# Original Article

# Comparing the Effectiveness of Behavioral Recognition and Group Stress Surmounting Techniques Instructions on Changing University Students' Positive Attitudes towards Opiate Abuse

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#### **Abstract**

**Background:** One of the most important strategies in preventing addiction is changing positive attitudes and stabilizing negative attitudes towards opiate abuse. Current research has been comparing the effectiveness of behavioral recognition and stress surmounting techniques instructions on changing students' positive attitudes towards opiate abuse.

**Methods:** To determine the effectiveness of behavioral-recognition and group stress surmounting instructions on changing student's positive attitudes towards opiate abuse, 90 students (45 boys and 45 girls) who had got good grades in attitude measuring questionnaire were chosen and were randomly assigned in 3 groups (two test groups and the control group) and then, were randomly replaced in 15 person groups with sex distinction. The research data were analyzed using multivariate statistical analysis method.

**Findings:** The results of pot-test analyses showed significant improvement compared with pretest analysis in both training methods and in both genders (P < 0.05). Then, the surmounting methods group training and recognition-behavioral group training both significantly improved positive attitudes towards opiate abuse in male and female students.

**Conclusion:** Behavioral-recognition and stress surmounting techniques instructions brought about changes in students attitudes towards opiate abuse and these changes were more prominent in female students than in males.

**Keywords:** Behavioral-cognition instructions, Stress coping techniques, Instructions, Attitude, Opiate abuse.

Addict & Health 2011; 3(1-2): 68-77. Received: 19.1.2011 Accepted: 6.4.2011

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## Introduction

Today, addiction (drug dependence, drug toxicity) as a social-psychological and historical issue is one of the contemporary world's problems. Addiction is threatening the human societies to collapse. According to the diagnostic and statistical of mental disorders fourth edition guide (DSM-IV), the fundamental sign of drug dependency is a set of recognition-behavioral and physiological symptoms. The addict, despite having significant problems associated with narcotics continues its consumption. For the prevention of addiction, the law and fight for supply cannot be effective alone. The most appropriate approach is to reduce demand. The most important element of planning (training) is exposed to threats. Inaccurate beliefs and positive attitudes towards drug abuse<sup>1</sup> among individuals and families is one of the determinants of high demand and the tendency toward addiction. Therefore, one of the ways to control the demand is changing the attitude to drug abuse.1

One of the most important strategies in the prevention of addiction is changing the positive attitudes and stabilizing the negative attitudes towards narcotics. Attitudes are the reasons of logical behaviors in any specific person. Many factors influence the individuals' attitudes. One of these factors is the individual's knowledge and information in different fields. Therefore, numerous studies indicate that people with positive attitudes and beliefs about narcotics have more potential in consumption and addiction than the individuals with negative or neutral attitudes. Accordingly, the change from neutral to negative attitude is easier than changing from positive to negative attitude. For this reason, the non-smokers are concerned smokers more than the to cigarette disadvantages. The most direct interventions to enhance mental-social capabilities are the interventions that strengthen the people coping resources and their personal-social abilities. With respect to children, adolescents and youth population, this type of interventions can be provided through life skills training in a supportive educational environment.<sup>2</sup>

Tarmyan conducted an unequal controlled research project as pretest-posttest. It was entitled as "effectiveness of life skills training to prevent drug abuse for the first year high school students in Tehran." The results showed that the students, who participated in life skills training classes, were found a more negative attitude towards narcotics than the control group.2 Rahmati performed a research in the field of the impact of preventive training on the probability of drug abuse in high school adolescents in Isfahan. The obtained result was that the prevention skills training are involved in reducing the risk of addiction in male and female students. It was also found that increasing the parental awareness about the probability of drug abuse has been effective in their children.3 Rashid carried out a research entitled "the efficiency of recognition-behavioral approach in preventing and reducing cigarette smoking". It was determined that recognitionbehavioral approach was effective in the following cases: increasing restraint to reduce anxiety and depression, changing beliefs about narcotics and increasing personal abilities to the components of emotional intelligence (interpersonal ability, tolerance, compatibility and general mood). Recognitionbehavioral approach has been effective in the reduction of cigarette smoking and preventing its consumption.4

A previous study showed that systematic motivation consultation and recognitionbehavioral therapy were effective in the creation of negative attitude towards the narcotics.1 Meichenbaum and Cameron indicated in another research that the optimistic, flexible, selfvulnerable people with high self-esteem rely more on active coping and planning. Less desirable qualities are related with dysfunctional coping tendencies.<sup>5</sup> Lazarus and Launier conducted a research entitled "evaluation of coping strategies and the use of narcotics". 4500 vouth people participated in this study as the subjects. These researchers were sought to identify and predict the tendency to drug use. In that research, thinking about narcotics and coping strategies were followed up. They concluded that the type of strategies being used can be the predictor of future drug use by taking advantage of the multiple regression statistical

