Predicting criminals’ personality characteristics by using the Minnesota Multiphasic Personality Inventory (MMPI) in committing type of crime

Mustafa Mohebbi¹*, Ali Mohebbi² and Ahmad Soori³

¹MA, Counseling Center, University Police, Tehran, IRAN
²Associate Professor, Department of education, University Police, Tehran, IRAN
³Associate Professor, Department of Psychology, University Police, Tehran, IRAN

Corresponding Email: psy.amin.93@gmail.com

ABSTRACT

Understanding criminals’ personality characteristics could engender appropriate solutions for preventing crimes and treating criminals and the aim of the current work is to predict criminals’ (robbers, swindlers and smugglers) personality characteristics by using the Minnesota Multiphasic Personality Inventory (MMPI) in committing type of crime. The research falls under the applied category in terms of goal while in terms of nature it is among survey-descriptive researches. The sample under investigation includes 480 people who were selected by way of classified random sampling method in a systematic form from among the population of criminals in the Central Prison, province of Kermanshah. The tool used in this paper is the Minnesota Multiphasic Personality Inventory (MMPI) (short form of 71 questions). The results obtained from the Minnesota Multiphasic Personality Inventory (MMPI) indicated that prevalence of anti-social personality characteristics and mental weakness among robbers; depression, anti-social personality and schizophrenia among swindlers as well as anti-social traits, mental weakness and schizophrenia among smugglers are seen significantly. Also, the results of the variance analysis demonstrated that there is a significant difference between the (MMPI) clinical scales among three groups of criminals (robbers, swindlers and smugglers) on D scales (depression), Pd (Psychopathy deviation), Pt (Anxiety and psychosis), Sc (Schizophrenia) and Ma (Hypomania) (p<%5). Research findings revealed that criminals enjoy lower level of normal and positive personality dimensions. To sum up, we can infer that all personality characteristics exist in the population of criminals and therapy experts need to pay attention to all sorts of personalities for treating criminals affected with personality disorder.

Keywords: Criminals, Personality characteristics, MMPI test, Crime.

