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Examining the Impact of Psycho-Social Empowerment on Students' General and Behavioral Attitudes Towards Drugs

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Abstract: The present quasi-experimental research aimed to investigate and determine the effectiveness of psycho-social empowerment on students' general and behavioral attitudes towards drugs. The statistical sample consisted of 380 first-year high school adolescents who were chosen by multistage cluster sampling method. The experimental group was trained via 11 sessions that were conducted by police counselors and personnel. The data were collected using a drug attitude questionnaire. Then, the multi-way ANOVA was used. The results indicated that the scores of experimental group (in terms of cognitive and behavioral attitudes) were significantly lower than the scores of control group ($p<0.01$). Although, there was not any significant difference between male and female students in terms of behavioral attitude ($p<0.05$), they were significantly different in terms of general attitude ($p<0.05$). As a result, implementing the psycho-social empowerment program could increase students' negative attitudes toward drug use. In addition, this training had a greater impact on female students in terms of general attitude towards drugs. Therefore, the introduction of interventions should consider the basic differences between the two genders.

Key words: Empowerment, psycho-social, attitude, behavioral, general

INTRODUCTION

Now a days, drug abuse is one of the major problems in many societies. This issue has affected many countries and its negative consequences are increasing ceaselessly. According to the statistics released by United Nations Office on Drugs and Crime, it has been estimated that between 167 and 315 million people aged 15-64 have used a psychoactive substances in 2011. Actually, this number corresponds to between 3.6 and 6.9% of the adult population of the world. Also, some studies conducted on adolescents indicate a rising trend in smoking, alcohol and drug use among adolescents. Given the situation in Iran, it is indicated that some relevant research have been done in relation to the age of onset of drug use. The results of these studies indicate that 4% of individuals start taking drugs before the age of 15 and 24% of individuals do the same act at ages 15-19. In total, 56.3% of individuals experience drug use before the age of 24. The rate of students' drug abuse has been determined between 5 and 7% using the objective methods (Allahverdipour *et al*., 2005). However, self-report studies have reported a rate between 3 and 4% in this regard (Bashirian *et al*., 2012). Interestingly, Rahmati believe that the rate of drug abuse among male and female individuals are 9 and 6%, respectively.

The very concern that is related to such findings is that early onset of charming drugs (cigarettes, alcohol and cannabis) may lead to heavier drug use (Kandel, 2002). Studies have shown that most adults experience smoking and alcohol for the first time in their early years of adolescence (Johnson *et al*., 2000; Botvin *et al*., 1999, 2006) and that such early experiences can lead to heavier drug use in higher age periods.

According to these findings, it appears that experts in the field of prevention have undertaken many attempts to develop effective approaches to prevent drug abuse in schools in the past three decades. These approached emphasize on introduction of prevention programs in childhood and adolescence because those programs target adolescents before high school period and yield more successful results (Botvin, 2000a, b). Meanwhile, the codification and development of prevention programs requires an etiological understanding on the phenomenon of drug use.

Therefore, various theories have been proposed in this area. For example, the emotional-cognitive theory emphasizes the role of adolescents' beliefs and ideas in relation to the effects of drug use as factors influencing the onset of drug use (Ajzen and Fishbein, 1980). Conversely, the model proposed by Hawkins *et al*. (1992) proposes that emotional attachment to peers is the main

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cause of drug use. Also, weak self-control (Wills and Stoolmiller, 2002), social learning, relationship with parents and intra-individual factors (Brook *et al*., 1998) and positive attitudes to drug use (Botvin and Griffin, 2004) have been enumerated as factors contributing to drug use. Nevertheless, none of these theories may justify this trend by itself.

Given the main causes of drug abuse, many different prevention approaches have been developed, especially in relation to adolescents. One of the most important approaches has been proposed by Botvin and Griffin (2004). They have categorized the preventive scientific approaches that have been developed and tested over the past three decades into the following two categories: social influence approaches, competence enhancement approaches.

Social influence approaches focus on the importance of social and psychological factors that facilitate the onset of drug use. As such, these approaches are based on Evans Intervention Model. In this model, drug use in adolescents is considered the result of social influences conceptualized on the part of friends and media to smoke or use drugs.

The theoretical foundations of competence enhancement approaches which are designed to prevent from drug use are based on Bandura's social learning theory Jessor problem behavior theory (Jessor and Jessor, 1997). According to this approach, drug use is considered as a learned and applied social behavior resulting from the interaction between individual and social factors. As such, the drug use trend is learned via modeling, imitation and reinforcement processes and it is influenced by knowledge, attitudes and beliefs of adolescent drug users. It is believed that these factors, combined with poor personal and social skills, increase adolescents' vulnerability to social influences related to drug use. This approach is characterized by an emphasis on training self-management and social skills (including life skills training).

