Relationship between self efficacies and achievement motivation with potential for substance abuse in student

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ABSTRACT: This study aimed to assess the relationship between self-efficacy and achievement motivation with the students tendency to drug abuse. This study is descriptive and correlation type. From Imam Khomeini International University undergraduate students, 400 students (230 female and 170 male) were selected by using multi-stage cluster sampling. Data collecting tool was self efficacy questionnaire (Scherrer et al, 1982), Achievement Motivation Questionnaire (Hermens, 1977) and drug abuse potential questionnaire (Wade et al, 1992). To analyze the data, the correlation method was used. The results showed that in men, Self efficacy and achievement motivation are able to anticipate potential for abuse and the tendency to drug abuse in most of the people. The only areas in which women are able to predict the Self efficacy and the risk of drug use trends to predict by identifying individuals who have low levels of self-efficacy and achievement motivation, and by learning ways of increasing self-efficacy and achievement motivation, it is possible to reduce their Drug abuse tendency.

Key words: self-efficacy, achievement motivation, Drug abuse

INTRODUCTION

In recent years, much attention is given to drug abuse as a major social problem in Iran (Jafary, Shahidi and Abedin, 2009), 46% of drug consumers have reported that, they start this action between the ages of 17 and 22, (Madani and Razeghi, 2004, quoted Molayee, Shahidi, Vazife and Bagherian, 2010). Because the Iran's populations are young people and many people are in this age range, the main concern is to find reasons and factors of the tendency among young people in Iran. This study aimed to assess two psychological factors on the tendency to use drug in the 18 to 23 years olds range. The World Health Organization defines addiction as: a periodic or perpetual toxic state use of arise from using drug frequently (Swinson and Eaves, 1987, as quoted by Franken, 2005).

The fourth revised Diagnostic and Statistical Manual of Mental Disorders (American Psychology Association, 2000), identifies addiction as a non-adaptive model of substance consumption, which leads to clinically significant problem. Addiction is along with symptoms such as tolerance, withdrawal, and craving for abuse, and despite having physiological, psychological and social effects on individuals, they continues to use (Galanter, Kleber, & Herbert). Substance use that includes tobacco, alcohol and medicines is the most risky behaviors during the life (Rutter2008, Weinberg et.al, 2002, Woodrofe et.al, 1993). Overuse of drugs, is happen when the frequency of using increases or consumption complications appears. Psychiatrists and clinical psychologists primarily care psychological social - personal functioning; They diagnosis substance abuse in adults based on twocriteria:

A person shows a clear and consistent pattern of patient form consumption, like high intake or an inability to stop or reduce drug use.

Abuse, to have at least one of the following problems:

- Failure to perform important tasks such as absenteeism
- Putting themselves and others at risk of physical harm, such as drunk driving
- Finding legal problems such as arrests due to criminal acts
- Having serious personal or social problems such as conflicts with family or colleagues (Sarefino, 2005).

Drug abuse is very complex and includes social, cultural, psychological, biological and genetic factors. No one of these factors works alone. In fact, the interaction of these factors can lead to substance abuse
disorder (Ghale bandi, 2003). In recent years, consistent with the increased drug use and abuse by young people, problematic behaviors associated with it is also rapidly increasing (Wasilow.Mueller & Erickson, 2001). While it is well known that having certain psychological characteristics bring vulnerability to Drug abuse on people.

Better understanding of the attitudes, aptitudes and underlying attendance of people and especially young people, make it possible for us to explain facilitating factors of people’s tendency to Drug abuse, (Knyazev et.al .2001). Drug abuse is one of the serious obstacles in the way of developing communities. Relationship between drug abuse and addiction, with other distortions such as violent behavior in the family, kid abuse, divorce increase and incidence of communicable diseases such as AIDS and hepatitis, adds to the range of its trauma (Kaplan & Sadock’s, 2007).

Perhaps Self efficacy and achievement motivation can be named as moderating variables effective in this field. it seems that people’s Faith to their abilities be considered to deal with life problems and their power to direct the daily activities, or in interpret of Bandura, the self-efficacy, and the desire to overcome difficulties and ability to perform difficult tasks, according to Murray, achievement motivation, can develop a tendency to attribute some influence in the field of substance abuse.