INTRODUCTION

Changes to social situation and human relations from traditional ways to modern and new ways while being affected by the modern and industrial urbanization have all engendered modern and accountable ways for handling human affairs. This issue holds true for many of delinquent phenomena. When an offense is committed, the criminal via violating the moral and human principles disrupts the normal trend of life in the society and brings terror and horror to the public minds. Now, to dissipate such horror and fear and to return the nor al trend of life ion the society and prevent from crime commission in the future, the very act of crime and omission need to be placed on the judicial and police course so that the suspect is tried n the basis of proceeding principle and justice [1]. Personality could be considered the most fundamental subject of Psychology; because the essential pivot of the discussion hovers around such issues as: learning, motivation, perceptions, thinking, emotions, feelings, intelligence and the like; in other words, the abovementioned cases are accounted to constitute personality. Therefore, even studying mental ills and particularly functional mental ills which are found to be embracing psychoses, like Schizophrenia, emotional psychosis, all neuroses and all personality and trait disorders, anti-social behaviors, anti-moral conducts, addictions
and deviances could be considered among personality related ills. To sum up, the issues of personality is like a cauldron in which all psychological material are poured. Overall, all subjects and matters could be placed under investigation for clarification of personality [2]. One of the issues under discussion of mental ills and criminal behavior is the relationship between mental ills and risky behaviors such that mental patients are usually described as dangerous from the view of others and there is an opinion that they due to some mental disturbances and via making inappropriate decisions for others produce risk and dangerous conducts for others; thus leading to inflicting harms and creating victims. The second issue is the relationship between mental ills and violence. Some of the mental patients due to special kinds of thinking and subjective structures like hysteria and suspicions are highly likely to expose more violent conducts compared to others; like the illusion of harm and paranoid thoughts such that violence and even murder will occur [3]. The third issue is the relationship between mental ill and drug abuse. People affected with mental abnormalities are highly likely to tend to drug abuse (20-30%) and drug abuse could be one of the predictors of criminal behaviors including violence in any individual [4]. Studies have shown that construct of motivation and personality play major roles in outbreak of behavior [5]. Of traits being under the investigation of psychologists are personality and the type of criminals [6]. Exactness in personality could open the way for entering into the world of different people where each of whom expose special and sometimes definite behaviors in dealing with individual and social issues. Undoubtedly, peoples' personality is to some extent similar. However, there are differences with some of the facets of these kinds of people. The criminal's personality is not separate from that of the non-criminal while one can state in line with the famous French criminalologist, Jean Pinatel that though criminals lack a separate personality central core from others, in terms of degrees, facets of personality need to be brought under spotlight. Today, one of the indices for assessing security in the society is to contain crime and irregularity and one of the social crises which has unfolded in our community and resulted in worries and distress for the criminals, planning for the mental health of the community and preventing crimes in the society. Anti-social officials is the issue of lowering of the age of commission of social crimes and ills. This issue needs national determination and public efforts which are important in researches regarding the pathology of personality of criminals, planning for the mental health of the community and preventing crimes in the society. Anti-social personality disorder which is distinguished by an overall pattern of inattention and violation of others' rights is found to be closely related with adults' criminal behaviors. It was shown in a study that 47% of the prisoners were affected with this disorder. Ussou et al examined the MMPI-2 mental profiles of the children exposed to misconducts on F (Bad feeling), Pd (Society fighting deviancy), Pa (Paranoia), Sc (Schizophrenia), Ma (Mania) and Si(Social introversion) scales. The Zarei's research with the subject matter of standardization of MMPI Personality Test for addicts and smugglers of drugs illustrated that addicted people received higher scores on Pt, Ma, Sc, Pa, Pd scales compared to normal people while they received lower scores on the Hy compared to the normal group and the smugglers group scored higher on Sc, Ma, Hs, D, Pd, Pa, Pt scales compared to normal groups. Kaplan and Sadouk while investigating the degree of prevalence of anti-social personality disorders maintained that this disorder is 3% (that could rise to 7%) among men and it is 1% among women. This rate could reach 70% among prisoners. Another investigation was done by Delavar et al in 2010 with the title of Comparative investigation of personality characteristics of criminal women. Research findings revealed that there is a significant difference among criminals on F, HS, D, PD, PA, Pt, Sc, Ma scales. The most fundamental issue that has entangled the societies is the issue of crime and to resolve this, it sounds necessary to have principled and systematic encountering so that the phenomenon of delinquency is discovered and understood. Understanding traits and personality characteristics of the criminals groups could clearly lead to establishment of security and social-mental health in life and at a macro level, it could open ways for solutions in order that the criminals' activities are treated.

**Research objectives**
Awareness of criminals' personality traits

**Secondary objectives**
1. Identification of robbers' personality characteristics within the police jurisdiction of Kermanshah
2. Identification of swindlers' personality characteristics within the police jurisdiction of Kermanshah
3. Identification of smugglers' personality characteristics within the police jurisdiction of Kermanshah
4. Awareness of potential differences and similarities of criminals (Robbers, swindlers and smugglers).

**MATERIALS AND METHODS**

The research falls under the applied category in terms of goal while in terms of nature it is among survey-descriptive researches. The universe under investigation is 2309 prisoners (robbers, swindlers and smugglers) of the Central Prison of Kermanshah province in the late second half year of 2012 to early half year of 2013. From this number, 2050 people are robbers, 109 people are smugglers and 150 ones are swindlers. Based on a Morgan table, from among the society under investigation, as many as 291 people, 105 swindlers and 84 smugglers were selected by way of classified random sampling method in a systematic form.

**Tools for measuring information**
MMPI: Minnesota Multiphasic Personality Inventory is one of the highly credible and prominent tests in the area of personality. This questionnaire was developed in 1940 by Hathaway and McKinley at the University of Minnesota. They needed a tool that could contribute to the evaluation of adults patients in case therapy periods of psychiatry and determine the severity of the disorder. This test in its original form contains 567 questions and the time necessary for its administration is one hour. This inventory could be administered individually and collectively. Various forms of this questionnaire could be administered for age groups higher than 16 years who at least hold 6 grades of education. For so long, the original form of the MMPI containing 567 questions was administered in Iran. The administration of such an inventory did have drawbacks, including the fact that it was too time consuming; such that by the need of the time the inventory was filled in, the subject looked totally tired. On the other hand, its interpretation and scoring was quite time consuming for psychologists. In addition to this, there were question in this form which was based on a western culture not matching the Iranian culture. Given the above-mentioned problems, there was a need for preparation of a test with the same content lacking the same drawback. On the same basis, a decision was made for preparing a form of MMPI which was initially taking in to account Iranian values and conditions and secondly, it was decided to be short, requiring little time. Considering these issues, Dr. Ukhvat, Baraheni and Shamloo adopted a 71 question inventory and taking into account its Iranian culture dimensions formulated it in a short form. The scoring method for this inventory is done ion two categories of scales. One category involves validity scales which are interpreted prior to interpretation and scoring of clinical scales. Validity scales include such cases as L scale (Good presentation), polygraph, F scale (Bas presentations), K scale (Denial), that the individual takes a defensive form while responding to the questions.