Teesson et al. performed a research in this field. The research title was: "the students' attitude towards narcotics". It was shown that the attitude towards cigarette smoking, alcohol

and other narcotics were associated with their consumptions. People, who have a more positive attitude towards narcotics, also show higher consumption.<sup>7</sup>

Lazarus and Folkman in a study paid attention into the role of beliefs in the attitudes and expectations of the drugs consumers. The results showed that the addicts feel the drugs can help them cope with personal and social problems such as the social anxiety.8 Botvin and Griffin conducted a study for investigation on the effect of training of life skills on knowledge, attitudes and abilities of middle school students in the selection of healthy lifestyles. This study showed that the students who participated in life skills training program, smoked less compared with those that were not involved in the training.9 Taramian and Mehryar in a research entitled: "the role of attitudes in high-risk behaviors such as addiction" showed a positive and meaningful relationship between positive attitudes to drug use and long-term multiple use.<sup>10</sup> There are primary themes for anti-social patterns and emotional attitudes in alcoholics. A research on assessing psychodrama impact (psychological impressiveness) in changing the attitudes of male and female high school students in Khoramabad towards drug abuse indicated that psychological impressiveness was effective in the change of students' attitude towards the drug abuse. But, there was no difference significant between students' demographic characteristics such as gender and age and the changing attitudes of students towards drug abuse.<sup>11</sup>

Yarmohammadian and Ghaderi Dehkordi carried out a study in the field of preventive training impact on the probability of drug abuse in male and female students in Isfahan. He has come to this conclusion that prevention skills training have played an important role in reducing the risk of addiction in male and female students. Female students have negative attitudes towards drug use. Female students in south of Tehran had a more active approach to the problem of drug abuse. They reported religious identification in this regard. 12

Classrooms, school and university atmosphere are among the places where people are affected more by their peers. Most of the time of the students is spent in these places. The students are under direct and indirect influence

of the teachings of their peers in most of issues and in their personal and social situations. The present study was conducted in order to investigate among the factors influencing the role of recognition-behavioral factors coping with stress in drug abuse. In fact, the researcher sought to answer the question that whether recognition-behavioral group training and stress management training group practices are effective on changing the positive attitude towards drug abuse. Therefore, the researcher in the present study was looking after the following objectives: determining effectiveness of the recognition-behavioral group training in changing the students' positive attitude towards drug abuse in both genders and the effectiveness determining surmounting group training in changing the students' positive attitude towards drug abuse in both genders.

#### Methods

The present study was a pilot project with three groups and pretest-posttest design. In these plans, each of the groups was measured twice. The first measurement was performed with the implementation of a pre-test and the second measurement was done by running a post-test. The statistical population of this research was all male and female students of Islamic Azad University in Rasht. They were studying in academic year of 2010-11 (Persian). The sample size included 90 students (45 girls and 45 boys).

Initially, the necessary permission was obtained from the Vice Chancellor for Student Affairs. The following courses were selected by using stratified random sampling method: accounting, literature, management, elementary education, and English language teaching. Then, the questionnaire of addiction attitude detector was conducted over 500 male and 500 female students. Those students were selected who gained higher scores (had more positive attitudes towards opiate abuse) in the test (250 boys and 250 girls). 90 students were randomly selected among them (45 males and 45 females). Different test conditions were randomly assigned with the gender breakdown in the groups of 15 students (two test and one control

Then, the test groups learned the recognitionbehavioral training and stress management techniques in eight 90-minute sessions. The control group received no training. After the training, the groups were measured by the addiction attitude detector scale again. Training recognition-behavioral sessions were included briefing and referrals, self-confidence, familiarity with the drugs, applied relaxation in reducing anxiety, decision making and problem solving skills, self-controlling the emotions following failure and frustration, preventing to escape from responsibility and how to say no. Training sessions for coping with stress were included the followings: stress definition, coping with stress, distraction, changing interests, self-learning techniques, muscle relaxation, bio-feedback, selfexpression, how to combat with irrational beliefs, problem solving, decision making and homework providing.<sup>12</sup>

