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Survey the relationship between five factor model and psychopathic personality in a sample of male prisoners in Iran

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ABSTRACT

Most research into psychopathy among prisoners has almost entirely been based in Western countries, and it is unclear whether these research findings are applicable to other settings as well. The main aim of the current study was to survey the relationship between Five Factor Model and psychopathic personality in a sample of male prisoners in Iran. Participants (N = 202) completed the Hare Psychopathic Checklist: screening version (PCL: SV) and NEO Five Factors Inventory (NEO-FFI). The results were analyzed with Pearson correlation coefficient, regression, and t-test for the independent group. Results showed positive and significant correlation between psychopathy with extraversion and also negative and significant correlation between psychopathy with openness, agreeableness and conscientiousness. The comparison of psychopath prisoners with non-psychopath and non-prisoners showed that there were significant differences between groups in conscientiousness, agreeableness, openness; thus psychopath prisoner, in comparison with other groups, was lower in conscientiousness, agreeableness and openness. More research regarding the studied variables can render brighter data.

Key words: Personality Characteristics, Psychopath Prisoners, Non-Psychopath Prisoner, Non-Prisoner.

INTRODUCTION

Psychopathy is a personality disorder (PD) associated with multiple social and behavioral problems [1,2] and has an exceptionally poor prognosis among the mental disorders [3,4]. During the last decade the validity of psychopathy has been supported by a growing body of research [5] although the concept has not been officially recognized as a psychopathy in the last three editions of the Diagnostic and Statistical Manual of Mental Disorders [6,7,8]. It is a rare condition affecting less than 1% of the household population [9] but highly prevalent among prisoners and associated with homelessness and psychiatric hospitalization over the lifespan.

However, there are remarkable differences in reported prevalence rates of psychopathy among samples of prisoners in different countries within a range of 3% to 73%, [10, 11, 12, 4, 13, 14].

Cleckley (1988) was the first to describe the psychopathic individual as seemingly sane, intelligent, and competent, but clearly disordered. These individuals were said to wear 'masks of sanity' [15]. Other clinicians and researchers have described psychopathy consistently as a form of PD, characterized by traits such as lack of remorse, manipulateness, egocentricity, superficial charm and shallow affect. Behaviorally, the psychopath is an impulsive risk-taker involved in a variety of criminal activities. Interpersonally, the psychopath has been described as grandiose, egocentric, manipulative, forceful and cold-hearted. Affectively, the psychopath displays shallow emotions, is unable to maintain close relationships, and lacks empathy, anxiety and remorse [16].

Psychopaths were described in general terms to lack guilt, remorse, and lasting bonds with others, while possessing high levels of impulsivity [17]. Psychopaths can be thought of as exhibiting a wide array of emotional and behavioral excesses and deficits. Characteristically, they are outwardly engaging, grandiose, impulsive, and sensation seeking. Simultaneously, they are lacking in remorse, genuine emotion, and anxiety. They are irresponsible and unable to maintain long-term plans or relationships [18]. Psychopathy is distinct from, but related to the more behaviorally based description of the Antisocial Personality Disorder (APD) described in DSM-IV [8], consisting of 'a pervasive pattern of disregard for and violation of the rights of others'. It is based almost solely on behavioral descriptors and is nearly synonymous with persistent criminal offending. The APD diagnosis reflects whether the subject has participated in a number of antisocial and criminal acts during childhood and adulthood. In forensic populations the prevalence of APD is two or three times higher than the prevalence of psychopathy, as measured by the PCL-R. Empirically the relationship between both disorders is asymmetric: most offenders with a high PCL-R score meet the criteria for APD, but most of those diagnosed as having APD do not meet the PCL-R criteria of psychopathy [19].

Recently several researchers [20, 21, 22, 23] have argued that psychopathy can be understood as a constellation of personality traits from this general model of personality functioning [FFM; 24]. The FFM has its historical roots in a lexical paradigm, which posits that all trait terms that are important for describing the personality functioning of one self and others will have been encoded into language [25]. Although the FFM was first derived from studies of the English language, it has since been reported within numerous other languages and cultures [26]. These studies have reasonably confirmed the presence of five broad bipolar domains of extraversion (vs. introversion), agreeableness (vs. antagonism), conscientiousness (vs. impulsivity), neuroticism (vs. emotional stability), and openness (vs. closedness to experience). Harpur et al. (2002) posited that these characteristics within the FFM produce a broadly-defined descriptive profile of the psychopath that is high on extraversion (E) and low on neuroticism (N), openness to experience (O), agreeableness (A), and conscientiousness (C) [27]. Decuyper, De Fruyt, & Buschman, (2008); see also Widiger and Lynam (1998), Lynam (2002), and Jackson & Richards, (2007), advanced a more detailed model of psychopathy based on the FFM [23, 22, 28, 18]. This description characterizes the psychopath as high in the antagonism (i.e., low agreeableness), and low in the conscientiousness. According to the description of Miller et al. (2001) the prototypical psychopath scores high on neuroticism (N), extraversion (E) and scores low on agreeableness (A), conscientiousness (C). There is also no prominent relationship between the openness and psychopathy [29].