As a preventive approach, it may be argued that the main characteristic of this approach is that if appropriate training is provided, students' social and interpersonal skills may be upgraded at the same time. In fact, this training program is developed on the basis of risky and protective factors of drug use among adolescents. Actually, the main objective of this program is to create a revolution in students' knowledge, attitudes and behaviors. Therefore, this study is an attempt to implement the psycho-social empowerment program and increase students' skills so that their attitude may be revolutionized to drug use in terms of general and behavioral dimensions. Besides, the effectiveness of these training efforts on the attitude of male and female students will be examined and scrutinized.

MATERIALS AND METHODS

The research method was a quasi-experimental one (pretest-posttest with a control group). Having used the random sampling method, it was attempted to categorize half of the subjects in the first group and the other half in the second group so that two experimental and control groups were formed thereof. One of these two groups was randomly selected as the experimental group and another group was chosen as the control group. While the members of experimental group were exposed to the independent variable, the members of control group continued their daily routine.

The statistical population of the study included all high school students of Mallard parish who enrolled in the academic year 2013-2014. The statistical sample was determined as 380 students (190 female and 190 male students) using the multistage cluster sampling method.

Measurement tools: The "Student Drug Attitude Questionnaire" was used to measure students' attitude towards drugs. Having used the 1 week test-retest reliability method, it was indicated that the questionnaire was reliable up to 80%. However, the questionnaire showed a reliability level of 0.803 using the internal correlation coefficient (Cronbach's alpha). This questionnaire had 34 questions and these items gauged students' attitudes in terms of cognitive, emotional, behavioral and general dimensions. In addition, the questionnaire provided a general attitude score in order to assess individuals' attitudes toward drugs. It should be noted that this score was the sum of the scores of cognitive, emotional, behavioral and general dimensions (Zarin, 2010).

Procedure: The psycho-social empowerment program for students at risk wad a multi-component preventive program designed to strengthen and improve personal and social skills and self-esteem of students at risk. In fact, this training program was developed on the basis of risky and protective factors of drug use among adolescents. Actually, the main objective of this program was to create a revolution in students' knowledge, attitudes and behaviors.

It should be noted that the empowerment program was conducted by group of experts as well as noncommissioned police officers (Anti-drug Department)

during 11 sessions. The content of the program was as follows: the value of health, decision-making, risk-taking and drug use, coping with stress, effective communication, refusal skills, self-esteem and a variety of drug-related effects and crimes.

Data analysis: The Levene test was run to determine the significant difference in the mean scores of general and behavioral dimensions of male and female adolescents' attitude to drug use in the experimental and controls groups. Furthermore, the impacts of two independent factors of grouping (experimental versus control groups) and gender (male and female students) on the scores of dependent variable were gauged. The results indicated that there was no significant difference in terms of behavioral dimension (Sig. = 0.556) and general dimension (Sig. = 0.125) and thus, it was concluded that the variances were homogeneous. Accordingly, the multi-way ANOVA was run to determine the significant difference in the mean scores of general and behavioral dimensions of male and female adolescents' attitude to drug use in the experimental and controls groups. Furthermore, the impacts of two independent factors of grouping (experimental versus control groups) and gender (male and female students) on the scores of dependent variable were gauged (Table 1).

Given the realization of the assumption of homogeneity of variances $\{F_{(376, 3)} = 0.689, p = 0.556\}$, the participants were categorized into two experimental and control groups. Then, the two-way analysis of variance between groups (UNIANOVA) was performed. The results of this test have been given in Table 2.

As seen in Table 2, the F-statistic calculated in relation to grouping the adolescent into two control and experimental groups $\{F_{(376, 1)} = 8.759, p = 0.003\}$ was significant at <0.01 error level. Therefore, it was concluded that the impact of grouping factor was significant in relation to behavioral attitude toward drug use. Thus, it might be concluded that there was a significant difference between control and experimental groups in terms of behavioral attitude to drug use. However, it was found that the impacts of gender $\{F_{(376, 1)} = 1.992, p = 0.159\}$ and group interaction $\{F_{(376,1)} = 1.40, p = 0.237\}$ on behavioral attitude to drug use were not significant at 0.05 error level.

Regarding the significance of grouping factor, it was attempted to compare the mean scores of behavioral attitude to drug use among participants in two experimental and control groups. Given this, it was found that the mean scores of behavioral attitude to drug use among adolescents in the experimental group (M = 7.77, SD = 2.30) were lower than the mean scores of behavioral attitude to drug use among adolescents in the control group (M = 8.46, SD = 2.22). Therefore, the drug abuse prevention training program which was provided to experimental group was successful in reducing adolescents' positive behavioral attitudes toward drug use in the experimental group. Then, the two-way ANOVA was run to gauge the adolescents' general attitude to drug use. These results have been presented in Table 3 and 4.

