Investigating the Relationship between Vulnerability to Addiction and 
Self-Efficacy among High School Students

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Abstract
Addiction is one of the most vulnerable social issues and the tendency to it involves several factors, including low self-efficacy. This study was conducted to determine the relationship between self-efficacy and vulnerability to drug abuse among students. This research was a correlational study. In this study, 483 male students from Salmas City (West Azerbaijan Province) high schools were selected by multi-stage cluster sampling. Then, the questionnaire to identify people at risk of addiction and also General Self-Efficacy Scale were conducted to them. Data were analyzed using Pearson correlation analysis. Statistical analysis was performed using the SPSS 20. The results showed that Self-efficacy has a significant negative relationship with propensity to addiction. The present study showed that low self-efficacy can play a role in the tendency of young people to drug addiction. Accordingly, clinicians can improve efficacy prevent the tendency of young people to addiction.

Keywords: Addiction, self-efficacy, vulnerability to addiction

Introduction
Addiction is one of the most vulnerable social that threatens the community, especially the younger generation in earnest (Karkhi, 2012). Todays, the problem of drug addiction and various drugs are a global and universally problem. Despite having 218 million addicted people around the World and our country proximity to major centers of drug production and taking the shortest transit route, has led to the complexity of the situation drug trafficking, so that in spite of the measures adopted in various dimensions, the addiction has spread in various sectors, especially young. There are 1200000 drug users and 800,000 recreational consumers in Iran, is a major problem that leads to family breakdown and the ensuing problems (Amani et al, 2005).

Addiction and substance abuse as asocial problem, is a phenomenon, which that comes with it the ability of society disappear in organization and maintain the existing order and cause structural changes in the economic, social, political and cultural changes in a society. World Health Organization (WHO), the issue of drugs, including generation, transmission, distribution and consumption in the three other global problem that production and stock piling of weapons of mass destruction, pollution, poverty and income gap, considered as one of the fundamental issues (Bagheri et al, 2011). Nonetheless the adolescents are not exempt from the risk of addiction, as reported in 2003, in Iran, the age of onset of drug use has risen to 14 to 16 years, and this shows the need to do a lot of research on the causes and rates of drug use among adolescents (Dehkordian, Delavar, & Jali, 2011).

Research literature indicates that drug use has increased dramatically among adolescents and young people. Most people who work with adolescents noticed that they take refuge in drugs, as a

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response to the repeated exposure to inappropriate situations, including feelings of insecurity, stress, psychological distress, and conflict with parents or problems of everyday life. Drug abuse begins in many people at high-school age, so one of the ways to reduce drug use in adulthood, is its control in adolescence (Tavousi et al., 2011).

Abolgasemi, Pourkord, and Narimani (2010) reported the rate of abuse of smoking in teenagers, 71.7, drug, 4.7 illicit drinks, 20.1, psychotropic pills, 3.1. Since data on the age of onset of drug use is declining and is focused on students, regarding the preparation for drugs use of this class, and to identify variables associated with it, will be very important.

Self-efficacy is one of the variables that are associated with substance abuse and includes individual judgments about the ability, capacity and its ability to carry out specific tasks (Schultz and Schultz, Translator: seyed mohammadi, 2000). One of the basic aspects of self-efficacy is the belief that people by providing control can effect on their life consequences. In particular, when dealing with stress, having a sense of control over circumstances is an important factor in coping with various situations (masoudnia, 2007).

Bandura (1993) in his theory of cognitive–social, by invoking the concept of self-efficacy on person’s perception focuses on personal effectiveness as a cognitive mediator, this means that humans when performing the act, judge about their abilities and competencies, and this judgment, effects on the mind, emotions and result. Bandura (2007), defines self-efficacy in this way, receive and judge of individuals about their skills and abilities to do what he needs to that in special situations. On the other hand, self-efficacy only affects performance that persons have the necessary skills to doing something specially and to doing that work, be stimulated enough.

Research on attitudes to drug use and self-efficacy found that self-efficacy correlates with life satisfaction. In other words, those who consider themselves more effectively, in addition, to achieve greater success in terms of performance have more satisfied with life, and doing less risky behaviors(Mortazavi, 2008).

