The DSM-5 Levels of Personality Functioning and Severity of Iranian Patients With Antisocial and Borderline Personality Disorders

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Background: Fundamental problems with Personality Disorders (PD) diagnostic system in the previous version of DSM, led to the revision of DSM. Therefore, a multidimensional system has been proposed for diagnosis of personality disorder features in DSM-5. In the dimensional approach of DSM-5, personality disorders diagnosis is based on levels of personality functioning (Criteria A) and personality trait domains (Criteria B).

Objectives: The purpose of this study was firstly, to examine the DSM-5 levels of personality functioning in antisocial and borderline personality disorders, and second, to explore which levels of personality functioning in patients with antisocial and borderline personality disorders can better predicted severity than others.

Patients and Methods: This study had a cross sectional design. The participants consisted of 252 individuals with antisocial (n = 122) and borderline personality disorders (n = 130). They were recruited from Tehran prisoners, and clinical psychology and psychiatry centers of Razi and Taleghani Hospitals, Tehran, Iran. The sample was selected based on judgmental sampling. The SCID-II-PQ, SCID-II and DSM-5 levels of personality functioning were used to diagnose and assess personality disorders. The data were analyzed by correlation and multiple regression analysis. All statistical analyses were performed using the SPSS 16 software.

Results: Firstly, it was found that DSM-5 levels of personality functioning have a strong correlation with antisocial and borderline personality symptoms, specially intimacy and self-directedness (P < 0.001). Secondly, the findings showed that identity, intimacy and self-directedness significantly predicted antisocial personality disorder severity (P < 0.0001). The results showed that intimacy and empathy were good predictors of borderline personality disorder severity, as well (P < 0.0001).

Conclusions: Overall, our findings showed that levels of personality functioning are a significant predictor of personality disorders severity. The results partially confirm existing studies.

Keywords: Antisocial Personality Disorder; Borderline Personality Disorder; Severity; DSM-5

1. Background

The fundamental problems with the Personality Disorders (PD) diagnostic system in the previous version of DSM, such as all-or-nothing diagnostic categories, considerable heterogeneity within categories, extensive overlap or comorbidity among categories, indistinct boundaries with normal personality, and incomplete coverage of personality psychopathology, led to the revision of the DSM approach (1, 2). Since 2000, after the revision of DSM-IV, PD researchers largely agree that personality pathology should be represented dimensionally rather than categorically (3). Thus, many alternative dimensional models of personality have been considered (4-7), and ongoing research has been performed to delineate the conceptual and empirical structure of personality traits in the pathological range (6, 8). Finally, a multidimensional system was proposed for representing and diagnosis of personality disorder features in DSM-5.

The new approach for the assessment of personality pathology identifies core impairments in levels of personality functioning, pathological personality traits, and prominent personality pathology types (9). All parts needed for PD diagnosis. However, there is wide consensus that severity assessment is essential for any dimensional system of personality psychopathology (10). Moreover, the DSM-5 Personality Disorders Work Group has proposed impairments in personality functioning as the central element of PD (11). Thus, in the dimensional model of personality disorder any PD (schizotypal, antisocial, borderline, narcissistic, obsessive-compulsive and avoidant) is associated with fundamental disturbances

had a sensitivity of 79% and a specificity of 54% for a semi-structured interview diagnosis of PD.

Amini et al. (20) have translated DSM-5 levels of personality functioning scale to Farsi, and developed a semi-structured interview. Inter-rater reliability for semi-structured interview of DSM-5 levels of personality functioning items was above 0.80. The DSM-5 levels of personality functioning scale domains correlation with DSM-IV was between 0.30 and 0.69. The duration of the semi-structured interview for DSM-5 levels of personality functioning is 15 to 25 minutes.

3.3. Procedure

In the implementation process, the researchers included three post-graduates of clinical psychology. To avoid probable bias outcome from these people, they were not informed of the exact goal of the research in detail and they were told that the research goal was to study personality disorders. They were entirely uninformed of the concerned disorder types. To control the probable bias, the research associates began to collect data periodically per step while they were blinded to the outcome of the previous or next step.