Clinical scales dealing with individual personality characteristics have been reduced in the 71 question form. The residual scales include the following:

1. HS scale or Hypochondria: refers to Hypochondriasis characteristics
2. D scale or depression: examinees depression features
3. Hs scale or Hysteria: shows tendency to drawing attention and show reactions
4. Pd scale or social mental deviancy: measures the subject's anti-social reactions
5. Pa scales or paranoia: asesse the degree of trust or personal mistrust towards others
6. Pt scale or mental weakness: refers to mental fatigue and weakness
7. Sc scale or Schizophrenia: for identification of schizophrenic patients
8. Ma scale or Hypomania: shows hypomanic signs for identification of mental patients.

Reliability and validity of the MMPI
In the present research, the shorty form of MMPI containing 71 questions wet used. Ukhvat and Daneshmand assessed the reliability of the 71 question form of the MMPI (short form) by using the estimate of the Cronbach's alpha and reported the Cronbach's alpha of 0/78 for the total test [7].

Data gathering methods
Given the fact that it was legally restrictive to enter the setting of the prison, after which the scheme was presented to the Organization of Kermanshah Prisons, two personnel of this organization were introduced as the liaison to the researcher. Given that the education of the liaisons was in Psychology and did have sufficient information concerning the tests, the subject of the research was fully explained to them and necessary information in relation to the statistical population as well as sampling method was made available to them.

Information analysis method
First, through the information obtained from questionnaire, the criminals' mental profile (robbers, swindlers and smugglers) was separately delineated and thereafter, via using the SPSS software, they were analyzed through inferential statistics (variance analysis).

RESULTS
Using the information obtained from the Minnesota Multiphasic Personality Inventory (MMPI), first the raw scores were turned into T standardized scores with an average of 50 and standard deviation of 10 for the interpretation of research questions. Thereafter, in accordance with the standard scores, the subject's profile was displayed on the graph and wads then interpreted. Scores beingbetween 40-60indicate the normalcy of the person whiles the scores being between 60-70 demonstrates the fact that the individual has a mild raised profile and indicates people's inclination to illness. Also, if T score equals or is greater than 70, i.e. greater than average for two deviations, there is high raised profile and such a score indicates the individual under investigation is ill.

First question: What are the personality characteristics of the robbers?
Due to the validity of the profile of robbers, the degree of prevalence of anti-social personality disorder and mental weakness in the criminal group of robbers is significantly higher while scales of Hypochondriasis, depression, hysteria, schizophrenia are little higher than the average rate. Given the fact that the Pd scale (social and mental deviancy) is raised among the robbers' profile, the major goal of this scale being measurement of the overall level of definite social compatibility they could be described as people having angry dissimilarity and non-assimilation with then family, society and both. Though it is possible they are placed under predicament for felony and delinquency conducts, they do not learn lessons from the repercussions of their own behaviors. When faced with the outcomes of their behaviors, they might feel regretful, however this feeling is fleeting. Also, given the fact the Pt scale (mental weakness) is raised, the goal being measurement of mental weakness signs, many of the clear fears and anxieties that might be experienced by the person could be measured. These kinds of people could be considered as shy people who experience social problems and are usually worried about the level of acceptance and social popularity. They are also faced with problems in doing their daily affairs and have compatibility in most of their problems. They reproach others for their own personal mistakes. For the researcher, given the robbers' profile and the fact that the two scales of being anti-social and mental weakness are raised, these people are in most cases having adaptability problems and rebuke others for their own personal mistakes and blame them for the mistakes and blunders they have themselves done. They maintain environmental conditions have caused such problems and this hinders them from having found an insight towards feelings, thoughts and behaviors; thus these problems will prohibit from having planning for the future.