## Study tools

The questionnaire of addiction attitude detector was used for gathering and collecting the required data. The questionnaire is made in Likert range in two forms of A and B.12 In the Likert method for measuring attitudes toward addiction, initially a large number of favorable and unfavorable items related to attitudes towards a particular topic, such as addiction, run on a particular group of subjects. The subjects presented their opinions in the range of quite agree to quite disagree. Grading of the favorable items represented positive numbers to any of the answers of quite agree, agree, no comment, disagree and quite disagree. The scores of 5, 4, 3, 2 and 1 were given to the mentioned items, respectively. Grading unfavorable questions were marked with (\*) specified in the questionnaire. They were represented negative attitudes. Thus, in form A and form B, the minimum score was 32 and the maximum was 160. The validity of the mentioned questionnaire was approved by the experts in the field of educational science and psychology. The reliability of the questionnaire by citing the Cronbach's alpha coefficient has been reported 0.81 for form A and 0.86 for form B.12

#### Results

Based on the results of table 1, considering the meaningful difference between the averages in the recognition behavioral group training with 99% confidence, the above presented objective is

accurate. It means that the recognition behavioral group training was effective in male students' positive attitude change toward opiate abuse.

Based on the results of table 2, considering the meaningful difference between the averages in the recognition behavioral group training with 99% confidence, the above presented objective is accurate. It means that the recognition behavioral group training was effective in female students' positive attitude change toward opiate abuse.

Based on the results of table 3, considering the meaningful difference between the averages in the surmounting methods group training with 99% confidence, the above presented objective is accurate. It means that the surmounting methods group training was effective in male students' positive attitude change toward opiate abuse.

Based on the results of table 4, considering the meaningful difference between the averages in the stress surmounting methods group training with 99% confidence, the above presented objective is accurate. It means that the stress surmounting methods group training was effective in female students' positive attitude change toward opiate abuse.

## Discussion

The first objective exploratory analysis of the results and calculated F according to F = 43.298(1 and 29) at the level of P < 0.05 for recognitionbehavioral group training was meaningful. According to calculated F = 38.002 at the level of P < 0.01 for stress surmounting group training was meaningful. Thus, the objective of the study was approved. These findings were consistent with the results of some other researches.<sup>12</sup> The adolescence is a dangerous period for young people towards drug addiction. Most of vulnerable young people do not have the needed skills to tackle against the traumatic causes.<sup>13</sup> Therefore, the importance of prevention programs and early primary considerations will be more apparent. Thus, due to the performed researches and the current study, recognitionbehavioral group training and group training methods of surmounting stress have been changed the attitude towards opiate abuse. Namely, it has been created negative attitudes toward drug use in the students.

**Table 1.** Results of covariance analysis for the first objective test: Determining the effectiveness of the recognition-behavioral group training in changing the students' positive attitude towards drug abuse in male gender

Changes resource (diffraction)	Total squares	Degrees of freedom	Mean squares	F	Significant level	Test exponent
Corrected model						
Recognition-behavioral group training post-test	3527.478	3	1175.826	60.040	< 0.001	1.000
Stress surmounting methods group training	2896.277	3	965.426	70.110	< 0.001	1.000
Intercept						
Recognition-behavioral group training post-test	6.997	1	6.997	0.357	0.555	0.089
Stress surmounting methods group training	0.858	1	0.858	0.062	0.805	0.057
Group						
Recognition-behavioral group training post-test	846.005	1	846.005	43.198	< 0.001	1.000
Stress surmounting methods group training	523.297	1	523.297	38.002	< 0.001	1.000
<b>Pre-test (recognition)</b>						
Recognition-behavioral group training post-test	1223.391	1	1223.391	62.468	< 0.001	1.000
Stress surmounting methods group training	29.319	1	29.319	2.129	0.156	0.290
Pre-test (stress)						
Recognition-behavioral group training post-test	5.819	1	5.819	0.000	0.986	0.050
Stress surmounting methods group training	1070.208	1	1070.208	77.720	< 0.001	1.000
Error						
Recognition-behavioral group training pre-test	509.189	26	19.584			
Stress surmounting methods group training	385.023	26	13.770			
Total						
Recognition-behavioral group training post-test	10965	30				
Stress surmounting methods group training	1174.61	30				
Corrected total						
Recognition-behavioral group training post-test	4036.667	29				
Stress surmounting methods group training	3254.30	29				

**Table 2.** Results of covariance analysis for the second objective test: Determining the effectiveness of the recognition-behavioral group training in changing the students' positive attitude towards drug abuse in female gender

