Limited awareness of such patterns among judicial authorities and

forensic personnel may contribute to cognitive bias and inaccurate interpretations of defendants' behaviors as deceptive or manipulative (Cooper & Meterko, ۲۰۱۹). Potentially reducing trust in their statements during investigative procedures. Although such skepticism may partly result from repeated exposure to deceptive behavior in forensic settings, the current findings highlight the importance of psychological screening during the early stages of judicial processing. Administering brief screening tools such as the Mini-Mult following arrest may improve understanding of defendants' psychological functioning throughout interrogation, legal evaluation, and rehabilitation planning.

The F-K index in the present study was also notably elevated (۲۴.۵۲). Traditionally, scores above ۱۰ have been considered suggestive of symptom exaggeration or attempts to present oneself as psychologically impaired (Duckworth & Anderson, ۱۹۹۵). However, elevated F-K index are also frequently observed among incarcerated individuals with genuine psychological disorders (Osuna et al., ۲۰۱۵). Therefore, in the current sample, elevated F-K scores may reflect severe psychological distress, attempts to deny responsibility, efforts to obtain legal benefit, or some combination of these factors. Importantly, the probable-PTSD group demonstrated an F-K index nearly twice that of the non-PTSD group, suggesting that this index may have potential utility as a preliminary indicator for identifying individuals at higher risk of PITS.

Regarding PTSD, approximately one-third of the violent offenders in this study were classified as having probable full or partial PTSD symptoms associated with perpetrating violent crimes (PITS). This finding is consistent with previous literature demonstrating elevated rates of PTSD among violent offenders (Badenes-Ribera et al., ۲۰۲۱; Baranyi et al., ۲۰۱۸; Facer-Irwin et al., ۲۰۲۳; Soh et al., ۲۰۲۳; Spitzer et al., ۲۰۰۱). Comparison of MMPI profiles between offenders with and without probable PITS showed that the Sc and D were among the most elevated clinical scales, consistent with previous studies of PTSD-related MMPI patterns (Mirzamani & Bolhari, ۱۹۹۹; Scheibe et al., ۲۰۰۱; Wilson & Walker, ۱۹۹۰). Although between-group differences on the clinical scales did not reach statistical significance, this may partly reflect the limited sample size and substantial within-group variability associated with the heterogeneous types of violent offenses included in the study.

Trauma exposure was highly prevalent in the sample, with most participants reporting at least one prior traumatic experience. Participants were instructed to answer the PTSD questionnaire specifically with reference to the crime for which they had been arrested. Nevertheless, some participants may have met criteria for PTSD due to earlier traumatic experiences unrelated to the current offence. Consequently, significant trauma-related symptoms may not necessarily have been attributed to the current crime. If PTSD symptoms had been assessed in relation to all prior traumatic experience, the estimated prevalence of PTSD within the sample might have been higher.

Nevertheless, the validity scales-particularly F-appeared to differentiate the two groups more clearly and, in combination with the F-K index, may serve as preliminary indicators for identifying individuals with probable PITS who require more comprehensive trauma assessment. These indicators should be interpreted cautiously due to the influence of general distress and the forensic context.

In the probable-PTSD group, the highest elevations were observed on the F, Sc, and Pa, followed closely by the D and Hs. Although variability within the sample limits definitive conclusions, these findings suggest that trauma-related psychological distress among violent offenders is clinically significant and warrants further assessment.

An important limitation of the presented study is the predominantly male participants (۹۸.۲%). This is consistent with previous findings, indicating higher representation of men in violent offending (CDE, ۲۰۲۵; Mohammadkhani et al., ۲۰۰۶; Rostami Tabrizi, ۲۰۰۹). This limitation restricts the generalization of the findings across other genders and MMPI profiles and PTSD-related findings should be interpreted in relation to male violent offenders.

Early identification of trauma-related symptoms and individuals at risk for PITS among violent offenders may provide valuable information for judicial authorities, facilitate more appropriate interview conditions, and reduce the risk of re-traumatization, dissociation, memory impairment, or exacerbation of PTSD symptoms during investigative procedures (Evans et al., ۲۰۰۷a, ۲۰۰۹; Risan et al., ۲۰۲۰). It may also facilitate referral to psychotherapy and psychological rehabilitation services within correctional settings. Such interventions may improve psychological functioning and rehabilitation outcomes and may contribute to reducing future violence and recidivism. Therefore, the findings of the present study may be useful to police case officers, judicial

authorities, forensic psychologists, and prison rehabilitation services when designing trauma-informed interventions tailored to the psychological needs of violent offenders.

Ethical Considerations

The study was conducted in accordance with the ethical principles of the Declaration of Helsinki and its subsequent amendments. The Research was approved by the Ethics Committee of the Faculty of Psychology and Educational Sciences of University of Tehran (IR.UT.PSYEDU.REC.۱۴۰۴,۰۹۹). A paper-and-pen informed consent form was presented before administration of the questionnaire; it described the study aims, participation conditions, and confidentiality of personal information. Participants read the information and provided consent before proceeding with the assessment.

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Conflict of Interest

The authors declared no conflicts of interest related to this research.

Article in Press

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