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Psychopathological Profile and Readiness to Change among Drug Addicts in Malaysia

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Abstract: The severity of psychopathological symptoms may influence the motivation to change drug dependence behavior. Therefore, this study was conducted to examine the predictive relationship between psychopathological symptoms and readiness to change among drug addicts in Malaysia. The study employed survey research involving the administration of the Symptoms Checklist-90-Revised (SCL-90-R) and the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). A total of 599 respondents in six rehabilitation centers in Malaysia participated in this study. Results showed that there were significant correlations between several psychopathological symptoms with recognition, ambivalence and taking steps. Findings also showed that psychopathological symptoms did not predict Recognition, interpersonal-sensitivity and paranoia predicted significantly Ambivalence, while only symptom of hostility predicted significantly Taking Steps. This demonstrated that high level of psychopathology among drug addicts undergoing treatment may compromise their motivation to change. Those who did not recognize that they have problems with addiction were ambivalent about changing and were unwilling to take steps to change their addictive behavior.

Key words: Psychopathology · Readiness to change · Drug addiction · Pofile

INTRODUCTION

A number of recent studies illustrate the presence and variety of psychopathology in drug dependent individuals presenting for treatment [1]. Psychopathology, either primary or secondary, has been found to be more prevalent among drug users than among the general population [2, 3]. Next to the existing drug dependence the three most common psychiatric disorders among drug users are depressive disorders, alcoholism and personality disorders, primarily antisocial personality [4].

Since psychopathology may be linked to substance abuse behavior, one aspect of that relationship should have an effect on the development and consequences of readiness to change. Psychopathology has been found to be an important predictor of success in addiction treatment [5, 6], whereby previous studies have shown a negative relation between severity of psychiatric problems and treatment success. Thus, investigating readiness and motivation to change addictive behaviours is an important issue in both our understanding of and treatment for addictive behaviours.

Psychopathology and drug addiction: Many studies have shown that the rate of psychopathological symptoms among drug addicts were high [7-11] and this high rate of psychopathology are also prevalent among those seeking treatment [12]. Comorbidity issue among drug abuse and psychopathology seemed to be the norm rather than the exception, as it is something that normally occurs among drug addicts [8].

In Malaysia, a study conducted on 574 male inmates in Serenti rehabilitation center and found that they experienced serious psychopathological symptoms, which were at the high level in all nine dimensions of main symptoms as measured by the Symptom Checklist-90-Revised (SCL-90-R) [13, 14]. In addition, their psychopathological symptoms exceeded the normative scores demonstrated by psychiatric inpatients [14]. This study also found that the psychopathological symptoms among Serenti inmates were severe according to the Global Severity Index (GSI). This finding replicated

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results of past studies such who used Psychiatric Status Schedule of Spitzer and Endicott and found that psychopathological symptoms among polydrug and narcotic users were similar to or higher than the scores of psychiatric inpatients [9].

It was reported that 76% of drug addicts were found to fulfill the diagnostic criteria for psychological disorders particularly mood, anxiety and behavioral disorders as [9]. Likewise, it was found the rate of comorbidity between drug addiction and psychological disorders reached 90% among adolescents who seek drug rehabilitation treatment [16]. It was also found that at pre-treatment phase 50% of the subjects have comorbid psychological disorders [17]. In addition, the study of Epidemiologic Catchment Area [11] found that more than 50% of the drug addicts also experienced psychological disorders with the life-time prevalent rate of 53.1%. Generally, the risks of having psychopathology was 4.5 times higher among drug addicts compared to the general population. The rate for comorbid psychological disorders among those undergoing treatment was 65.2%, with the risk of experiencing the disorder to be at 6.7 times higher than the normal population [11].

The high rate of comorbid psychopathology among drug addicts have several implications on treatment outcome. Namely, it is related to poor clincial outcome [4], lesser commitment to treatment [18] and poor maintenance gains [19].

Readiness to Change: Most of the work that has been conducted on motivation for change has focused on single substances such as cigarette smoking or alcohol use [20]. Studies have found either no association or only a weak association between motivation measures and substance use outcomes [21, 22]. Crack cocaine users who were classified into three levels of readiness to change at intake to treatment showed similar improvements in a range of outcome measures at 6-month follow-up despite their different motivational levels [23].

In a study of methadone maintained multiple drug abusers, stages of change profile scores were found to be almost identical across three different substances, suggesting that there may be limitations to the validity of such measures with polydrug-abusing groups [24]. The readiness for change scores were similar in several studies [20, 25]. The high recognition and taking steps scores are consistent with what would have been expected for a sample of substance misusers who were seeking treatment for drug or alcohol dependence problems.