Most research into psychopathy among prisoners has almost entirely been based in Western countries and is unclear whether these research findings are applicable in other settings. Prison populations are growing rapidly in Asia. A report has indicated that 87% of Asian countries have had increasing numbers of prisoners over the past decade [30]. Despite this, little is known about non-Western prisoners. A systematic review in 2002 only found three papers from non-Western societies, with a combined sample of 326 prisoners [31].

In Iran, the prison population has increased from about 100 000 in 1993 to 160 000 in 2002, with a rate of 229 inmates per 100 000 of general population. This puts Iran in the top quartile of the worldwide incarceration rate per head of population [30]. The Iranian correctional system has several features in common with other low-income countries, such as inmate overcrowding and inadequacy of prison healthcare services [32]. The aim of this study was to survey the relationship between Five Factor Model and psychopathic personality in a sample of male prisoners in Iran.

MATEREALS AND METHODS

Participants: Participants were men prisoners ($N = 202$) from the city of Ray near Tehran. The mean age for the total sample was 48 ($SD = 8/14$, range = 38-54) and a mean duration of detention was 1/6 years (range from 0 to 7 years). According to official Iranian statistics, offences are classified into five categories: violent crimes (murder, kidnapping and armed robbery), non-violent crimes (such as fraud, pickpocketing and burglary), drug-related offences (drug use, possession or trafficking), 'immoral acts' (such as fornication, prostitution, and alcohol use or trading) and financial crimes (mainly bounced cheques). About %54 of prisoners in the present study had committed drug-related offences , %21 non-violent crimes , %13 financial crimes , %11 violent crimes and %4 immoral acts'.

Assessments

NEO-FFI: The NEO-FFI [24] is a 60-item inventory. It is one of the most widely used questionnaires for measuring the Big Five personality factors (neuroticism, extraversion, openness, conscientiousness, and agreeableness). Participants in our study rated the 60 behavior-descriptive statements on 5-point Likert-type scales, ranging from 1 (strongly disagree) to 5 (strongly agree), indicating the degree to which they thought the items were characteristic of them.

PCL-SV: The PCL-SV is a 12-item rating scale and is derived from the Hare Psychopathy Checklist –Revised [PCL-R;4]. It is a relatively quick way of assessing psychopathic traits. Its total score can be used either as a dimensional measure or for categorical diagnosis. For the first purpose, the raw total score is used, which ranges from 0 to 24; for the latter purpose, a cut-off score of 18 has been recommended [4]. The scale is composed of two factors: factor 1 reveals interpersonal and affective symptoms of psychopathy, whereas factor 2 reflects the severity of social deviance and antisocial lifestyle. Both factors are scored from 0 to 12.

Statistical Analysis: The results were analyzed with Pearson correlation coefficient, regression, and t-test for the independent group.

RESULTS

The mean total PCL-SV score was 11.81 (S.D=4.20) with a range from 2 to 22. The prevalence of psychopathy using a PCL-SV cut-off of 18 was 10.39%. The means, standard deviations and ranges of the NEO-FFI inventory and PCL-SV checklist scores are also described in Table 1.

TABLE 1: Descriptive statistics for the NEO-FFI and the PCL-SV Total and Factor Scores in a men prisoner

Variables	M	S.D	Range
NEO-FFI			
Neuroticism	23.37	7.75	9-52
Extraversion	23.48	7.44	10-50
Openness	24.55	7.45	10-52
Agreeableness	24.23	8.22	10-51
Conscientiousness	24.76	7.52	8-47
PCL-SV			
Total score	11.81	4.20	2-22
Factor 1 aggressive narcissism	4.28	3.66	3-16
Factor 2 impulsive/antisocial lifestyle	7.52	4.49	1-18

Correlations between PCL-SV scores and NEO-FFI are demonstrated in Table 2. Factor 1 (aggressive narcissism) scores were negatively correlated with agreeableness(A), conscientiousness(C), openness(O) and positively correlated with extraversion(E). The impulsive/antisocial lifestyle(F2) negatively correlated with agreeableness(A), conscientiousness(C), openness(O) and positively correlated with extraversion(E).

