Prediction of Substance Abuse Based on Early Maladaptive Schemas and Perfectionism among Students

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Abstract

Objective: This study was conducted with the aim of predicting tendency to substance abuse based on early maladaptive schemas and perfectionism among students. **Method:** The present study was a descriptive-correlation one. The students of Razi University constituted the statistical population of the study, among whom the number of 288 students (137 females, 151 males) was randomly selected as the participants of the study by cluster sampling. The participants filled out Tendency to Substance Abuse Inventory (Weed et al., 1992), short form of the Young Schema Questionnaire (second edition, 2005), and Positive and Negative Perfectionism Scale (Terry Short et al., 1995). **Results:** The results proved mistrust/abuse, dependence/incompetence, subjugation and self-control/insufficient self-discipline to be predictors of substance abuse. **Conclusion:** The results contain many practical implications.

Keywords: Early Maladaptive Schemas, Perfectionism, Tendency to Substance Abuse

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Introduction

Substance abuse has been one of the most serious human problems and one of the most complex human phenomena in recent years that has led to frequent occupational, social and legal problems as a non-adaptive pattern of substance use (Barati, Verdipour & Jalilian, 2011). The subsequent social issues arising from this problem in developing countries are remarkable and these countries are at higher risk due to their young populations. Students, like other people are not immune from this problem. The effects of drug abuse among students have been reported to be profound and sometimes fatal. Addiction is a biological, psychological, and social-cognitive disease. Various factors influence the ideology of substance abuse that lead to the initiation of substance use and, then, addiction (Carroll & Onken, 2005). Cognitive schema is a component that affects tendency to substance use. Schema is considered as an abstract map that is a guide to the interpretation of data and problem solving (Young, Klosko & Weishaar, 2003). In terms of schema, Young introduced fifteen schemas that are activated as a result of failure to fulfill five important emotional needs, including connection and acceptance, self-regulation, competence and identity, self-expression,

Young's schema theory raised the need for acceptance, spontaneity and pleasure, and inner-directedness (Young, 1999; cited in Seligman, Tryon & Schulman, 2007). In addition, Young et al (2003) have suggested that early maladaptive schemas are created via mal-adaptive coping styles that are surrender (freeze), avoidance (flight), and overcompensation (fight). The activation of early maladaptive schemas causes cognitive dissonance. Therefore, tendency to substance abuse is a maladaptive coping style that people use to deal with the cognitive dissonance.

Among the other factors that may influence substance abuse, is perfectionism. Perfectionism is viewed as a set of high standards for performance that is followed by negative self-assessments, criticisms, and self-blame (Frost, 1990). Perfectionism has received attention as negative and neurotic style in behavior (Hemachek, 1978). Based on the normal-neurotic division, two types of perfectionism are distinguished from each other. The individuals with negative perfectionism are involved in negative feelings of failure, stress, and anxiety resulting from failure in reaching their unreasonable goals and such people are in a vicious circle of high personal and irrational standards and excessive fear of mistakes accompanied by negative emotions and depression caused by failure (Davari, Lavasani & Eje'ea, 2012). In contrast, positive perfectionism has a significant correlation with high personal standards, desired performance, and positive adaptation (Besharat, Asgari, Alibakhshi & Movahedinasab, 2010). In fact, perfectionists tend to avoidance rather than welcome problems and take responsibility tackling them. They try to protect against the reduction of their self-esteem and self-worth in this way. As a result, they are more concerned with

avoiding defeat in the area of self-worth dependence and opting for the avoidance goals or preventive goals with a higher possibility. Thus, negative perfectionists follow this item through a different approach and take advantage of mal-adaptive coping styles such as substance use, although they are seeking self-esteem like positive perfectionists (Clark & park, 2004). In this regard, Dunkley, Zuroff & Blankstein (2003) concluded that negative perfectionism is correlated with depression, anxiety, and low self-esteem. However, research findings obtained by Rice & Dellwo (2002) suggest that negative perfectionism is predictor of problematic psychological consequences such as depression, anxiety, lack of self-esteem, and inner shame, and these themselves are contributory factors to tendency to substance use. Decouvelaere (2002, cited in Riso, 2007), compared the schemas of 46 alcoholic patients with those of 55 non-alcoholic individuals. The results were indicative of the higher scores of the non-alcoholic group in all the schemas. This difference was particularly more observable in impaired self-regulation, the schemas of mistrust-abuse, self-sacrifice, and subjugation. Similarly, Brotchie, Meyer, Copello & Waller (2004) demonstrated that the scores of alcoholic patients were higher than the non-alcoholic participants in terms of the schemas of vulnerability to harm or illness, subjugation, and emotional deprivation (cited in Zargar, Kakavand, Jalali & Salavati, 2011). Stoeber & Otto (2006) came to the conclusion that healthy perfectionists showed higher levels of life satisfaction and positive personality traits, more adaptive coping strategies, higher social regulation, and better consistency compared to unhealthy perfectionists. Furthermore, healthy perfectionists received higher scores in the majority of the predefined positive attributes compared to unhealthy perfectionists. With regard to the above-mentioned points, the present study was an attempt to predict tendency to substance abuse based on early maladaptive schemas and perfectionism among students.