Second question: What are the personality characteristics of swindlers?

Due to the validity of the swindlers' profile, prevalence of depression, anti-social disorder and schizophrenia is raised in this group. Scale D being raised among then group of swindlers indicates depression meaning problems with thinking disturbance, insolvency, and hopelessness. Their ability in dealing with interpersonal problems is distracted and also the feeling of frustration and disappointment could lead to movement-mental conducts, fatigue and isolationism. The very environment of prison could reinforce this. Also, scales Sc (Schizophrenia) being raised indicates people with feeling of alienation and distance from social situations. This group of people feels that others do not comprehend them well and they often have problems in
maintaining a string of clear and consistent thinking. They are weak in communication skills and possess unconventional and unusual mentalities. In accordance with the two scales (Sc and D) being raised in the profile of swindlers, the relative degree of non-objective and subjective turbulence experienced by the person is reflected and hence they are often called insolvency scales. For the researcher, this group has problems in temporal and anxiety related disorders who need support by relatives so that they can overcome their own problems and if this supports not thrown they will fell insolvent and due to weak judgment they have, they will succumb to potential risks such as drug abuse and alcohol. The role of environment in this group is salient and since they accept some of their own problems and seek solutions for them, others could help these guys out so that they can get the better of the problems.

Third question: What are the personality characteristics of smugglers?

Graph 3, Mental profile of balanced scores of clinical and validity scales for smugglers

Given the validity scales of smugglers, the mental profile is of importance though the K scale enjoys relative rise however, this raising is natural among prisoners.

The level of prevalence of snit-social disorder, mental weakness and schizophrenia is significantly higher among smugglers while Hypochondriasis scales, depression, hysteria a d paranoia is relatively higher than the medium rate. Like the other two previous profiles, swindlers have anti-social personality disorder where their relations with others are superficial and cannot easily establish loyalty with others simultaneously. Rise of weak mental health schizophrenia scales in this group of criminals indicates a level of restlessness that would culminate in disruption of daily activities. For the researcher, given the mental profile of smugglers, these people are self-conceited, impulsive, and unaccountable and out of mood people that cannot tolerate and do not accept social norms of the society and lack sufficient conscience. These people could look trustable and quiet, but behind this apparent form lie hostility, rage and impulsivity. Telling lies, illegal acts, sadism, smoking, abusing drugs and alcohol could be seen frequently. These people also lack stable professions and are lower in terms of social norm compared to other people.

Fourth question: Is there a significant difference between the criminals (Robbers, swindlers and smugglers) in terms of personality characteristics?

Results from the variance analysis indicted that there is a significant difference between the (MMPI) clinical scales among three groups of criminals (robbers, swindlers and smugglers) on D scales (depression), Pd (Psychopathy deviation), Pt (Anxiety and psychosis), Sc (Schizophrenia) and Ma (Hypomania) (p<%.5). The results of this study are in line with those of Sherry et al [8], Eppright et al [9], Delavár et al [10], Ahmadi et al [11], Bordbar [12], Heydari Pahlavan et al [13], Mohamadi Forouad and Mir Hashemi [14], Hamid and Dehghan Zade [15]. For the researcher, in accordance with the rise on the scale of anti-social personality among many of the criminals, these people frequently cause disturbance for their families and friends. They have a greedy approach towards others, are indifferent to others and attempt to reach their goals by telling lies, stealing or making fabrications. Of other characteristics of these people is the inability to make decisions. It is possible for normal people to also steal and embezzle; however, they have control and planning over their lifestyles. Meanwhile, people affected with this anti-social personality disorder, due to some biological, social and psychological factors are unable to control and navigate their own behaviors and strive to act impulsively and without planning. These people do not shoulder their own responsibilities and have no work conscience. They do not learn a lesson from the punishments they receive and cannot consider later punishments.
### Table 1. Results of criminals' variance analysis