The colleagues were trained to use these instruments. After training under the supervision of the researcher, some people were actually interviewed, and the interviewers bug was fixed. As mentioned above, there were two groups of patients (patients with personality disorders and normal subjects). Prior to the research onset, the participants were fully informed and provided a written consent. To avoid fatigue and to increase motivation in subjects, study for each subject was conducted during two days. In the days following the completion of the demographic questionnaire, participants completed the SCID-II-PQ. Furthermore, cases, which had both symptoms of antisocial and borderline personality disorders, were examined by the Structured Clinical Interview for Personality Disorders (SCID-II). After the definitive diagnosis of antisocial personality disorder and borderline, they were invited to attend the next stage of the interview process based on DSM-5 levels of personality functioning. Ethics approval was obtained from the University of Social Welfare and Rehabilitation Sciences Research Ethics Committee, and the registered ethical code was 92/801/3110/2/A.

3.4. Statistical Analysis

The normality of data was tested and confirmed by the Kolmogorov-Smirnov test. We computed bivariate correlations between the DSM-5 levels of personality functioning and ASPD, and BPD symptoms. To examine which levels of personality functioning in patients with antisocial and borderline personality disorders can better predicted severity, stepwise regression analysis was used, in which SCID-II results (ASPD and BPD severity) were the dependent variables and levels of personality functioning

were the predictors. The analysis was done using the SPSS 16 and NCSSPASSII.

4. Results

The demographic characteristics of the two groups are presented in Table 1. The two groups had no significant differences in demographic characteristics.

The mean and standard deviation scores of the levels of personality functioning in antisocial and borderline personality disorder groups are showed in Table 2.

Bivariate correlation between DSM-5 levels of personality functioning (identity, self-directedness, intimacy, empathy) and antisocial and borderline personality symptoms are presented in Table 3.

Table 1. Demographic Characteristics of the Two Groups [a]

Variable	Antisocial Personality Disorder	Borderline Personality Disorder
Age, y	30.84 ± 6.9	33.11 ± 8.8
Gender		
Male	118 (96.7)	116 (89.2)
Female	4 (3.3)	14 (10.8)
Education Levels		
Under diploma	62 (50.8)	64 (9.2)
Diploma	45 (36.9)	36 (45.4)
Post diploma	7 (5.7)	54 (56.8)
Bachelor and higher	6 (6.6)	33 (34.7)

[a] Data are presented as Mean ± Standard Deviation (SD) or No (%).

Table 2. The Mean and Standard Deviation Scores of the Levels of Personality Functioning in the Two Groups [a]

	ASPD	BPD
Identity	0.86 ± 0.89	0.36 ± 0.76
Self-directedness	2.18 ± 1.57	1.14 ± 1.27
Intimacy	2.28 ± 1.31	1.9 ± 1.06
Empathy	2.04 ± 1.31	0.99 ± 1.04

[a] Abbreviations: ASPD, Antisocial personality disorder; and BPD, Borderline Personality Disorder.

Table 3. The Correlation Between DSM-5 Levels of Personality Functioning and Antisocial and Borderline Personality Symptoms [a]

	ASPD Symptoms	BPD Symptoms
Identity	0.46 [b]	0.08
Self-directedness	0.44 [b]	0.16 [c]
Intimacy	0.45 [b]	0.40 [b]
Empathy	0.42 [b]	0.003

[a] Abbreviations: ASPD, Antisocial personality disorder; and BPD, Borderline Personality Disorder.
[b] P value < 0.01.
[c] P value < 0.05.

As seen in Table 3, positive and significant correlations were found between antisocial personality symptoms and DSM-5 levels of personality functioning. The total levels are highly correlated with ASPD symptoms (P value < 0.001).

In borderline personality disorder, except identity and empathy, other variables had significant correlations with BPD symptoms (P value < 0.001 and < 0.05).

To examine the relationship between DSM-5 levels of personality functioning and ASPD and BPD severity, a stepwise regression analysis was conducted, where ASPD and BPD severity were the dependent variables and levels of personality functioning (identity, self-directedness, intimacy, empathy) were the independent variables. The results of regression analysis for levels of personality functioning and ASPD severity are presented in Table 4.