According to past findings, readiness to change and outcomes of drug addiction after treatment showed that the results failed to support the expected hypothesis that the steps taken were related with reduced use of drugs after treatment [20]. There was no significant relationship between steps to change with use of substance or extended influence after treatment. A negative relationship was found in the steps to change taken and Benzedrine abuse.

A study on 780 drug addicts who received outpatient treatment and found that higher educational level and women were more ready to change [26]. Those who voluntarily came and have the intention to be free from addiction also were found to be more ready to change. In another study, a study identified patients in emergency department with regard to their readiness to change their addictive behavior [27]. They found that 46% of those who were 18 years old and used single drug reported 'not ready' to change their drug dependency behavior, 21% felt 'uncertain' and 33% reported to be 'ready to change'.

In a recent study, the motivational readiness to change among 599 drug addicts was examined [28]. The results for the majority of respondents indicated a high readiness in terms of recognition and taking steps to change and recover from the drug. However, the results showed that the majority of drug addicts were still feeling ambivalent and were not sure whether they can control the problems associated with drug addiction.

Understanding the personality traits of drug addicts may also give an indication of their readiness to receive treatment and change this addictive behavior. A study was conducted to examine the predictive relationship between personality traits and readiness to change among drug addicts in Malaysia [29]. Results showed that there were significant correlations between personality traits of neuroticism and psychoticism with all the three stages of readiness to change. Findings from multiple regression analysis indicated that neuroticism and psychoticism predicted significantly Recognition, Ambivalence and Taking Steps. The findings indicated that personality traits were significant predictors of readiness to change among drug addicts in Malaysia [29].

Psychopathology and Readiness to Change: A research was carried out on 169 adolescents between 14-18 years old who were recruited from addictions treatment [1]. They completed a comprehensive assessment of substance use, the presence of psychiatric disorders and measures of readiness to change substance use.

Results showed that the most prevalent psychiatric disorders were conduct disorder (47%), major depression (29%), attention deficit-hyperactivity disorder (17%) and oppositional defiant disorder (11%). The most prevalent class consisted of teens primarily with conduct problems only (23%). Adolescents with low severity in externalizing problems (15%) tended to have relatively high readiness to change alcohol use compared to those with other comorbid disorders. Results indicate heterogeneity among youth presenting to addictions treatment, particularly with regard to profile of co-occurring psychiatric symptoms and readiness to change substance use. Youth with overall low severity of externalizing behaviors reported higher readiness to change alcohol use relative to teens with other comorbid profiles. Thus, this highlights the potential importance of enhancing and maintaining teens' readiness to change substance use behavior during treatment, specifically among those with psychiatric comorbidity [1].

Specifically, the purpose of this study was to find the relationship between psychopathological symptoms with readiness to change among individuals involved in drug addiction. In addition, this study aimed to identify the significant predictors of readiness to change from these two variables. The following hypotheses were formulated to guide this research: (1) There is a significant relationship between psychopathological symptoms with readiness to change. (2) Readiness to change is significantly predicted by psychopathological symptoms.

MATERIALS AND METHODS

This study employed a survey design in which two standardized questionnaires were administered. A total of 599 rehabilitees from six drug rehabilitation centres agreed to participate in this research.

The instruments used were two standardized psychological tests which were:

- Symptoms Checklist-90-Revised (SCL-90-R). The SCL-90-R is a self-report inventory about psychopathological symptoms that have 90 items with 9 dimensions of main symptoms. The dimensions are: Somatization (SOM), Obsessive-Compulsive (O-C), Interpersonal-Sensitivity (I-S), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobia (PHOB), Paranaoia (PAR), Psychoticism (PSY) and Global Severity Index (GSI).
- The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). SOCRATES is a psychological measurement to measure three subscales which are: Recognition, Ambivalence and Taking Steps.

The Symptoms Checklist-90-Revised (SCL-90-R) has internal consistency reliability between 0.79 to 0.90 for each dimension [30] while validity was also reported to be good [14]. The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES) was also reported to have good alpha reliability between .60-.88 for Ambivalence, .85-.95 for Recognition and .83-.96 for Taking Steps [25]. In addition, test retest reliability also showed high values of .82 for Ambivalence, .88 for Recognition and .91 for Taking Steps.

The research was conducted by first getting the permission from National Anti-Drugs Agency. Once approval was obtained, the researchers administered the questionnaires to participants identified by officials in the drug rehabilitation centers. Instructions were given to participants and items were explained to participants when necessary. All the completed questionnaires were then collected by researchers.

The data were keyed in and analyzed using Statistical Package for Social Sciences (SPSS). Statistical analyses employed were Pearson correlation and multiple regression analyses.

RESULTS AND DISCUSSION

The findings in this research for all the hypotheses were presented here. Hypothesis 1 was formulated to test the significant relationship between psychopathological symptoms and readiness to change using Pearson correlation.

