The Relationship between Personality Disorders and the Type of Crime Committed and Substance Used among Prisoners

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Abstract

Background: Prisoners are a vulnerable group within societies, and also threaten society due to their dangerous behavior. The objective of the present study was to evaluate the relationship between prisoners’ personality disorders and their crime and substance use.

Methods: This was a descriptive-correlational study. The statistical population consisted of all prisoners of Kerman, Iran. Through stratified random sampling, 228 prisoners (114 women and 114 men) were selected as the study subjects. Data were collected through clinical interviews by a psychiatrist [structured interviews based on the Diagnostic and Statistical Manual of Mental Disorders-4th Edition (DSM-IV)], a social worker, and a physician and using a demographic characteristics questionnaire and the Millon Clinical Multiaxial Inventory-2nd Edition (MCMI-II) (the 175-item Persian version). Data were analyzed using frequency, percentage, and Fisher's z-distribution in SPSS software.

Findings: The results showed that 87.3% of women and 83.3% of men had a personality disorder at the time of committing the crime. Moreover, 46.5% of the target population had developed substance dependence at the time of committing the crime. The highest percentage of substance abuse in both women and men was related to opium, especially in the age group of 18-28 years. The highest rates of mental disorders were related to major depressive disorder (MDD), dependent personality disorder (DPD), borderline personality disorder (BPD), and antisocial personality disorder (ASPD), respectively. In these personality disorders, opium, methamphetamine, heroin, and alcohol, respectively, had the highest rates of use. The results of Fisher's z-distribution illustrated a significant relationship between personality disorders and type of crime committed and substance used. The total rate of substance abuse was lower in sexual offenses and fraud, but was the highest in theft and drug trafficking.

Conclusion: The presence of personality disorders in the target population is indicative of the need for judicial officials’ attention to this effective factor in crime and the use of mental health services and treatment instead of the penalty of deprivation of liberty.

Keywords: Personality disorder; Crime; Drugs; Prisoners

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Introduction

Personality is a psychological variable that affects all human behavior in personal and social life aspects and can sometimes be problematic for the individual and others due to maladaptive traits. Eysenck believes that the combination of environmental circumstances and neurological factors is the cause of different types of crime. This hypothesis implies that some individuals are more likely to commit crime. Eysenck believes that personality is the main factor in criminal behavior, has a decisive role in crime, and their study is the only systematic method through which criminal behavior can be explained.\(^1\)

The identification of individual characteristics of criminals and antisocial behavior tendencies in humans, evaluation of institutional factors in response to criminal tendency and their development process from potentiality to actuality, assessment of the degree of responsibility and consciousness in committing crime, and the role of the unconscious in the elimination or reduction of legal culpability are the most important concerns of community agents, particularly judicial authorities, psychologists, and psychiatrists.\(^2\)

The findings of a study on 440 prisoners in Tehran, Iran, showed that 88% of prisoners were men.\(^3\) Moreover, 51.8%, 15.7%, 10.2%, 8.6%, 5.0%, 1.4%, 3.0%, and 1.6% were imprisoned due to fraud, theft, blood money payment, infidelity, denying, and failure to pay dowry, murder, and smuggling, respectively.\(^3\) Furthermore, the prevalence of avoidant personality disorder (AvPD), narcissistic personality disorder (NPD), antisocial personality disorder (ASPD), aggressive-masochistic personality disorder, passive-aggressive personality disorder, and self-defeating personality disorder was higher than other disorders.\(^3\) A significant relationship was observed between type of crime and schizoid personality disorder (SPD) \((r = 0.182)\), AvPD \((r = 0.189)\), histrionic personality disorder (HPD) \((r = 0.250)\), and obsessive-compulsive disorder (OCD) \((r = 0.209)\).\(^3\)