Changes resource (diffraction)	Total squares	Degrees of freedom	Mean squares	F	Significant level	Test exponent
Corrected model						
Recognition-behavioral group training post-test	4037.877	3	1345.961	109.647	< 0.001	1.000
Stress surmounting methods group training	4260.276	3	1420.092	210.275	< 0.001	1.000
Intercept						
Recognition-behavioral group training post-test	17.281	1	17.281	1.408	0.246	0.208
Stress surmounting methods group training	16.786	1	16.786	2.486	0.127	0.330
Group						
Recognition-behavioral group training post-test	94.534	1	17.924	1.461	0.238	0.241
Stress surmounting methods group training	385.482	1	385.482	57.079	< 0.001	1.000
Pre-test (recognition)						
Recognition-behavioral group training post-test	17.924	1	17.924	1.461	0.238	0.241
Stress surmounting methods group training	2.229	1	2.224	0.320	0.571	0.086
Pre-test (stress)						
Recognition-behavioral group training post-test	94.963	1	94.963	7.901	0.009	0.772
Stress surmounting methods group training	14.232	1	14.232	2.107	0.159	0.288
Error						
Recognition-behavioral group training pre-test	319.082	26	12.272			
Stress surmounting methods group training	175.591	26	6.735			
Total						
Recognition-behavioral group training post-test	111041	30				
Stress surmounting methods group training	106286	30				
Corrected total						
Recognition-behavioral group training post-test	4356.967	29				
Stress surmounting methods group training	4435.867	29				

**Table 3.** Results of covariance analysis for the third objective test: Determining the effectiveness of the stress surmounting group training in changing the students' positive attitude towards drug abuse in male gender

Changes resource (diffraction)	Total squares	Degrees of freedom	Mean squares	F	Significant level	Test exponent
Corrected model						
Stress surmounting methods group training	2185.09	2	1092.545	101.681	< 0.001	0.000
Intercept						
Stress surmounting methods group training	68.649	1	68.649	6.389	0.018	0.683
Group						
Stress surmounting methods group training	128.133	1	128.133	11.925	0.002	0.914
<b>Pre-test</b> (recognition)						
Stress surmounting methods group training	2056.957	1	2065.957	191.437	< 0.001	1.000
Error						
Stress surmounting methods group training	290.110	27	10.47			
Total						
Stress surmounting methods group training	84848	30				
Corrected total						
Stress surmounting methods group training	2475.20	29				

**Table 4.** Results of covariance analysis for the fourth objective test: Determining the effectiveness of the surmounting methods group training in changing the students' positive attitude towards drug abuse in female gender

Changes resource (diffraction)	Total squares	Degrees of freedom	Mean squares	F	Significant level	Test exponent
Corrected model						
Stress surmounting methods group training	2185.09	2	1092.545	101.681	< 0.001	0.000
Intercept Stress surmounting methods group training	68.649	1	68.649	6.389	0.018	0.683
Group Stress surmounting methods group training Pre-test (stress)	128.133	1	128.133	11.925	0.002	0.914
Stress surmounting methods group training	2056.957	1	2065.957	191.437	< 0.001	1.000
Error Stress surmounting methods group training Total	290.110	27	290.110	10.745		
Stress surmounting methods group training Corrected total	84848	30				
Stress surmounting methods group training	2475.20					

The second objective exploratory analysis of the results and calculated F according to F = 7.703(1 and 29) at the level of P < 0.0005 for recognition-behavioral group training was meaningful. According to the calculated F = 57.09at the level of P < 0.0005 for stress surmounting group training was meaningful. Thus, the objective of the study was approved. These findings were consistent with the results of some other researches.<sup>12</sup> The third objective exploratory analysis of the results and calculated F according to F = 11.925 (1 and 29) at the level of P < 0.01 was meaningful and these findings indicated the difference between the two groups of students. Thus, these findings were confirmed with 99% confidence. Unfortunately, no studies were found that directly compared the two treatment groups. But, generally it was consistent with previous results<sup>6</sup> in which the female students had negative attitudes towards addiction and they were selected active surmounting practices. Therefore, the recognition-behavioral group training has specific skill features, unique effects and plays an important role in effective relationships between the individuals. Moreover, it will give the ability to resist pressure from the friends and other people to surmounting against the drug offers. It also provides the person to have reasonable behavior when faced with various problems in life. The individual avoids from dealing with indecent and traumatic behaviors. The fourth objective exploratory analysis of the results and calculated F according to F = 11.925 (1 and 29) at the level of P < 0.01 was meaningful and these findings indicated the difference between the two groups of students. Thus, these findings were confirmed with 99% confidence.