Cognitive theorists believe that self-efficacy beliefs or people’s judgments about their ability, specify, organizes the performance and activities Path of them (Bandura. Quoted by Pajares, 1995). Bandura (1986) explains that self-efficacy is a person’s confidence on his ability to perform everyday activities. Ferster, quotes Bandura (1992), depression is as low-grade effective treatment. It seems that, individual's sense of self-efficacy appears to be much higher, their goals level that they accept is higher, too, and feel heavier Commitment and responsibility towards the goals (Jalali, 1997).

Henry Murray (1938), a pioneer in the field of achievement motivation research thinks that need to improve is the desire to overcome the problem, power train, trying to do difficult things and trying to run more quickly. As this definition comes on, Murray think, progress is generalized progress. Like others, he believes that progress pleasure is not in reaching the goal, but is in developing and practicing skills. In other words, this is a process that provides incentives for the development (Franken, 2007). In general, individuals with high achievement motivation, feel they have control over their lives and enjoy it. They try to improve their performance and prefer to do things that are challenging or the amount progress in work can be calculated (Tucker-Ladd, 2000).

METHODS

This study is descriptive and correlation type. Study population included all undergraduate students of International University of Imam Khomeini, in Qazvin in 1388, that after providing a list of studying students’ names at the undergraduate level, from undergraduate students, 400 people (230 females and 170 males, in range 18 to 23 years old) were randomly selected using multi-stage cluster sampling.

The information collecting tool was self-efficacy questionnaire (Scherrer et al, 1982), Achievement Motivation Questionnaire (Hermen, 1977) and substance abuse potential questionnaire (Wade et al, 1992). The correlation method was used for data analysis.

Assessment tools

self efficacy questionnaire of Scherrer et al (1982)
23 questions scale of self-efficacy is made by Bandura and Maddox and based on social learning theory. Of these 23 articles, 17 are dedicated to general self-efficacy (GSE) and the rest are related to the experiences of self- efficacy in social situations (SSE) (Nourbakhsh and Maleki, 2005 and Barati, 1997, quoted Najafi and fuladvand, 2006). Efficacy scale in the areas of employment, education and the military gives a good prediction. Higher scores on this scale indicate higher self-efficacy. The reliability of this test is expressed 0.84 for public self-efficacy, and 0.65 for social self-efficacy using Cronbach's alpha coefficient (Keramati, 2001). In this test, the participants assigned a score between 1 and 7 to each component. To calculate the one’s score, at first reverse items` points 2,4,5,6,7,10,11,12,14,15,16,17,18,20,22 and then by adding the scores, person's self-efficacy scores are achieved (Zhanda, 2005).

Hermen’s Achievement Motivation Questionnaire (1977)
The questionnaire included 29 Incomplete sentence built by Hermen, which to the following sentence, several options are brought. To calculate the test reliability, Hermen used Content Reliability based on the previous research about the Achievement Motivation. He also calculated the correlation of each question, by progress-oriented behavior, which the validity of questions scope is 0.30 to 0.57. In addition, Hermen pointed to correlation between the questioner and Thematic Apperception Test (Ghasemi Pirbaluti, 1995). HeidarAli Hooman and Ali Asgari (2000) conducted this test during the research on a sample size of 1073 people(560 females and 513 males) who were selected from Saveh and suburban high school students by a multi-stage
sampling, that the reliability of test is obtained 0.83, by using coefficient Cronbach’s formula. Also Asvadi (2000), using Cronbach’s alpha and retest method, calculated the validity the test as 0.84 and 0.82.