Method

Population, sample, and sampling method

In terms of purpose, the current study falls into the category of applied ones and it is also considered as a descriptive and correlation study due to no intervention of the researcher in data gathering. All the students of Razi University of Kermanshah (male and female) in the academic year 2011-2012 constituted the statistical population of the study. The number of seven faculties was randomly selected from among all the faculties of the university and, then, four classes were randomly selected from each faculty for data collection. Thereafter, from among the statistical population, the number of 288 students was randomly selected as the participants of the study via random cluster sampling method, 188 students of whom were female and 151 students were male. All the participants lay in the 18-34-year age group.

Instrument

Tendency to substance abuse inventory: This questionnaire contains 38 items that are answered by the choices "yes" or "no". The questionnaire consists of two categories of items: the items numbered 1, 5, 6, 11, 12, 18, 19, 23, 24, 28, 31, 32, 33, 34, and 36 are scored reversely. This means that no point is assigned to the answer yes while one point is assigned to the answer no. The items numbered 2, 3, 4, 7, 8, 9, 10, 13, 14, 15, 16, 17, 20, 21, 22, 25, 26, 27, 29, 30, 35, 37, and 38 are scored directly. This means that one point is assigned to the choice yes while no point is assigned to the answer no. The total score of the scale is the sum of all the scores of the items. The cutoff point is 23 for females and 24 for males. This scale was validated by Rostami, Nosrat Abadi & Mohamadi in Iran (2007). The Cronbach's alpha for this scale was obtained equal to .92. The reliability coefficients of scores of the scale on the normative sample (after a week) were obtained equal to .69 and .77 for males and females, respectively. The Cronbach's alpha was obtained equal to .39 for the scale in the present study.

Young Maladaptive Schema Questionnaire (short form of the second edition, 2005): This questionnaire consists of 75 questions which was constructed by Schmidt and colleagues for the measurement of 15 early maladaptive schemas. These 15 schemes are placed in five domains, namely disconnection and rejection, impaired autonomy and performance, other-directedness, overvigilance and inhibition, and impaired limits. Each item is scored on a 6-point scale. Schmidt and colleagues obtained Cronbach's alpha coefficient in the range of .83 to .96 for early maladaptive schemas and retest coefficients between .50 and .82 on non-clinical populations. Other studies also confirmed the factor structure and construct validity of the scale. In Iran, the Cronbach's alpha coefficient of this questionnaire has been reported .97 and .98 for female and male populations, respectively. Other studies have also confirmed the validity and reliability of the questionnaire. Cronbach's alpha of the questionnaire in this study was obtained equal to .93.

Positive and Negative Perfectionism Scale: This questionnaire was developed by Terry-Short, Owens, Slade, Dewey (1995). Perfectionism Scale consists of two negative and positive subscales and 40 items that are scored based on a 5-point Likert scale (strongly agree, agree, no idea, disagree, and strongly disagree). Half of the items, i.e. 20 items measure positive perfectionism and the other half measures negative perfectionism.

The total score of the scale ranges from 20 to 100. The cut-off point of the scale for people with impairment is 69 or higher in negative perfectionism. Construct validity of the scale was confirmed by Hasse, Prapavessis & Owens (1995). Hasse et al. (2002) studied a larger sample and showed that this scale enjoys an acceptable factor structure and internal consistency. They obtained Cronbach's alpha coefficients of .84 and .83 for positive and negative

perfectionism, respectively (cited in Abolghasemi, Narimani, Ebrahimzadeh & Vahedi, 2009). Similarly, Haase & Prapavessis reported Cronbach's alpha coefficients of .83 and .81 for positive and negative perfectionism, respectively. Besharat (2002) obtained the internal consistency coefficients of .90 and .87 for positive and negative perfectionism, respectively. The test-retest reliability of the questionnaire was also obtained equal to .86. Abolghasemi (2005) obtained the Cronbach's alpha coefficient of this scale equal to .87. In this study, the Cronbach's alpha of the whole questionnaire was obtained equal to .83 and the Cronbach's alpha coefficients for positive and negative perfectionism were obtained .75 and .80, respectively.

Results

Statistics pertinent to central tendency and the correlation between early maladaptive schemas and substance abuse are presented in the table below.

Table 1. Statistics pertinent to central tendency and the correlation between early maladaptive schemas and substance abuse

Variable	*Mean*	*SD*	*R*	*Sig.*	*N.*
Tendency to addiction	18.14	3.77	1	-	288
Mistrust	11.86	5.19	**.42	.001	288
Dependence	8.98	4.85	**.21	.001	288
Subjugation	9.77	9.57	**.28	.001	288
Self-control	19.11	5.59	**.39	.001	288

**P< .01

As it can be observed in the table above, there is a significant relationship between tendency to substance abuse and the schemas of mistrust, dependence, subjugation, and self-control. Multiple regression analysis was performed to assess the predictive power of early maladaptive schemas in substance abuse as follows. In the first step, the schema of mistrust entered into the equation and accounted for 18% of the variance of substance abuse by itself. In the second step, self-control was added to the equation and both schemas could explain together23% of the total variance. With the addition of subjugation, the three schemas could explain 25% of the variance.