Dolan and White (2008) showed in a study, there is an inverse relationship between high levels of self-efficacy and the desire to use drugs in high-risk situations. McKellar and et al (2008) also showed the rate of self-efficacy in the first year of recovery, is a good predictor for alcohol reduction, problems associated with alcoholism, depression, arousal, social support from friends and long-term participation in Alcoholics Anonymous.

Mohammad khani and et al(2007)concluded in a study on the adolescents at risk in Tehran, that factors such as locus of control and self-control skills, impact on substance use in adolescent sat risk, via the impact on individual and community empowerment. The results of Tate et al (2008) showed that poor self-efficacy provide the field of substance abuse in adolescents and young adults. Abolgasemi, Pourkord, Narimani(2010) showed in a research that Self-efficacy has a significant negative correlation with trends in substance use in adolescents.

Thus, according to information posted on the effectiveness of self-efficacy in the tendency of people to addiction, this study wants to answer this question that: Do self-efficacy can predict vulnerability to addiction in adolescents?

**Methods**

This research was a correlational study. The study population comprised all male high-school students in Salmas City (West Azerbaijan Province), including 7652 people who were enrolled in 2014-15 academic year. The sample size on the basis of Krejcie–Morgan’s table (N = 8000) was 367 people. Population size was rounded to 8000, but considering some loss of participants (incomplete questionnaires), the size sample was taken of 500, which were selected by multi stage cluster sampling. In this way, at first, among 20 boys high-school of Salmas, 5 high schools were selected

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by cluster random sampling method. In each school, 25 students per class and a total of 100 students were randomly selected from each school. Thus, 500 students completed questionnaires. Of those, 17 patients were excluded from analysis due to flaws in the questionnaire and the final sample was reduced to 483 people. It should be noted the age range of the participants was 15 to 19 years. Also, volunteers participated in the study were free to terminate their collaboration anytime for any reason. After explaining the purpose of the study and invoking students’ participation and confidence, the questionnaire to identify people at risk of addiction, the General Self-Efficacy Scale and the Toronto Alexithymia Scale (TAS-20) were conducted on them. Data were analyzed using Pearson correlation and simultaneous regression analysis. Statistical analysis were performed using the SPSS 20.

Anisi Questionnaire to identify people at risk of addiction: This questionnaire is a screening tool that was designed in 2013 by JafarAnisi in Baqiyatallah University of Medical Sciences. The questionnaire consists of 75 items and 4 subscales, the subscales are as follows: depression and helplessness, positive attitude to drugs, anxiety and fear of others, high sensation seeking. Scoring is rated on 4-point Likert scale from totally disagree (0), disagree (1), somewhat agree (2), and agree (3). Scores range from 0 to 225 and the cutoff point of the test is 80. In other words, people who have a score of 80 or higher are at risk of addiction. Cronbach α for this scale has been reported at 0.97 (Ghadiri, Sabouri, Babapour, 2014).

General Self-Efficacy Scale: This questionnaire was made in 1996 by Nezami, Schwarezer and Jerusalem and in Iran has been standardization by Rajabi (2006). It is a 10-question test and A 4-point Likert scale rates the answers. Cronbach's alpha coefficient this test is 0.85 and its concurrent validity with Rosenberg Self-esteem scale has been reported 0.30.

Results
Table 1 shows data on the basis of the study’s participants.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First grade</td>
<td>149</td>
<td>30.8</td>
</tr>
<tr>
<td>Second grade</td>
<td>190</td>
<td>39.3</td>
</tr>
<tr>
<td>Third grade</td>
<td>144</td>
<td>29.8</td>
</tr>
<tr>
<td>Total</td>
<td>483</td>
<td>100</td>
</tr>
</tbody>
</table>

In the present study, before examining the contribution of predictor variables of vulnerability to addiction in the regression model, the simple correlation between the variables were examined (Table 2). So that can see in table 2, vulnerability to addiction has a significant negative relationship with self-efficacy.