**Questioner of Tendency to abuse**

The questionnaire was produced using the three subscales of the APS, AAS, MAC-R which is derived from a multi-faceted personality Minnesota Inventory (MMPI-2). The final form of the three scales contains 101 questions, which 11 questions were on repeated scale, and so the rest has been removed from the final form. To assess the validity of the questionnaire, Richardson test has been used, that in the preliminary implementation, alpha for the three scales, obtained respectively, AAS = 0.60 APS = 0.43 MAC-R = 0.40. This test, in 2000, has been validated by the KordMirza the obtained alphas in three scales were: AAS = 0.75 APS = 0.29 MAC-R = 0.48. In a similar study that was conducted on the students of America, the obtained alpha for the three scales were: AAS = 0.55 APS = 0.48 MAC-R = 0.36. In this research to facilitate the implementation, the checklist AAS is used which includes only 13 questions and was able to predict the trend of drug use.

**RESULTS**

To compare the Average of studied variable between the two sexes, two independent samples t-test was used, that the results is given in Table 1.

**Table 1. T-test for comparing means among two sexes**

<table>
<thead>
<tr>
<th>T-test for comparing means</th>
<th>Lovin test for equality of variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig</td>
<td>df</td>
</tr>
<tr>
<td>0.001</td>
<td>398</td>
</tr>
<tr>
<td>0.001</td>
<td>287/71</td>
</tr>
<tr>
<td>0.07</td>
<td>398</td>
</tr>
<tr>
<td>0.07</td>
<td>340/88</td>
</tr>
<tr>
<td>0.14</td>
<td>398</td>
</tr>
<tr>
<td>0.14</td>
<td>374/6</td>
</tr>
</tbody>
</table>

This table shows that, there is a significant difference between boys and girls potential on drug abuse (p<0.01). Studies of average show that the potential on boys are more than girls. Therefore, so on examining the Correlation and regression analyzes, boys’ and girls’ data was separately studied. Pearson correlation coefficients between variables according to sex are presented in Table 2.

**Table 2. correlation among variables according to sex**

<table>
<thead>
<tr>
<th>SelfEfficiency</th>
<th>Development motivation</th>
<th>Variables</th>
<th>sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0/82</td>
<td>-0/81</td>
<td>Correlation coefficient of Pierson significant</td>
<td>Talent of drug abuse</td>
</tr>
<tr>
<td>0/001</td>
<td>0/97</td>
<td>Correlation coefficient of Pierson significant</td>
<td>Females</td>
</tr>
<tr>
<td>1</td>
<td>0/001</td>
<td>Correlation coefficient of Pierson significant</td>
<td>SelfEfficiency</td>
</tr>
<tr>
<td>230</td>
<td>230</td>
<td>Correlation coefficient of Pierson significant</td>
<td>Males</td>
</tr>
<tr>
<td>-0/89</td>
<td>-0/87</td>
<td>Correlation coefficient of Pierson significant</td>
<td>Numbers</td>
</tr>
<tr>
<td>0/001</td>
<td>0/95</td>
<td>Correlation coefficient of Pierson significant</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0/001</td>
<td>Correlation coefficient of Pierson significant</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td>170</td>
<td>Correlation coefficient of Pierson significant</td>
<td></td>
</tr>
</tbody>
</table>

The table shows that, in both sexes, there is a significant negative correlation between substance abuse potential with the Achievement Motivation and self-efficacy (<0.01), this means that the higher Achievement Motivation and self-efficacy in individuals shows less substance using potential. Also between Achievement Motivation and self-efficacy in both sexes, high correlations has been obtained (P<0.01).

Results of stepwise regression analysis for predicting drug using potential from self-efficacy and Achievement Motivation, according to sex are presented in Tables 3 and 4.
This table shows that stepwise regression analysis for the prediction of drug abuse potential by self-efficacy and achievement motivation in boys each variable is entered into equation, whereas for girls only self-efficacy was predictor of potential substance abuse.

It is also shown in this Table that, Beta coefficients for the predictor variables are negative; it means that high achievement motivation and self-efficacy predicted the less potential for drug abuse.