Unfortunately, no studies were found that directly compared the two treatment groups. The following disorders are more common in boys than in girls in the childhood period: mental disorder, conduct disorder, attention deficit disorder and gender identity disorder. Nevertheless, the girls much more than the boys show emotional problems and anxiety. The girls are more vulnerable than the boys to the disturbances in the adolescence. The girls, in the adolescence and young age show more negative reactions to psychological pressures than the boys. The gender difference in the vulnerability to psychological pressures is probably rooted in the different methods of

emotions socialization.14 In a previous study, the girls used surmounting social support methods more than the boys.15 The women prefer to select emotional practices in dealing with problems and psychological pressures. There are significant differences between the women and the mothers in the adoption of problem-focused coping strategies. Therefore, the surmounting stress group training methods helped the female college students to use more effective approaches in coping with stress. Thus, they were more successful than boys. The girls showed more negative attitudes towards narcotics in comparison with the boys after receiving the surmounting stress methods group training in the present study. Therefore, the surmounting stress methods group training changed the negative attitudes towards opiate abuse. In other words, the positive attitude of students (girls and boys) was changed after receiving the recognition-behavioral group training and learning methods to cope with stress. Their attitude was negative. The impact of education on female college students has changed more positive attitude to opiate abuse than male students. The female college students found a more negative attitude towards narcotics in comparison with male students. Therefore, in prevention of drug addiction, we need to pay more attention to psychological factors such as psychological tendencies, personality, perceptions, beliefs, attitudes, goals, values, feelings of inferiority, emotional and mental deficiencies. Indispensable attention is necessary to the cultural affairs, ideologicalmental dimensions and strengthening the will of restraint education for attitude Accordingly, it is assumed that the methods and programs to develop personal and social characteristics can help adolescents and young adults. Thus, they can overcome the defects which increase the risk of opiate abuse trends. In other words, is necessary to develop such features of high self-esteem, self-awareness, responsible decision making, coping skills, healthy relationships and existing tools. These cases can increase the skills and awareness of adolescents and youth against high risk factors and situations. In this respect, training programs as "recognition-behavioral group training" and "surmounting stress methods group training" can be very effective (with emphasis on personal and social skills growth). These programs can play an important role in strengthening and reinforcement of the preventive interventions against the opiate abuse.

**Conflict of Interest:** The Authors have no conflict of interest.

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# مقایسه اثربخشی آموزشی گروهی شناختی- رفتاری و آموزش گروهی شیوههای مقابله با استرس بر تغییر نگرش مثبت دانشجویان نسبت به سوء مصرف مواد مخدر

# دکتر بهمن اکبری<sup>۱</sup>

# چکیده

مقدمه: پژوهش حاضر به مقایسه اثربخشی آموزش گروهی شناختی- رفتاری و آموزش گروهی شیوههای مقابله با استرس بر تغییر نگرش مثبت دانشجویان دانشگاه آزاد اسلامی رشت نسبت به سوء مصرف مواد مخدر پرداخته است و هدف آن تعیین اثربخشی آموزش شناختی— رفتاری و آموزش گروهی مقابله با استرس بر تغییر نگرش مثبت دانشجویان به سوء مصرف مواد مخدر بود.

روشها: به همین منظور تعداد ۹۰ نفر از دانشجویان (۴۵ نفر دختر و ۴۵ نفر پسر) که در پرسشنامه نگرشسنج اعتیاد نمره بالایی گرفته بودند، انتخاب و هر جنس (دختر و پسر) در سه گروه (دو گروه آزمایش ویک گروه شاهد) به طور تصادفی انتخاب شدند. سپس به صورت تصادفی در شرایط مختلف آزمایشی به تفکیکی جنسیت در گروههای ۱۵ نفری جایگزین گردیدند. سپس دادههای تحقیق با استفاده از روشهای آماری تحلیل کوواریانس چند متغیره (ANCOVA) و تحلیل گرواریانس (ANCOVA) مورد تجزیه و تحلیل قرار گرفتند.

**نتیجه گیری:** با توجه به نتایج فوق آموزش شناختی- رفتاری و آموزش گروهی شیوههای مقابله با استرس موجب تغییر نگرش دانشجویان نسبت به سوء مصرف مواد مخدر گردیده و این تغییر نگرش در دانشجویان دختر بیشتر از دانشجویان پسر بوده است.

**واژگان کلیدی:** آموزش گروهی شناختی- رفتاری، آموزش گروهی شیوههای مقابله با استرس، نگرش، سوء مصرف مواد مخدر.

مجله اعتیاد و سلامت، سال سوم، شماره ۲-۱، زمستان و بهار ۹۰-۱۳۸۹

تاریخ دریافت: ۸۹/۱۰/۲۹ تاریخ پذیرش: ۹۰/۱/۱۷

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