Table 1: Descriptive indicators of scores on behavioral attitude to drug use among adolescents in experimental and control groups

Gender/group	Males		Females		Total	
indicator	Mean	SD	Mean	SD	Mean	SD
Experimental						
Pre-test	8.75	2.57	8.19	2.45	8.25	2.44
Post-test	7.80	2.29	7.75	2.32	7.77	2.30
Control						
Pre-test	8.70	2.17	8.20	2.11	8.36	2.19
Post-test	8.76	2.18	8.16	2.22	8.46	2.22
Total						
Post-test	8.28	2.28	7.95	2.27	8.12	2.28

Table 2: The results of two-way ANOVA for scores on behavioral attitude to drug use among male and female adolescents in experimental and control groups

Change source	Sum of Square (SS)	df	The Mean of Squares (MS)	F-values	Sig.
Grouping factor	44.474	1	44.474	8.759	0.003
Gender factor	10.116	1	10.116	1.992	0.159
Group interaction×gender	7.116	1	7.116	1.401	0.237
Error	1909.200	376	5.078	-	-
Total	1970.905	379			

Table 3: Descriptive indicators of scores on general attitude to drug use among adolescents in experimental and control groups

Gender/group	Males		Females		Total	
indicator	Mean	SD	Mean	SD	Mean	SD
Experimental						
Pre-test	10.36	1.87	10.11	2.04	10.25	2.03
Post-test	10.09	1.82	9.38	1.89	9.74	1.88
Control						
Pre-test	10.40	2.09	10.14	1.83	10.25	1.92
Post-test	10.45	2.10	10.13	1.74	10.29	1.93
Total						
Post-test	10.27	1.96	9.75	1.85	10.01	1.92

Table 4: The results of two-way ANOVA for scores on general attitude to drug use among male and female adolescents in experimental and control groups

Change source	Sum of Square (SS)	df	The Mean of Squares (MS)	F-values	Sig.
Grouping factor	29.01	1.00	29.01	8.13	0.001
Gender factor	29.79	1.00	25.79	7.22	0.010
Group interaction×gender	3.60	1.00	3.60	0.01	0.320
Error	1342.53	376.00	3.57		
Total	1400.93	379.00			

Given the realization of the assumption of homogeneity of variances $\{F_{(376, 3)} = 1.92, p = 0.125\}$, it was attempted to depict the results of two-way ANOVA in the form of Table 4. As seen, the F statistic calculated in relation to grouping the adolescent into two control and experimental groups $\{F_{(376,1)} = 8.13, p = 0.001\}$ was significant at <0.01 error level. Therefore, it was concluded that the impact of grouping factor was significant in relation to general attitude toward drug use. Thus, it might be concluded that there was a significant difference between control and experimental groups in terms of general attitude to drug use. However, it was found that the impact of gender $\{F_{(376, 1)} = 7.22, p = 0.01\}$ on general attitude to drug use was not significant at 0.05 error level. Thus, it was concluded that there was a significant difference between male and female adolescents in terms of general attitude to drug use. However, it was indicated that the impact of group interaction $\{F_{(376,1)} = 1.01, p = 0.32\}$ on general attitude to drug use was not significant at 0.05 error level.

Regarding the significance of grouping factor, it was attempted to compare the mean scores of general attitude to drug use among participants in two experimental and control groups. Given this, it was found that the mean scores of general attitude to drug use among adolescents in the experimental group (M = 9.74, SD = 1.88) were lower than the mean scores of general attitude to drug use among adolescents in the control group (M = 10.29, SD = 1.93). Therefore, the drug abuse prevention training program which was provided to experimental group was successful in reducing adolescents' positive general attitudes toward drug use in the experimental group.

Regarding the significance of gender factor, it was attempted to compare the mean scores of general attitude to drug use among male and female participants in two experimental and control groups. Given this, it was found that the mean scores of female adolescents' attitude to drug use (M = 9.75, SD = 1.85) were lower than the mean scores of male adolescents' attitude to drug use (M = 10.27, SD = 1.96).

RESULTS AND DISCUSSION

The results of multi-way ANOVA showed that preventive intervention could significantly alter the scores of post-test attitude. The observed difference in pre-test and post-test data in the experimental group which resulted from introduction of independent variables, showed that this training method was effective in changing attitudes of adolescent students. In other words, the psycho-social empowerment program was successful in reducing the positive behavioral and general attitudes of adolescent students toward drug use in the experimental group.

Regarding the first part, the analysis of the data in the realm of female and male adolescent students' behavioral attitudes toward drug use in the experimental and control group indicated that the mean scores of two groups were significant at <0.01 error level. Accordingly, the impact of grouping factor on behavioral attitude towards drug use was significant thereof. As such, learning how to communicate effectively with peers and boosting adolescents' ability to cope with social damages may positively prepare them to effectively act out against drug use. Thus, these kinds of training programs should be offered to different adolescents.