**DISCUSSION**

As seen in Table 1, males tendency to consuming drug were more than females. In fact, despite the changes in view to addiction, from crime to disease, the social negative charge of the Pathologic behavior is highlighted for females more than males, and the social pressure is heavily associated with it. This is undoubtedly one reason for the lower prevalence of substance abuse in different countries among women. But there are other cultural reasons for these differences; one of them is, more Achievement Motivation, in the following, its effectiveness mechanism will be explained. In Table 2 we have shown that potential of drug abuse, have significantly negative relationship with both self-efficacy and Achievement Motivation, it means that the higher self-efficacy and Achievement Motivation make lower tendency to substance abuse. These findings frequently has shown in different studies, for example, up to now, many supporting has been done from self-efficacy roles as a positive treatment consequences, in patients with drug and alcohol abuse, (Miller, W. R.2003; Allsop et al 2000, Goldbeak et al 1997, Stephens 1993, Rychtarik et al, 1992). Many theorists believe that theory, theoretically, self-efficacy is able to predict the returned experiences in patients with substance abuse (planar et al, 1999; Persian month Dey Clement, 1989; Marley and Gordon, 1985). And, therefore, specifically many substance, drug and alcohol abuse treatments are explicitly focused on increasing self-efficacy (quoting Witkiewitz, K., & Marlatt, 2004).


Research of Coon et al (1998) showed that, among patients with cocaine abuse, those who continued to the end of treatment, and one month after treatment were also avoided, had higher self-efficacy (quoting Dolan, Rohsenow and Martin, 2008).

Tyler & Moos (2009), in a research that entitled dual diagnosis dimension on addiction treatment effectiveness, quoted by Annis & Davis (1988), Miller et al (1982), express that self-efficacy is related to the ability of controlling alcohol and drug using, it is clearly evident on his research about addiction to drugs, alcohol.

Burlew, Feaster, Brecht, Hubbard on their research on a sample of addicts in a rehabilitation center found that, self-efficacy and self-help, are key mediators for explaining the relationship between substance abuse treatment and its outcomes in patients with substance abuse, has Burlew and colleagues express that these results are consistent with results of the previous research, including Mickey`s et al (2003) research.

Dolan, Martin and Rohsenow (2008), pay attention to self-efficacy effect on abstinence, increasing it by education to cocaine addicts, and finally were able to replicate the results of previous research in this area, because the self-efficacy on abstinence, are considered as a factor to predict outcomes of treatment of patients with alcohol abuse (Burling et al, 1998; Demmel, 2005; Kavanaugh et al, 1996; Monti et al, 1993; Solomon et al., 1996; Annis et al, 1993; Solomon and Annis, 1990), opioids (from Ray et al, 1995) and smoking (Baer et al, 1986; Gulliver et al, 1995; McIntyre et al, 1983).

Also Ligen, McKellar and Moos (2007), in a comprehensive research on a large sample of patients with substance abuse found that, higher education, having fewer problems related to substance abuse, more ensuring from refraining consumption and educating necessary skills to enhance the efficacy of substance abuse treatment, prevent from addicts` return to using drugs again, and this effect persists in a follow-up year.

Jason, Davis and Ferrari (2007), in a research showed that, Changes in the intensity of abstinence are closely linked with supporting groups, self-efficacy in abstinence and Length of Stay in supporting house.
Pelissier, B & Jones (2006), in a study, evaluated the motivation, coping and self-made men and women addicted prisoners. Results showed that, between self-efficacy and withdrawal motivation in both sexes, there is a positive correlation, and people with higher efficacy, used more adaptive coping styles. On the other hand, the results of this study, which was conducted on a relatively large sample of persons in both sexes with substance abuse, indicated that, women had more problems associated with substance use and have less self-efficacy to avoid in tempting environments.

Generally, it is expected that higher levels of education, substance abuse and not very sharp depression, and good coping skills, can largely predict the self-efficacy of patients with substance abuse. According to updated self-efficacy pattern (Bandura, 2004), we also expect that social support be associated with higher self-efficacy.

Researcher by reviewing and searching found that there is no independent research has been conducted about drug abuse and achievement motivation and research.