Finally, in the fourth step, the schema of dependence entered into the equation and this schema along with the other four schemas could account for 26% of the total variance. The table below presents the regression coefficients in the last step.

Table 2: Regression coefficients of substance abuse based on early maladaptive schemas in the last step

Predictor	*B*	*β*	*t*	*Sig.*
Mistrust	.23	.32	5.640	.001
Self-control	.19	.28	4.810	.001
Subjugation	-.15	-.19	-3.210	.001
Dependence	.10	.13	2.220	.02

The statistics pertaining to central tendency and the correlation between perfectionism and substance abuse is presented in the table below.

Table 3: The statistics pertaining to central tendency and the correlation between perfectionism and substance abuse

Variable	*Mean*	*SD*	*R*	*Sig.*	*N.*
Tendency to addiction	18.14	3.77	1	-	288
Negative perfectionism	61.55	10.23	**.36	.001	288
Positive perfectionism	78.81	10.42	*-.13	.02	288

**P< .01

Multivariate regression analysis was used to explore the predictive role of perfectionism in substance abuse as follows. In the first step, negative perfectionism entered into the equation and could explain 13% of the variance. The table below presents the regression coefficients in the last step.

Table 4: Regression coefficients of substance abuse based on perfectionism

Predictor	*B*	*β*	*t*	*Sig.*
Negative perfectionism	.13	.36	6.660	.001

Discussion and Conclusion

The results of this study showed that the schemas of mistrust/abuse, dependence /incompetence, obedience, and insufficient self-control/self-discipline were predictors of substance abuse. These schemas are related to the domains of disconnection and rejection, impaired limits, impaired autonomy and performance, and other-directedness. It can be argued that people with tendency to substance abuse are more vulnerable in these four domains. This result is consistent with that of the study conducted by Decouvelaere (2002, cited in Riso, 2007). The schema of mistrust/abuse is pertinent to the domain of disconnection and rejection. These domains are typically formed in the families that are heartless, cold, isolated, short-tempered, unpredictable or abusive (Young et al., 2003, translated by Hamidpoor & Andouz, 2007). Overall, the results suggest that those who have mistrust/abuse activated also have tendency to substance abuse. It can be deduced that these people misbehave towards others and humiliate humans because they believe that others are harmful to human being. As a result, such people cannot rely on others when faced with a crisis and they turn to drug use in order to achieve peace and tranquility. On the other hand, dependence/incompetence was predictor of substance abuse. This schema is related to the domain of impaired autonomy and performance. The schemas of this domain normally come into existence in the families that reduce children's self-confidence and over-protect their children (Young et al., 2003). Those people who have active schema of dependence/incompetence believe that they cannot correctly accomplish everyday responsibilities and this state is often

realized as learned helplessness. The helplessness causes confusion and anxiety in individuals and they turn to substance use to achieve peace and alleviate the confusion. The schema of subjugation is related to the domain of other-directedness which is frequently observed in the families who have accepted children without any conditions. Young et al. (2003) believe that those people with active schema of subjugation feel compelled to divest their excessive control over others. This schema is often reflected as excessive sensitivity to the feelings of others. This schema generally leads to anger, which is in the form of a series of maladaptive symptoms including passive aggressive behavior, uncontrolled emotional outbreaks, psychosomatic symptoms, withdrawal of affection, outflow of complexes, and substance abuse. The schema of insufficient self-control/self-discipline belongs to the domain of impaired limits. This domain typically occurs in the families that are characterized by confusion or feeling of superiority rather than by discipline, proper exposure, and reasonable limits. People who are active in this schema cannot tolerate failure and frustration and strictly avoid discomfort and try to avoid conflicts at any cost. In the face of problems, these people exhibit emotional behaviors rather than take a problem-focused approach since they are determined to avoid conflicts. They may resort to drug abuse to eliminate confusion and conflicts.

The findings of this study suggest that negative perfectionism can predict tendency to substance abuse. To explain this finding, one can argue that the main drive in the life of negative perfectionists is not the self-actualization of talents but it is the achievement of superiority. They must achieve perfection in everything and do it in the best way; otherwise, they will not be satisfied. Failure to achieve perfection makes them feel severely anxious and guilty. These people often fail to achieve their goals, and consequently they undergo the diminution of self-worth. They feel inferior and come to the belief that have lost their values and credits in the mind of others and, thereby, they become anxious. Hewitt & Felt (2004) and Besharat (2002) approved of the existence of the relationship between negative perfectionism and anxiety. Anxiety causes disturbance and confusion, and the individuals suffering from it may tend to dysfunctional coping strategies such as drug abuse use in order to appease stress and anxiety. Since a low percentage of the variance of tendency to addiction was predicted by the variables of this study, it is suggested that the following researchers undertake other studies to identify the other factors that influence tendency to addiction. The model derived from the study is suggested to be evaluated on drug-dependent individuals in future studies so that the required interventions towards the decrease of tendency to addiction can be properly planned and put into practice.

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