The findings of this study have been consistent with the findings of the following studies; Sarrami *et al.* (2013) argue that self-assertion training can enhance students' negative attitude to the drug use. Similarly, Taremian states that establishment of good relationships with parents and peers is an important factor that may prevent from tendency to experience drug use. The results of a study conducted by Chenari and Golzari indicate that there is a significant difference between student's attitudes to drug abuse in terms of behavior and drug use before and after learning life skills. However, these results are contrary to the results of a study conducted by Foroush Sattari who has found that training assertiveness and immunization against stress have not altered the adolescents' attitude towards drug use.

Having compared the means scores of female and male adolescent students' behavioral attitudes toward drug use, it has been found they have not been significant at 0.05 error level. This suggests that training on drug abuse prevention has yielded similar results in terms of behavioral dimension in both male and female adolescent students. Actually, there is no significant difference between the two groups. In other words, the training program has not lasted a distinguished impact in terms of behavioral attitude between two groups of female and male adolescent students.

Chenari and Golzari assert that there is a significant difference between student's attitudes to drug abuse in terms of behavior and drug use before and after learning life skills. Foxcroft and Tsertsvadze assert that teaching skills and providing school-based prevention programs lower normative expectation for smoking and alcohol consumption. Sohrabi *et al.* (2014) argue that intervention develops the negative attitude to drug use. Actually, the difference between two groups was significant in terms of attitude to drugs.

There is a direct relationship between positive attitude to drugs and the desire to use drugs. Besides, possession of a positive attitude to drug use is among risky factors in the domain of individual areas. Given the results of previous studies, it is indicated that there is a positive relationship between possession of positive attitudes and beliefs towards drug use and the onset of drug use. Those individuals who have a positive attitude to drugs are more likely to experience drug use and the former is correlated with onset of drug use. Thus, providing effective training to students and changing their attitude can be a good preventive method.

According to these findings, it seems that some comprehensive and appropriate actions should be undertaken to prevent students' willingness towards drug abuse. However, the latter depends on the development of negative attitudes toward drug use among students. For this reason, the authorities and those involved in education should pay due attention to offer prevention programs aimed at reducing drug use among adolescents. Furthermore, holding comprehensive training courses in schools can be helpful in the prevention of drug use in this domain.

Regarding the second part, the analysis of the data in the realm of female and male adolescent students' general attitudes toward drug use in the experimental and control group indicated that the mean scores of two groups were significant at <0.01 error level. Accordingly, the impact of grouping factor on general attitude towards drug use was significant thereof. Therefore, the drug abuse prevention training program was successful in reducing adolescents' positive general attitudes toward drug use in the experimental group.

Besides, it was found that the impact of gender was significant at 0.01 error level. Thus, there was a significant difference between male and female adolescent in terms of general attitude. Actually, the comparison of mean scores of male and female adolescents' attitude indicated that the mean scores of female adolescents were lower than the mean scores of male adolescents. Therefore, it was concluded that prevention program has had a more effective impact on female adolescents' general attitude than the male adolescents' attitude. In other words, the aforementioned program has been more successful in altering the general attitude of female adolescents than the general attitude of male adolescents.

In addition, it was found that training has altered the attitude of both female and male adolescents and they have adopted some more negative attitudes towards drug use. However, the interesting point is that the gender factor has significantly affected their attitude to drug use. Overall, female adolescents possessed a more negative general attitude towards drug use.

The differences between the two groups of female and male adolescents in terms of general attitudes can be attributed to several factors. For example, Darai asserts that high school girls have negative attitudes towards drugs. Based on these results, the factors that may explain the negative attitudes of female adolescents towards drugs are as follows: cultural attitudes containing different drug use norms among men and women, different gender-based social and behavioral norms, religious and legal regulations that prohibit alcohol and other drugs, the contradiction of drug abuse to the cultural values of Iranian families, especially female adolescents, severe disapproval of drug abuse by parents, more strict control and monitoring of family and friends on the manner in which female adolescents spend their leisure time.

CONCLUSION

The findings of this study indicate that training intervention may alter students' attitude towards drug use. Since, there is a direct relationship between attitude to drugs and the desire to use drugs, it seems that some comprehensive and appropriate actions should be undertaken to prevent students' willingness towards drug abuse. However, the latter depends on development of negative attitudes toward drug use among students. For this reason, the authorities and those involved in education should pay due attention to prevention programs aimed at reducing drug use among adolescents. Furthermore, holding comprehensive training courses in schools can be helpful in the prevention of drug use in this domain. Since, female adolescents possess negative attitudes to drugs, it seems that there is a dire need to pay more attention to content and manner of training programs offered to both genders.

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