Table 2 also shows that correlation between the self-efficacy and achievement motivation is very high. In fact, Bandura (1986) developed a theoretical framework that highlights the role of self-referent thought in guiding and changing human action. According to these models, behavior changes arrived from through various ways, including direct confrontation, patterns accountability, appetite, and reducing anxiety. This action is somewhat strengthen of person's self-efficacy expectations (Bandura and Abrams, 1986). On the other hand, he considered self-reflection as a unique human ability, that in this way of thinking people change their behavior. Self-Assessment of the abilities, are including perceptions of self-efficacy. People's beliefs about their abilities, on various ways, will affect the behavior such as the choices of people, and make them to continue or leave the operation. People get involved to assignments that feel they deserve and are sure that they can do or get the expected success and thereby satisfy their need to improve themselves. Self-efficacy beliefs determine how much efforts do people need how much diligence and perseverance should have in the face of obstacles, how to be flexible in the face of obstacles. Also, self-efficacy beliefs have impacts on individual thought patterns and their emotional reactions. As a result of these influences, self-efficacy beliefs are strong determinants and predictors of performance levels. Based on these reasons, Bandura believes that self-efficacy beliefs play a key role in people’s lives, and are closely related to improving the achievement motivations (Pajariz, 1995). This close relationship means that people with high progress motivation, experience a higher sense of self-efficacy and also people who have deep feelings of self-efficacy, have more realistic achievement motivations, and hope to develop these goals.

In Table 3, we saw that in girls only self-efficacy factor is able to predict drug cravings. The question is that why the girls’ achievement motivation cannot be a good predictor of potential abuse? Matina Horner announced in 1968 that women are motivating to be succeeded but are afraid of success. Horner believes that being succeeded in the competitive world is something that many women avoid it. Since, traditionally this was considered as non-feminine feature (scholtez, 1377). However, later studies showed that different this theory was fit with the mood of Horner's life duration, and by developing the societies and civilizations rise, gradually this fear in females will decrease. For example, in a study, were done by Lau and Zinseky (1994), gender differences in achievement motivation were studied with respect to the location. This research was performed on Italian boys and girls as more traditional society, and American boys and girls as persons who have less traditional attitudes, and indicates that Italian girl in comparison with Italian boys had lower achievement motivation, but no difference was observed between Americans male and female on Achievement Motivation. Detailed investigation of Marjuy Banks in 1994 showed that, gender differences in Achievement Motivation get meaning from cultural factors. He showed that Italian girls are weaker than Italian boys on Achievement Motivation. However, in Greek and English Samples, girls’ score was higher than boys’ in achievement motivation.

So according to the traditional conditions prevailing on cultural environment of Iran, it can be considered that still females fear from success that society considers appropriate for men. Perhaps these differences between male and female are on achievement motivation and its ability to predict the tendency to substance abuse. Because our society, low achievement motivation, is not admirable and acceptable and so men who have low achievement motivation, because of environmental and cultural pressures, are looking for ways to increase the motivation, and sometimes with wrong impression about refreshment and capable suppliers have heard, are tended to drug use. However, if the achievement motivation in girls be low, there is no kind of social pressure to raise it, and undoubtedly in this case, girls don't try to increase it, at least through unconventional means, such as drug abuse. But self-efficacy is component that is expected to be in every culture of both sexes. That is because the low efficacy of both sexes can easily predict the trend of drug abuse, because when people feel they have low self-efficacy, they will seek a way to increase it and drug consuming would make sense at first.

People who use drugs, when drug impacted their brain, they get themselves able to do whatever they want, and this qualification feeling can be very lovely and amplifier for people who have low self-efficacy during their lifetime, which may lead to permanent use. However, people who have a high sense of self-efficacy,
according to the findings in Table 3 and 4, have less tendency to use substances, because when a person feel
that, is able to perform his duties and functions, he doesn't need to enhance it by an external factor. And even if he
uses drug, due to his deep insight into his abilities, can distinguish the sense of his real performance and the
sense performance from the drug abuse, and can differentiate them properly. In addition, people who have a
high sense of self-efficacy do not feel better by using drug and achieving a sense of virtual self- efficacy, and
therefore the drug consumption is not as appealing as people with low self-efficacy. The same difference
between the sexes on Achievement Motivation explains one of the females` low tendencies to substance
abuse. What we have found in Table 1, and showed that in general, men have more tendency than women to
abuse the drug.

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