<table>
<thead>
<tr>
<th>Scales</th>
<th>Source of scatteredness</th>
<th>Square sum</th>
<th>Square average</th>
<th>Freedom degree</th>
<th>F value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypochondria</td>
<td>Intergroup variance</td>
<td>2.12</td>
<td>1.06</td>
<td>2</td>
<td>0.263</td>
<td>.769</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>1923.87</td>
<td>4.03</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1925.99</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Intergroup variance</td>
<td>2060.47</td>
<td>1030.23</td>
<td>2</td>
<td>243.68</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>2016.67</td>
<td>4.22</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.77.14</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hysteria</td>
<td>Intergroup variance</td>
<td>23.07</td>
<td>11.53</td>
<td>2</td>
<td>1.35</td>
<td>.259</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>40.85.25</td>
<td>8.50</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4081.32</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social and mental</td>
<td>Intergroup variance</td>
<td>88.62</td>
<td>44.31</td>
<td>2</td>
<td>16.13</td>
<td>.000</td>
</tr>
<tr>
<td>deviancy</td>
<td>Intragroup variance</td>
<td>1399.62</td>
<td>2.74</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1398.24</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paranoia</td>
<td>Intergroup variance</td>
<td>10.43</td>
<td>5.218</td>
<td>2</td>
<td>1.293</td>
<td>.276</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>1925.56</td>
<td>4.03</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1936.00</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental weakness</td>
<td>Intergroup variance</td>
<td>2255.83</td>
<td>1127.915</td>
<td>2</td>
<td>1.293</td>
<td>.276</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>971.76</td>
<td>2.03</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3227.59</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>Intergroup variance</td>
<td>590.8</td>
<td>295.40</td>
<td>2</td>
<td>42.76</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>3295.34</td>
<td>6.90</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3886.155</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypomania</td>
<td>Intergroup variance</td>
<td>69.483</td>
<td>34.74</td>
<td>2</td>
<td>12.89</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Intragroup variance</td>
<td>1284.79</td>
<td>2.69</td>
<td>477</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1354.28</td>
<td></td>
<td>479</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CONCLUSION

Therefore, crime and criminality are thought of the biggest problems humans are faced with in industrial societies which lead to negative impacts in the short and long run. The damage crimes will leave will be hefty and irreparable. Hence, practitioners and experts of various areas like sociologists, psychologists and experts of judicial sciences pay special attention to this issue and are not only seeking ways and solutions for it but they also attempt to reduce the crime rate as much as they can. It appears that social crises and problems leading to commission of crimes are directly and indirectly rooted in the human personality. Once personality traits are identified, we can make plans for treating and reform them. The findings of the present research place two duties before psychiatrists, psychologist and mental health experts as well as all interested organizations in dealing with the issue of crime and risky conducts. Therapists treating criminals have to identify criminals and strive to support the treatment of personality disorders of people. Through psychotherapy, particularly group psychotherapy, criminals could find insights into themselves. Psychotherapy could also reduce negative and defensive state of people and avoid abusive words and conducts. Overall, to conclude we can state that criminals enjoy lower level of positive and normal personality dimensions; abnormal patterns and coping strategies are inefficient and unconstructive amongst these people. To sum up, it can be stated that all personality types do exist in the population of criminals and if experts are going to recommend treatment for criminals suffering from personality disorder, they need to pay attention to all diagnoses. Thus, individual approaches which analyze issues individually are the best way for identification of the therapy for the person and hence we can conclude from the research above that personality disorder in adolescence are followed with some definite signs and if these disorders cannot be diagnosed exactly, one can identify them and prevent them from expanding.

**Applied recommendations**

1. The therapy style needs to be followed by long run psychotherapy. People suffering from personality disorder are better to be placed under examinations by clinical psychologists, because if these people are not examined under therapies, it is highly likely for them to return to commission of crimes after they are released from prison.
2. Because people who have committed crimes, in addition to having deficiencies in social cognition are affected with a range of behavioral, emotional, educational and family problems, it is recommended that educational officials adopt measures so that the reformist approach (maintain prisoners in counseling centers) and using psychotherapy services would lead to reduction of anxiety and depression as well as and increase of life expectancy among criminals.
3. Holding education; courses with titles of life skills, effective communication, controlling rage, appropriate decision making, problem solution, and period of familiarity with rational and irrational thoughts outside of the prison for the people just released from prison and particularly adolescents exposed to risks.
4. It is recommended that arrested criminals, especially robbers are assessed in the stage of interrogation so that they will be evaluated in case some mental disorders are discovered. In case, mental disorder is diagnosed, it is advised that the individual affected be referred to clinical experts.

5. It is proposed that the judge prior to handing over the verdict refer the defendant arrested to an expert (psychologist) so that he can issue a verdict in line with his mental capacity.

REFERENCES