Other studies showed that the prevalence of clinical personality patterns was 46.7% among imprisoned men and depressive personality disorder (23.3%) was the most prevalent disorder.\(^45\) The prevalence of clinical personality patterns among imprisoned women was 61.2% and schizotypal personality disorder (STPD), paranoid personality disorder (PPD), and borderline personality disorder (BPD) were, respectively, the most prevalent among men, and PPD, SPD, and BPD were, respectively, the most prevalent among women. In the Clinical Symptoms Index, the most prevalent disorders among men was anxiety disorder (9.9%) and among women was substance dependence disorder and posttraumatic stress disorder (PTSD).\(^4\) In the Severe Symptoms Index, the most prevalent disorders among men were thought disorder (TD) (4.8%), major depressive disorder (MDD) (2.4%), and delusional disorder (20.0%).\(^4\)

The results of a study on prisoners convicted of murder showed that 81% of the subjects had no disorders, 14% were susceptible to personality disorders, and 5% had some symptoms of disorders.\(^6\) In addition, the highest and lowest rates of personality disorder were related to MDD (69.2%) and substance dependence disorder (83.3%), respectively, and only 1% of the statistical population had BPD.\(^6\)

In the study conducted on addicts in the prison of Kashan, Iran, the highest prevalence was, respectively, observed in ASPD (12 individuals; 24%), MDD (10 individuals; 20%), hypomania (7 individuals; 14%), hypochondriasis (5 individuals; 10%), HPD (5 individuals; 10%), PPD (4 individuals; 8%), anxiety disorder (4 individuals; 8%), and SPD (3 individuals; 6%).\(^7\)

In a study on prisoners charged with narcotics-related crimes, 85.2% of the studied individuals had personality disorders; the most prevalent disorders were HPD (42.4%) and ASPD (40.4%) and the least prevalent disorder was SPD (14.6%).\(^8\) Moreover, mixed personality disorder was observed in 52.6% of the subjects. Furthermore, occupation, education, and marital status had a significant correlation with drug trafficking.\(^8\)

Another study reported a 55.2% prevalence (112 individuals) of personality disorders among prisoners.\(^9\) ASPD (18.2%) was the most prevalent disorder.\(^9\)\(^12\) SPB (8.4%), dependent personality disorder (DPP) (8.4%), BPD (7.4%), mixed personality disorder (3.4%), OCPD (3.0%), HPD (3.0%), PPD (2.5%), and other personality disorders (0.9%) were also observed.\(^9\) The evaluation of the prevalence of personality disorders based on crime type showed that the highest prevalence was related to theft (64.1%),

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drug addiction (60.9%), iniquity and murder (55.6%), drug trafficking (55.0%), and financial crimes (40.9%), respectively. The rate of prisoners and criminals in Iran has increased in recent years; the number of prisoners in 1985, 1998, 2001, and 2013 was 42249, 153444, 179292, and 217851 individuals, respectively. The issues of prisons, as the last stations for criminals and offenders, have always been a cause for concern for judicial, police, and prison officials. Thus, it is necessary to study different elements and components of prisons and prisoners from different perspectives in order to realize the ultimate goal of prisons which is the rehabilitation of criminals. It is noteworthy that through this study and identifying criminals’ personality traits and their relationship with crime type, steps can be taken more easily and with better and more effective planning toward behavior modification in criminals.

**Methods**

This study was conducted during the first 4 months of 2013 in the prison of Kerman, Iran, which accommodates 5000 prisoners. The subjects were selected through stratified random sampling according to the crime of the offenders. First, the main crimes were divided into 6 subcategories of financial crimes (fraud, and non-sufficient funds (NSF) check), domestic crimes (lack of payment of infaq), violent crimes (murder, accessory to murder, rape and accessory to rape, abduction and accessory to abduction, and disputes and assaults), non-violent crimes (theft, and alcohol consumption), substance use and trafficking (possession and transportation of drugs, and drug use), and crimes against chastity (Illicit relations, adultery, and sodomy). Subsequently, according to the population volume of each crime, the names of the perpetrators of these crimes were randomly selected using the computer center. The study inclusion criteria consisted of being a resident of Kerman and obtaining a non-definitive ruling. Before the study, the topic and objective of the study were explained to the subjects, they were assured of the confidentiality of data and lack of judicial misuse of data, and informed consents were obtained from them.