<table>
<thead>
<tr>
<th>Components</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Vulnerability to Addiction</td>
<td>78</td>
<td>34.99</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2.self-efficacy</td>
<td>27.62</td>
<td>6.51</td>
<td>**- 0.38</td>
<td>1</td>
</tr>
</tbody>
</table>

**Significant at the P <0.01  
* Significant at the P <0.05

Before performing the analysis, initial analyzes were conducted to ensure no violation of the assumptions of normality, linearity, multiple linear, and same distribution. In this study, to assess the independent predictive variables, multiple linearity assumption was calculated. Tolerance and the
variance inflation factor were derived. Tolerance index values were in the range of 0.73 to 0.82 and index variance inflation factor was ranged from 1.31 to 1.57. Therefore, it is possible that predictive variables are independent of each other and multiple linear did not happen. After the test and ensuring of no violation of the assumptions, the regression analysis were used in order to determine which variables predict vulnerability to addiction. Table 3 shows the results of the regression analysis.

**Table 3: Regression analysis to predict vulnerability to addiction through self-efficacy**

<table>
<thead>
<tr>
<th>Variable</th>
<th>index</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>P</th>
<th>R</th>
<th>R2</th>
<th>R2Δ</th>
<th>E.S</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>model</td>
<td></td>
<td>0.45</td>
<td>0.20</td>
<td>0.19</td>
<td>31.23</td>
<td>61.66</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-efficacy</td>
<td>-1.99</td>
<td>0.22</td>
<td>-9.07</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on table 3 shows that multiple correlation for the regression model is MR = 0.45, its square is equal to R2 = 0.20 and the correction coefficient is 0.19. In other words, 0.19 changes in vulnerability to addiction is explained by self-efficacy. Self-efficacy as negative is able to predict the maximum power in vulnerability to addiction.

**Conclusion**

The results showed that there is a significant negative relationship between self-efficacy and vulnerability to addiction, and at the same time, self-efficacy is Predictor of vulnerability to addiction. The findings in this section be consonant with the findings of Dolan and et al (2008), McKellar, Erice, Carver (2008), Sterling and et al (2007), Tate and et al (2008), Bahadori, Khanjani, (2013) that say people with low self-efficacy, further, tend to drugs. To explain these findings can say, people with clear self-efficacy, well defined, coordinated and almost stable, are afforded greater psychological health. Therefore, there is less likely that to solve their problems, use of abnormal and unhealthy ways such as substance abuse.

This result can be explained, like this that when faced with adverse events and stressful, people with high self-efficacy show more stability and do not accept negative thoughts about themselves and their abilities. Accordingly self-efficacy help them that resist against material and peer pressure and control their behaviors (Kiamarsi, Abolgasemi, 2011).

Also can be said, people who have low self-efficacy be convinced easily to deal with problems that their conduct is useless and quickly become frustrated, while people who have high self-efficacy remove barriers with improve self-management skills and perseverance and resist in the face of problems, And have more control over affairs, and experience less uncertainty. Therefore understanding of the self-efficacy can maintain, the health promotion behaviors and prevent the tendency of people to drug abuse (Banduram, 2006).

On the other hand, people with high self-efficacy have more courage and because of their high self-esteem and confidence, easily overlook the negative judgments of others against drugs and do not care for it. In fact the ability to say no to risky behaviors is a consequence of self-efficacy and the self-esteem that is its result (Tate and et al, 2008). In general, can be concluded that low self-efficacy (This means that a person does not believe that can do something successfully or inhibit the events that affect their lives) can be one of the factors, in the tendency of young people to drug abuse.

Accordingly, it can be noted that there are two sets of theoretical and practical implications of this study. In practical level can use the results of research by psychologists and psychiatrists in
the area of prevention of addiction and reduced the risk, intensify or damage of this disease. In primary prevention by using questionnaires for young in schools can identify those at risk and prone to addiction and with special programs about learning the skills of self-efficacy, reduced risk of addiction. The theoretical implications of research findings, providing new ideas and assumptions about the predictors of vulnerability to addiction. This forecast (self-efficacy) not only enrich theoretical models of addiction but it will lead to strengthening of the relations between the two theories; the theory of self-efficacy, and addiction.

The population and sample size poses some limitations on the findings, interpretations, and attributions of cognitive variables that should be considered. Also this study was conducted only on male students and the results are not generalizable to the population of females.

Introducing the vulnerable students to counseling centers for educational and psychological advice, training drug refusal skills, the inclusion of self-efficacy teaching methods in school curricula, the developing of training programs to regulate and control emotions, conduct a similar study in other geographic areas, basic education, and education sectors also on girls are recommendations of this study.

References
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