TABLE 2: Correlations between PCL-SV scores and NEO-FFI

Variables	A	C	E	O	N
Factor 1 aggressive narcissism	-0.78**	-0.43**	0.10	-0.22**	0.11
Factor 2 impulsive/antisocial lifestyle	-0.63**	-0.31**	0.9	-0.31**	0.8

* $p \leq 0.05$, ** $p \leq 0.01$,

The next stage in analysis was to use regression analysis with psychopathy as the dependent variable to try and identify the best predictive model. The results are shown in Table 3. The two significant predictors in the model are agreeableness (A) and conscientiousness (C).

TABLE 3: Predictors of Psychopathy from regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Neuroticism	-.002	.024	-.003	-.076	.940
Extraversion	.001	.026	.003	.055	.956
Openness	.014	.027	.024	.503	.615
Agreeableness	-.376	.026	-.735	-14.689	.000
Conscientiousness	-.083	.028	-.149	-2.943	.004

TABLE 4: Comparison of the backgrounds of psychopath versus non-psychopath prisoners

Background variable	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Neuroticism	-1.787	200	.075	-3.17785	1.77785
Extraversion	.334	200	.739	.57459	1.71928
Openness	-2.787	200	.006	-4.71087	1.69030
Agreeableness	-4.387	200	.000	-7.96554	1.81564
Conscientiousness	-6.371	200	.000	-10.10339	1.58574

To allow for clearer conclusions about differences between psychopath ($n = 21$) versus non-psychopath ($n = 181$) prisoners, two-tailed t-tests (with alpha set at 0.001) were used to compare the independent samples (see Table 4).

We could conclude that the psychopath prisoners are enjoying a lower level of openness, extraversion and agreeableness than non-psychopath prisoners.

DISCUSSION

Previous research into psychopathy among prisoners has almost entirely been based in Western countries and it is unclear whether these research findings are applicable to other settings as well. The present study examines the relations between five factor model and psychopathic personality in a sample of male prisoners in Iran. Widiger and Lynam (1998) argued that all the core features of psychopathy operationalized in Hare's (2003) PCL-SV have an explicit representation within the FFM [22]. Previous studies [20, 22, 28, 21, 18, 23] reported an amount of significant nonpredicted relationship between FFM and psychopathy. Dyce and O'Connor (1998) suggest that, although there is strong support for the predicted relationships, some associations may need to be added [33]. Decuyper, De Fruyt, & Buschman (2008) recommended that the proposed predictions between the FFM and disorders by Widiger et al. (2002) would best be interpreted as a minimal set that should be empirically examined and may eventually be extended relying on a meta-analysis of FFM facet-PD relationship [23].

Overall, the results of the current analysis are largely consistent with previous research in terms of the FFM's ability to describe psychopathy. A consistent finding across FFM-psychopathy studies is that the domain of agreeableness and conscientiousness are particularly relevant to psychopathy. Psychopathy correlated negatively with agreeableness and conscientiousness. That relationship was replicated in the current study. Similarly, psychopath prisoners turned out to enjoy a lower level of openness, extraversion and agreeableness than non-psychopath prisoners. Lynam (2002); see also Widiger and Lynam (1998) Jackson and Richards (2007), Decuyper, De Fruyt, Buschman (2008) and Harpur et al.(2002) found agreeableness and conscientiousness strongly related to psychopathy [28,22,18,23,27].

The unpredicted finding was the fact that psychopathy correlated negatively with Openness. This finding contradicts conclusions of Miller et al. (2001) who stated that only four out of five factors from the FFM were relevant for the FFM descriptions of personality pathology and Decuyper, De Fruyt, & Buschman, (2008) who reported no prominent relationship between Openness and psychopathy[20]. Miller et al. (2001) also declared that Openness was not strongly represented in the psychopathy scores and that none of the psychopathy scales loaded strongly on the Openness dimension. Empirical support for the role of Openness in the relevance of the FFM to the psychopathy domain seems thus less consistent [20]. Costa and McCrae (1992) take the view that little attention has been paid to symptoms that reflect inflexible and maladaptive traits related to high or low Openness [24]. Excessive or disordered Openness might lead to eccentric thinking, poor integration of the life structure or weak ego boundaries; excessive closeness might be seen in dogmatic thinking or an inability to adapt to changing social conditions. These features may be characteristic for the investigated sample. Miller et al. (2001) also suggested that elevated levels of Openness are related to higher levels of schizotypal symptoms [20].

CONCLUSION

The present study had a number of strengths, including using an instrument to assess psychopathy disorder in Iran and the uniqueness of the sample consisting of male prisoners. Moreover, to our knowledge it is the first study examining psychopathy and a FFM-perspective in the Iranian context. More research regarding studied variables can render brighter data.

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