Data were collected through clinical interviews by a psychiatrist [structured interviews based on the Diagnostic and Statistical Manual of Mental Disorders-4th Edition (DSM-IV)], a social worker, and a physician and using a demographic characteristics questionnaire and the Millon Clinical Multiaxial Inventory-2nd Edition (MCMI-II) (the 175-item Persian version). The personality disorders of the subjects were determined based on their score in the MCMI-II. The MCMI-II was designed by Millon in 1977 and reviewed in 1990. It assesses 13 personality disorders through 175 true-false questions. These personality disorders include SPD, AvPD, DPD, HPD, NPD, ASPD, sadistic personality disorder, OCD, passive-aggressive personality disorder, Self-defeating personality disorder, STPD, BPD, and PPD. The psychometric properties of the MCMI-II (test-retest reliability, internal consistency, and validity) have been evaluated and approved in foreign studies. Through the preliminary validation of the MCMI-II in Iran, the reliability of the inventory using Kuder-Richardson Formula 20 (KR-20) was reported as 0.85 and the reliability of its retest was reported as 0.86.

Data were analyzed using frequency, percentage, and Fisher's z-distribution in SPSS software (version 20, IBM Corporation, Armonk, NY).

**Results**

The age of 122 (53.5%) prisoners ranged between 18 and 28 years. Among this number, there were 71 women and 51 men. In terms of education, 68 (29.8%) individuals had guidance school diploma and 59 (25.9%) individuals had elementary school education. Moreover, 124 (54.4%) prisoners had a part-time or full-time job, 112 (49.6%) were married, 65 (28.5%) were single, and 50 (21.9%) were divorced. In addition, 114 subjects (50.5%) had 1-3 children, and 130 (58.0%) subjects reported a below average economic status. Among the study participants, 51 (44.7%) women and 53 (46.5%) were addicts; in total, 45.6% of prisoners were addicts. The frequency of each crime according to gender has been provided in table 1.

The results presented in table 2 show that 73.3% of imprisoned women and 79.8% of imprisoned men used opium. The results of chi-squared test based on table 3 illustrated a significant relationship between personality disorders and crime type (P < 0.001). In addition, a significant relationship was observed between personality disorders and the type of substance used (P < 0.001).
Table 1. Frequency and percentage of crime among men and women

| Crime                        | Men     | Women    |
|------------------------------|---------|----------|
|                              | n (%)   | n (%)    |
| Theft                        | 32 (28.1) | 26 (22.8) |
| Alcohol consumption          | 3 (2.6)  | 1 (0.9)  |
| Drug-related crime           | 26 (22.8) | 54 (47.4) |
| Murder                       | 12 (10.5) | 9 (7.9)  |
| Rape                         | 7 (6.1)  | 1 (0.9)  |
| Sodomy                       | 2 (1.8)  | 0 (0)    |
| Financial crimes             | 5 (4.4)  | 0 (0)    |
| Domestic crimes (lack of payment of infaq) | 1 (0.9)  | 0 (0)    |
| Fraud                        | 1 (0.9)  | 4 (3.5)  |
| Abduction                    | 9 (7.9)  | 3 (2.6)  |
| Adultery                     | 3 (1.7)  | 1 (0.9)  |
| Illicit relations            | 3 (2.6)  | 8 (7.0)  |
| Disputes and assaults        | 10 (8.8) | 3 (2.6)  |
| Accessory to murder          | 0 (0)    | 4 (3.5)  |
| Total                        | 114 (100)| 114 (100)|

Table 2. Frequency and percentage of the type of substance used by prisoners

| Type of substance          | Women     | Men       |
|----------------------------|-----------|-----------|
|                            | n (%)     | n (%)     |
| Opium                      | 81 (73.3) | 91 (79.8) |
| Cigarettes                 | 0 (0)     | 1 (0.9)   |
| Methamphetamine           | 13 (11.4) | 8 (7.0)   |
| Hashish                    | 3 (2.6)   | 1 (0.9)   |
| Heroin                     | 11 (9.6)  | 3 (2.6)   |
| Alcohol                    | 0 (0)     | 8 (7.0)   |
| Psychotropic substances    | 6 (5.6)   | 2 (1.8)   |
| Total                      | 114 (100) | 114 (100)|

