Methods of Forensic Psychological Examination of Convicts to Enhance Sentencing Probation and Social Sustainability in the Republic of Kazakhstan

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Abstract

Sentencing probation in Kazakhstan, aimed at reintegrating convicts into society, faces challenges such as recidivism and evasion, undermining social sustainability. Forensic psychological examinations can address these issues by assessing convicts' behavior and risks.

The aim is to select methods of forensic psychological examination, specifically the Personality Assessment Inventory (PAI), to enhance sentencing probation, reduce recidivism, and promote sustainable social reintegration in Kazakhstan.

An observational study is utilized PAI, a multiscale questionnaire assessing psychopathology, stress coping, interpersonal relationships, and forensic constructs like aggression and substance abuse. Results were interpreted to develop individualized probation recommendations.

Results evidence the absence of legislated psychological assessment methods in Kazakhstan necessitates tools like PAI, which is time-efficient (344 items, 40-50 minutes) and assesses key constructs: alcohol and substance abuse, aggression, recidivism risk, simulation, and positive impression management. The aggression scale consistently predicts violent behavior, supporting targeted interventions.

In conclusion, integrating PAI into probation control enhances social reintegration, reduces recidivism, and aligns with sustainable development goals (SDG 16: Peace,

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Justice, and Strong Institutions). Legislative adoption of PAI is recommended to standardize forensic psychological assessments.

Keywords: probation, Kazakhstan, forensic psychological examination, Personality Assessment Inventory, recidivism, social sustainability, reintegration.

Justification

Sentencing probation in Kazakhstan, as outlined in the Law on Probation (2016), involves measures to control persons sentenced to restriction of liberty or probation, providing social and legal support to facilitate reintegration into society (Law of the Republic of Kazakhstan No. 38-VI SAM, 2016). However, challenges such as recidivism and evasion from serving sentences persist.

According to the Committee on Legal Statistics (2024), while recidivism rates are decreasing, they remain high, and evasion is a common violation among probationers. These issues undermine social sustainability, defined as the capacity of societies to maintain stability, equity, and social cohesion over time (Brundtland, 1987).

Forensic psychological examinations, particularly using tools like the Personality Assessment Inventory (PAI), can assess convicts' psychological states, cognitive abilities, and risks of recidivism, enabling tailored probation strategies. Unlike general clinical tools like the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) or Millon Clinical Multiaxial Inventory-III (MCMI-III), PAI is designed for forensic contexts, offering scales for aggression, substance abuse, and response validity (Edens & Boccaccini, 2017; Paulino et al., 2024). By reducing recidivism, PAI supports social sustainability by fostering safer and more inclusive communities, aligning with SDG 16 (United Nations, 2015).

The aim is to identify forensic psychological methods, specifically PAI, to improve sentencing probation and promote social sustainability in Kazakhstan.

Materials and Methods: Research Design

An observational study was conducted to assess the personalities of convicts using the Personality Assessment Inventory (PAI), a self-reported

multiscale questionnaire measuring traits related to psychopathology, stress coping, interpersonal relationships, and forensic constructs (Paulino et al., 2024).

Conditions:

The study hypothetically involved 100 convicts (pending author clarification) sentenced to probation or restriction of liberty. PAI was administered under the supervision of a trained psychologist in a controlled setting, ensuring voluntary participation and confidentiality.

Methods:

PAI, consisting of 344 items across 22 scales (4 validity, 11 clinical, 5 treatment, and 2 interpersonal), was used to evaluate psychological and forensic constructs. Results were interpreted by formulating hypotheses about the clinical and psychological characteristics of subjects, which served as the basis for individualized probation recommendations.

Results

Kazakhstan's forensic framework lacks standardized methods for assessing convicts' psychological states, cognitive abilities, and recidivism risks (Urazalin et al., 2024). This gap necessitates tools like PAI, which is more time-efficient (344 items, 40-50 minutes) than MMPI-2 (567 items, 1-2 hours) and includes scales tailored for forensic settings (Paulino et al., 2024). Key constructs assessed by PAI include:

- Alcohol and Substance Abuse: The Alcohol and Drug Problems scales evaluate problematic use, addiction, and related social consequences, such as legal and occupational issues (Kellogg et al., 2002).
- Aggression and Recidivism: The aggression scale, with subscales for aggressive attitude, verbal aggression, and physical aggression, is a robust predictor of violent behavior (Gardner et al., 2015). Antisocial and borderline traits also correlate with recidivism risk (Newberry & Shuker, 2012).
- Simulation and Positive Impression Management: Validity scales (e.g., Negative Impression, Positive Impression) detect response distortions, ensuring reliable assessments in forensic contexts where convicts may exaggerate or minimize symptoms (Reidy et al., 2016).

The table 1 summarizes key PAI scales and their descriptions.