Results in Table 1 showed that there were significant correlations between symptoms of obsessive-compulsive, interpersonal-sensitivity and depression with Recognition. There were also significant correlations between symptoms of obsessive-compulsive, interpersonal-sensitivity, depression, anxiety, paranoia and psychoticism with Ambivalence. Finally, only symptoms of hostility were found to be significantly negatively related to Taking Steps.

Hypothesis 2 was formulated to examine whether readiness to change was significantly predicted by psychopathological symptoms. Multiple regression analysis was conducted to examine the contribution of

Table 1: Correlation between psychopathological symptoms and readiness to change

	Recog.	Ambiv.	T. Steps
SOM	-.057	.075	.002
O-C	.103*	.151*	.069
I-S	.121*	.193*	.071
DEP	.096*	.181*	.054
ANX	.082	.109*	.009
HOS	-.004	.022	-.132*
PHOB	-.006	.031	-.065
PAR	.022	.083	-.056
PSY	.054	.129*	.009

* p < .001

Table 2: Multiple regression analysis between psychopathological symptoms and Recognition

Model	B	Std. Error	Beta	t
Constant	22.50	.56		40.18*
O-C	.27	.46	.04	.59
I-S	.69	.45	.11	1.51
DEP	-.09	.47	-.01	-.18

* p < .05

Table 3: Multiple regression analysis between psychopathological symptoms and Ambivalence

Model	B	Std. Error	Beta	t
Constant	13.68	.37		37.51*
O-C	.11	.30	.03	.37*
I-S	.89	.32	.21	2.75*
DEP	.61	.33	.14	1.88
ANX	-.50	.33	-.12	-1.51
PAR	-.63	.28	-.15	-2.23*
PSY	.29	.33	.06	.87

* p < .05

Table 4: Regression analysis between Hostility and Taking Steps

Model	B	Std.Error	Beta	t
Constant	34.11	.50		67.81*
HOS	-1.12	.35	-.13	-3.15*

* p < .05

psychopathological symptoms toward Recognition, Ambivalence and Taking Steps. Of particular importance were the symptoms that significantly predicted Taking Steps because this would indicate whether having certain psychopathological symptoms would compromise the rehabilitees' motivation to change. The regression model showed that psychopathological symptoms did not predict Recognition with 2% variance, $R^2 = .02$, $F(3, 552) = 3.01$, $p < .05$. The results are shown in Table 2.

The regression model also showed that interpersonal-sensitivity and paranoia significantly predicted Ambivalence with 5% variance, $R^2 = .05$, $F(6, 542) = 5.03$, $p < .05$. The linear equation that can be formulated is:

$$Y = 13.68+.89(I\text{-}S)-.63(PAR)$$

Interpersonal-sensitivity was the strongest significant predictor for Ambivalence with Beta = .21, t = 2.75, p < .05. This is followed by Paranoia which also significantly predicted Ambivalence with Beta = -.15, t = -2.23, p < .05. The results are shown in Table 3.

Finally the regression model only showed that hostility predicted significantly Taking Steps with 2% variance, $R^2 = .02$, $F(1, 560) = 9.93$, $p < .05$. The linear equation that can be formulated is:

$$Y = 34.11-1.12(HOS)$$

Hostility was a significant predictor with Beta = -.13, t = -3.15, p < .05. The results are shown in Table 4.

CONCLUSION

Results indicated that certain psychopathological symptoms are correlated to the subscales that measure motivation to change. Rehabilitees who scored high on obsessive-compulsive, interpersonal-sensitivity and depression scales were found to have high recognition about their drug addiction problems. On the other hand, those who scored high on obsessive-compulsive, interpersonal-sensitivity, depression, anxiety, paranoid ideation and psychoticism were found to be highly ambivalent about their readiness to change. Furthermore, those rehabilitees who scored high on hostility scale were found to have low motivation in taking steps to change their addictive behavior.

Further analyses also demonstrated that psychopathological symptoms did not predict Recognition. This implied that rehabilitees with high psychopathological symptoms did not recognize that they need to change their addictive behavior. Thus, suggesting that rehabilitees need be free from any form of psychopathological symptoms in order to be able to recognize that they need to change their addiction.

Having high level of interpersonal-sensitivity and paranoia were also found to significantly contribute towards rehabilitees' ambivalence about changing their addictive behavior. Finally, rehabilitees who demonstrated

high hostility level were found to be unwilling to take steps towards changing their addiction. This also implied that the rehabilitees who are ready to take steps to change were those who demonstrated low level of hostility. Taken together, results of this study demonstrated that high level of psychopathology among drug addicts undergoing treatment may compromise their motivation to change. Those who did not recognize that they have problems with their addiction, were ambivalent about changing their drug abuse and were unwilling to take steps to change their addictive behavior certainly pose threat toward the success of the treatment program.

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