Discussion

Many studies have shown that offenders commonly have severe personality disorders. Therefore, the root of social problems and issues which result in crime are directly or indirectly related with human personality. The results of the present study showed that the highest rates of crime by women were related to drug-related crimes (47.4%), theft (22.8%), third-degree murder (7.9%), and illicit relations (7.0%), respectively. Furthermore, the highest rates of crime by men were related to first-degree murder (28.1%), drug-related crimes (22.8%), murder (10.5%), disputes and assaults (8.8%), abduction (7.9%), and rape (7.0%), respectively. These results were in agreement with that of previous studies. The comparison of the rate of drug-related crimes between men and women is suggestive of the higher inclination of imprisoned women toward high-risk behavior with the consideration of the crime benefits and losses calculation principle, Merton’s Anomie Theory, and benefit through the paths defined in the target population. Theft had the highest rate among men; the inclination of men was higher toward theft due to the masculine nature in legal escape and pursuit. Violent crimes and those requiring physical strength which is unique to the masculine nature were more common among men; however, illicit relations and fraud were more prevalent among women.

The highest percentage of drug use among men was, respectively, related to opium (79.8%) and alcohol and methamphetamine (7.0%). In women, the highest percentage of drug use was related to opium (73.3%), methamphetamine (11.4%), and heroin (9.6%), respectively. Moreover, the rate of consumption of pills and psychotropic substances was higher among women compared to men. The results also showed that most common personality disorders were MDD, ASPD, and BPD. This finding was in accordance with that of previous studies.

The results showed a significant relationship between personality disorders and crime type. The highest percentage of presence of personality disorder was related to DPD and MDD in drug-related crimes. Some drug users had probably attempted to traffic drugs and some others had tried to exhibit their superiority in performing high-risk behavior to their peers. This finding was also in agreement with that of previous studies.
Table 3. Frequency of personality disorders according to crime type

| Personality disorders       | Theft | Alcohol consumption | Drug trafficking | Murder | Accessory to murder | Rape | Sodomy | Financial crimes | Fraud | Abduction | Adultery | Illicit relations | Disputes and assaults | Total |
|-----------------------------|-------|---------------------|------------------|--------|--------------------|------|--------|------------------|-------|-----------|----------|------------------|-----------------------|-------|
| Healthy                     | 6     | 2                   | 9                | 1      | 2                   | 2    | 2      | 2                | 2     | 1         | 2        | 1                | 2                     | 28    |
| MDD                         | 13    | 1                   | 14               | 2      | 1                   | 2    | 1      | 4                | 1     | 1         | 4        | 2                | 2                     | 40    |
| Masochistic personality disorder | 1   |                     | 1                |        |                     |      |        |                  |       |           |          |                  | 2                     |       |
| AvPD                        |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| PPD                         |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| STPD                        |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| HPD                         |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| OCD                         |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 2                     |       |
| BPD                         |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 2                     |       |
| Pessimistic personality disorder |     |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| ASPD                        |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| DPD                         |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| Sadistic personality disorder |     |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| Bipolar disorder            |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| PTSD                        |       |                     |                  |        |                     |      |        |                  |       |           |          |                  | 1                     |       |
| Total                       | 26    | 4                   | 31               | 8      | 1                   | 3    | 1      | 4                | 1     | 3         | 1        | 9                | 2                     | 7     | 99    |