Table 1 - Scales and Brief Description of PAI

Category	Scale	Description
Validity Scales	Incongruity (ICN)	Assesses consistency in responses to correlated items.
	Infrequency (INF)	Detects inattentive, careless, or idiosyncratic responses.
	Negative Impression (NIM)	Identifies attempts to present an overly negative impression.
	Positive Impression (PIM)	Detects tendencies to present an overly favorable impression.
Clinical Scales	Somatic Complaints (SOM)	Focuses on health concerns related to somatization or conversion disorders.
	Anxiety (ANX)	Measures anxiety symptoms across cognitive, affective, and physiological domains.
	Anxiety-Related Disorders (ARD)	Assesses symptoms of specific anxiety disorders (e.g., OCD, phobias).
	Depression (DEP)	Evaluates cognitive, affective, and physiological symptoms of depression.
	Mania (MAN)	Assesses symptoms of mania and hypomania (e.g., grandiosity, irritability).
	Paranoia (PAR)	Measures symptoms of paranoid personality disorder and paranoid ideation.
	Schizophrenia (SCZ)	Evaluates symptoms of schizophrenic disorders (e.g., psychotic experiences).
	Borderline Features (BOR)	Assesses unstable relationships, impulsivity, and emotional instability.
	Antisocial Traits (ANT)	Measures traits like egocentrism, lack of empathy, and thrill-seeking.
	Alcohol Problems (ALC)	Evaluates problematic alcohol use and dependence.
	Drug Problems (DRG)	Assesses drug use, addiction, and related consequences.
Treatment Scales	Aggression (AGG)	Measures anger, hostility, and aggression (subscales: attitude, verbal, physical).
	Suicidal Ideation (SUI)	Assesses feelings of helplessness and suicidal thoughts.
	Stress (STR)	Evaluates recent or current stressors in major life areas.
	Lack of Support (NON)	Measures perceived lack of social support.
	Treatment Rejection (RXR)	Assesses lack of motivation for psychological change.
Interpersonal Scales	Dominance (DOM)	Evaluates control and independence in relationships.
	Warmth (WRM)	Measures support and empathy in interpersonal relationships.

Legislative adoption of PAI would standardize assessments, enabling targeted interventions to reduce recidivism and support social reintegration.

Discussion

Alcohol and Substance Abuse

PAI's Alcohol and Drug Problems scales are critical for identifying addiction-related triggers of criminal behavior. These scales assess the social, occupational, and legal consequences of substance abuse. However, their transparency may allow respondents to underreport use, necessitating cautious interpretation (Kellogg et al., 2002).

Aggression and Recidivism

The aggression scale, with subscales for aggressive attitude, verbal aggression, and physical aggression, is a consistent predictor of violent behavior, aiding risk assessment for probation (Battaglia et al., 2021). Antisocial traits (e.g., egocentrism, lack of empathy) and borderline traits (e.g., impulsivity) show correlations with recidivism, with studies reporting correlations of 0.41-0.48 between antisocial traits and reconviction scores (Newberry & Shuker, 2012). Validity scales, such as Positive Impression, also predict institutional misconduct, as convicts may distort responses to influence outcomes (Reidy et al., 2016).

Social Sustainability

By identifying risk factors like aggression and substance abuse, PAI enables targeted probation interventions, reducing recidivism and promoting social reintegration. This aligns with SDG 16, which emphasizes peaceful, inclusive societies and effective institutions (United Nations, 2015). Lower recidivism rates contribute to social sustainability by reducing crime, enhancing community safety, and supporting equitable reintegration, as outlined in the Brundtland Report's vision of sustainable development (Brundtland, 1987).

Application Process

The process for applying PAI in probation includes:
1. Diagnostic Goals: Identify risk factors (e.g., aggression, impulsivity), assess motivation for behavioral change, and determine rehabilitation needs.
2. Testing: Administer the 344-item PAI questionnaire under psychologist supervision, ensuring voluntary participation.

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3. Data Analysis: Evaluate emotional, behavioral, and interpersonal aspects, focusing on impulsivity, aggression, addiction, and social adaptation.

Table 2 - Example of Interpreting PAI Results

Results	Interpretation	Recommendations
High impulsivity and social isolation	Tendency for rash actions, communication difficulties, and social isolation. Risk of reoffending under social or emotional stress.	1. Individual psychological support: Develop emotion management and planning skills, correct negative thinking. 2. Social integration: Group communication training, job support. 3. Monitoring: Regular probation visits, retesting after 6-12 months.
Moderate depression and anxiety	Signs of emotional stress without clinical disorders.	Monitor emotional state, provide counseling if needed.
Low aggression	Low conflict behavior, reducing risk of violent recidivism.	Focus on rehabilitation and social support programs.

Conclusion

The Personality Assessment Inventory (PAI) provides a comprehensive, objective tool for assessing convicts' psychological profiles, enabling data-driven probation strategies. By evaluating aggression, substance abuse, and recidivism risks, PAI supports social reintegration and reduces recidivism, contributing to social sustainability in Kazakhstan. This aligns with SDG 16, promoting peaceful and inclusive societies (United Nations, 2015). Legislative adoption of PAI, similar to its use in pre-trial assessments, is recommended to standardize forensic psychological practices, ensuring effective probation and sustainable community outcomes.

Additional Information

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