As demonstrated by Table 4, the effects of three variables were significant. These results indicate that approximately 21.7%, 31.4%, and 33% of the variance of the ASPD severity could be accounted by identity, intimacy and self-directedness, respectively. Empathy was excluded from the table. The data showed that identity, intimacy, and self-directedness significantly predicted antisocial personality disorder severity.

The results of regression analysis for levels of personality functioning and BPD severity are displayed in Table 5.

As indicated by Table 5, the effects of both variables were significant. The results showed that intimacy and empathy were good predictors of borderline personality disorder severity. The R square of regression model was 16.5% and 25%. This means that approximately 16.5% and 25.1% of the variance of the BPD severity could be accounted for by these variables.

Table 4. Regression Analysis for Levels of Personality Functioning and Antisocial Personality Disorder Severity (n = 122) [a]

Variable	Unstandardized Coefficients	
	Effect (mean ± SD)	t Value
Identity	0.62 ± 0.06	9.53
Intimacy	0.56 ± 0.08	6.82
Self-directedness	0.24 ± 0.08	2.78

[a] Dependent Variable: Antisocial Personality Disorder severity.

Table 5. Regression Analysis for Levels of Personality Functioning and Borderline Personality Disorder Severity (n = 130) [a]

Variable	Unstandardized Coefficients	
	Effect (mean ± SD)	t value
Intimacy	0.59 ± 0.075	7.95
Empathy	-0.49 ± 0.081	-0.36

[a] Dependent Variable: Borderline Personality Disorder severity.

5. Discussion

The first aim of this study was to examine the DSM-5 levels of personality functioning on an Iranian sample with antisocial and borderline personality disorders. The study findings revealed that all levels of personality functioning had significant positive correlations with ASPD. This means that DSM-5 levels of personality functioning had a good relationship with antisocial personality disorder symptoms of an Iranian sample. The present findings are consistent with the findings of Zimmermann et al. (13), and Morey et al. (14). Also, the findings indicate that except identity and intimacy, other variables (self-directedness and empathy) had a significant correlation with borderline personality symptoms. It seems that the study population could be one of the reasons for these findings.

Previous studies indicated that severity is the most important single predictor of concurrent and prospective dysfunction in assessing personality psychopathology (11, 21, 22). Therefore, the second aim of this study was to explore which levels of personality functioning in patients with antisocial and borderline personality disorders can better predict severity. The stepwise regression analysis results showed that identity, intimacy, and self-directedness are positively and significantly correlated with antisocial personality disorder severity, indicating that those with higher scores on these variables tend to have higher symptoms of ASPD. These findings are consistent with the findings of Zimmermann et al. (13), Mullins-Sweatt et al. (23), Yang et al. (24), and Schmeck et al. (25). In patients with borderline personality disorder, the analysis showed that intimacy and empathy had a significant association with borderline personality disorder severity. It means that interpersonal level of personality functioning (intimacy and empathy) could explain the severity on patients with BPD in this study.

In addition, the results showed that the DSM-5 levels of personality functioning are an essential part of antisocial and borderline personality disorders. Also, the results revealed that levels of personality functioning were the same in other cultures and the Iranian sample.

The present study is one of the first in which researchers examined the DSM-5 levels of personality functioning relationship with severity, and is the first study on Iranian patients with personality disorders based on the DSM-5 approach.

Overall, our findings showed that the levels of personality functioning are a significant predictor of antisocial and borderline personality disorders severity. Nevertheless, there are a number of important limitations in this work and future research is required to overcome such limitations. Firstly, the results are based on a relatively small number of cases and so caution should be taken in interpreting the data. Secondly, data was gathered by a semi-structured interview designed to assess a dimensional model of personality disorders, and future work should focus on other relevant instruments. The third

limitation of the current study was the nature of the sample, which was drawn from antisocial and borderline personality disorders. Future research should replicate findings in larger samples with multiple personality disorders. Fourth, axis I disorders were not detected and controlled in the sample. Thus, future research should examine the role of axis I disorders in personality disorders severity. Fifth, most participants in this study were males. Therefore, other research is needed to investigate DSM-5 levels of personality functioning and severity in females. Seventh and finally, our work focused on the assessment of DSM-5 levels of personality functioning and severity in adults. Further work is needed to determine it in other age groups.

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