MDD: Major depressive disorder; AvPD: Avoidant personality disorder; PPD: Paranoid personality disorder; STPD: Schizotypal personality disorder; HPD: Histrionic personality disorder; OCD: Obsessive-compulsive disorder; BPD: Borderline personality disorder; ASPD: Antisocial personality disorder; DPD: Dependent personality disorder; PTSD: Posttraumatic stress disorder
Furthermore, the impact of economic problems on individuals’ mental status can be evaluated based on the feeling of deprivation theory of John Dollard and Leonard Web and individuals’ reactions in order to reduce this pressure and achieve personal goals can be evaluated based on Merton’s Anomie Theory. Moreover, those who committed theft and drug trafficking, which had the maximum rate in the target population, had MDD, ASPD, DPD, bipolar disorder, or HPD. The determination of their mental disorder and the comparison of these statistics with other studies in Iran and other countries revealed an agreement in the findings. Based on the results of the present study and previous studies, high rate of addiction, inefficiency of the education system, lack of attention to mental health and the diagnosis and treatment of mental disorders among prisoners in addition to economic problems, inefficiency of crime prevention governmental systems in areas with high crime rates due to lack of use of public participation, and the inefficiency of the family in children’s upbringing and socialization (due to parents’ involvement in other issues and cultural poverty) have been determined as the main causes of crime. These issues require preventive measures by the government.

The results of the present study are related to imprisoned addicts and cannot be generalized all addicts in the population. Thus, it is suggested that future studies be conducted on all addicts. Moreover, to determine whether the prison environment can cause or aggravate psychological symptoms, it is suggested that the mental health of individuals be examined before imprisonment. It is also suggested that further studies with more subjects be conducted in other areas of the country to produce generalizable results.

**Conclusion**

A significant relationship was observed between personality disorders, and the type of crime committed and substance used. Thus, attention to psychological and behavioral aspects of prisoners, in addition to the criminological and sociological aspects of their behavior, by judicial officials is recommended.

**Conflict of Interests**

The Authors have no conflict of interest.

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چکیده
مقدمه: زندانیان یکی از گروه‌هایی هستند که به شمار می‌روند و در این حال با برخورداری از گروه‌های مخرب، تهدیدی برای جامعه محسوب می‌شوند. هدف از انجام پژوهش حاضر بررسی رابطه اختلالات شخصیت با نوع جرم و ماده مصرفی در زندانیان بود.

روش‌ها: این پژوهش به روش توصیفی-همبستگی انجام گردید. جامعه آماری مطالعه، زندانیان شهر کرمان بودند که به روش نمونه‌گیری تصادفی طبقه‌بندی شدند. 228 زندانی (114 زن و 114 مرد) به عنوان نمونه انتخاب شدند. داده‌ها به وسیله مصاحبه‌های پزشکی، روان پزشکی، ساختار ساخته بر اساس (DSM-IV) Diagnostic and Statistical Manual of Mental Disorders-4th Edition (کلمون Millon Clinical Multiaxial Inventory) و تست شخصیتی Millon Clinician Clinical Multiaxial Inventory (فرم MCMI-II) بر اساس Fisher's z مورد تجزیه و تحلیل قرار گرفت.

یافته‌ها: 3/87 درصد زنان و 3/83 درصد مردان در زمان ارتکاب جرم دارای نوعی اختلال روانی بوده و 5/46 درصد آنان در حین انجام جرم اعتیاد داشتند. تریاک بالاترین نرخ ماده مصرفی در هر دو گروه بخصوص سنین 28-18 سال را به خود اختصاص داد. بیشترین نرخ اختلال روایی افسردگی و بی‌دمتی و گسترش اجتماعی بود که مصرف ماده مخدر تریاک در این اختلالات رتبه نخست و پس از آن شیشه، هروئین و مواد الکلی قرار داشت. بین اختلالات شخصیت، نسبت به نوع جرم و ماده مصرفی رابطه معنی‌داری مشاهده شد. کمترین میزان سوء مصرف مواد در جرائم جنسی و کلاهبرداری و بیشترین سوء مصرف مواد در جرایم سرقت و حمل ماده مخدر بود.

نتایج‌گیری: وجود اختلالات شخصیت در جامعه هدف نشان دهنده نیاز به توجه مقامات قضاوتی به این شاخص مؤثر در ارتکاب جرم و پیشگیری از خدمات و مراقبت‌های بهداشتی و سازمان‌های محترم می‌باشد.

واژگان کلیدی: اختلالات شخصیت، جرم، ماده مخدر، زندانیان

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