

Psycho-Social Strengthening Program for High-School Students: Targeting Female Students' Attitudes Toward Drug Use

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Abstract

Background: Adopting caring behaviors in adolescence is very important since alcohol and drug use among teenagers has become a pressing social problem and is also a predictor of school drop-out rates and academic failure. Research has shown that there is lack of awareness about drug and alcohol use.

Objectives: The present study describes a psycho-social strengthening program aimed at changing female students' attitudes toward drug use.

Patients and Methods: The research design involved an experimental group that participated in a pre-test and post-test, as well as a control group. The study population comprised female students in the first grade of high school in Tehran city during the educational year 2014 - 2015. Random cluster sampling was used to select 60 students in total. Mohammad Khani's (2006) risk and protective factors questionnaire (RAPQ) was used to collect the data. The treatment group participated in the United Nations office on drugs and crime (UNDOC) "psycho-social strengthening program in the schools" package over eleven 90-minute sessions. Covariance analysis was used to analyze the data.

Results: The significance of covariance F at the level of $P < 0.05$ showed that psycho-social strengthening is effective in changing female students' attitudes toward drug use.

Conclusions: Given the importance of caring about high-risk behaviors and the role of psycho-social strengthening in changing female students' attitudes toward drug use, it is better to carry out such interventions at an early age in school to ensure more preventative and sustainable effects.

Keywords: Psycho-Social Strengthening, Attitude, Attitudes Toward Drug Use, Risk Factors, Iranian Students

1. Background

The transition from childhood to adolescence and then to adulthood happens in parallel with many salient and unique changes. Specifically, the interaction between adolescent characteristics and a complex and variable environment influences individuals' adjustment and health-related behaviors. Changes in social and gender norms, as well as in information technology, have increased the incidence of unhealthy and high-risk behaviors among teenagers. Adopting caring behaviors in this period is very important since alcohol and drug use among adolescents indicates a pressing social problem and also predicts school drop-out rates and academic failure (1). Many teenagers do not consider their use of alcohol to be a problem or a harmful behavior (2). For example, one study found that 74% of a pre-screened sample of 96 late adolescents met the diagnostic criteria for the presence of an alcohol problem (3). This lack of awareness may exist because adolescents tend to perceive that their alcohol use has more positive than negative effects (4).

The majority of adult smokers report that they smoked their first cigarette prior to aged 18 (5-7). Adolescent smoking is associated with the development of heavy regular smoking (8-10), continued smoking in young and later adulthood (11-13), other substance use, and deviant or violent behavior (10, 14, 15).

Drug use in recent years has considerably increased and is now a crisis (16). A study describes positive attitudes toward addiction and its historical roots, as well as the process of changing values resulting from the growth of drug addiction in the young population. These changing values often have the effect of neutralizing security measures, legislation policies, and even knowledge (17). The estimated number of addicted students in the country is currently around six to ten thousand (18). Among students in their final year of high school in Kerman, 26.5% of the boys and 17.5% of the girls admitted to having used drugs at least once (16). Also, among high-school students in Shiraz, 32% percent have used alcohol and 2.1% have used drugs (19). Among Tabriz students, 12.7% have used alcohol, 2% have used drugs, and 59% have smoked cigarettes (20). More

than half of U.S. high school students have tried smoking (21).

Prevention interventions targeting cannabis use have proven effective in children with a range of risk profiles (22). Studies have shown that life skills programs aimed at the prevention of adolescent substance use can have a positive influence in terms of bonding in a school context (23). Huang et al. found that training in life skills can act as a protective factor and decrease drug use in later year (24). Considering the importance of psycho-social strengthening and its role in reducing high-risk behaviors, it is better to start this type of intervention at school from an early age, which is likely to lower the risk of substance use and have a lasting preventative effect.

In recent decades, different theories have attempted to explain the reasons for teenagers' tendency to use drugs. These theories have explored a wide range of factors, including genetic, psychological, familial, and social (25-27).

Integrative model of drug use: One of the above theories is Botvin's integrative model (25). After reviewing various studies on risk and protective factors in teenagers, Botvin integrated a series of factors contributing to the commencement of drug use into a comprehensive model relating to how teenagers start to use alcohol, cigarettes, and other drugs (25). According to this model, alcohol, cigarette, and other drug use is the result of dynamic interaction between a series of personal and environmental factors in which peers, parents, and other social factors, combined with an individual's psychological vulnerabilities, lead to alcohol, cigarette, and other drug use. As an example, individuals whose beliefs and attitudes affirm the use of substances are more likely to start using them.

Structural model of drug use in teenagers: An integrative model of drug use has been made available to the public, but no studies currently exist to support individuals in danger (25). As a result, Mohammad Khani assessed the potential of the stated model for predicting drug use among teenagers in danger (28). The study, which is presented in Figure 1 below, resulted in a causative model of factors predicting drug use in teenagers in danger.

Mohammad Khani devised the "Psycho-social strengthening program for high-risk students" according to research findings on risk and protective factors for adolescents. The program, which is the treatment that was selected for this study, includes eight subjects taught over 11 sessions.

The way students interact with school and society in the eighth year of school is instrumental in predicting their mental health, academic achievement, and drug use in later years (29). Therefore, one of the ways to decrease drug use during adulthood is to control it during adolescence by informing teens and correcting their attitudes to-

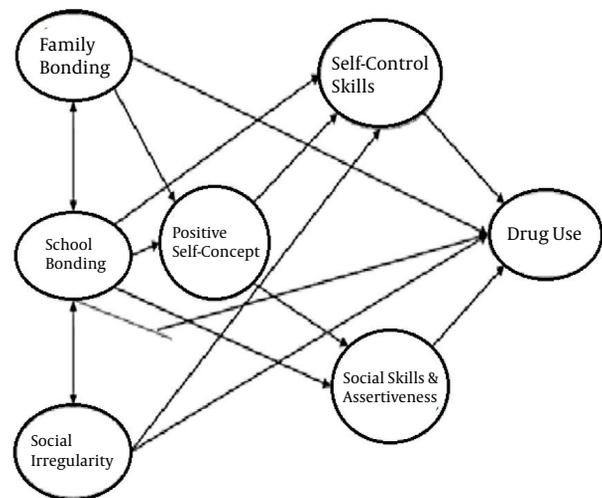


Figure 1. Structural Model of Drug Use (28)

ward addiction, drugs, and life style (30).

On the whole, any research done in this country has had little relevance to girls' attitudes toward drug use, and no research exists that has used instructional intervention to change these attitudes in girls.

2. Objectives

The present study explores the effectiveness of the psycho-social strengthening program relating to female students' attitudes toward drug use.

3. Patients and Methods

Based on the above purpose, the present research design is an experimental one including a pre-test, post-test, and control group. After the group was sampled and randomly divided into control and experimental groups, a pre-test was given to both groups. The psycho-social strengthening program was then performed over eleven 90-minute sessions. The intervention was conducted by the master of school counseling.

The population comprised female students in the first grade of high school in Tehran city during the educational year 2014 - 2015. The students were at the same level in many aspects such as age, education, and social status. Sampling was done using the random cluster sampling method. A high school was selected randomly from Tehran's all-female high schools. Two groups were then selected randomly from the first grade classes of the selected high school. Lastly, the two groups were randomly

assigned into a control group and an experimental group. The number of students in each group was 30 and the total number of students in both was 60. The inclusion criteria included 16-year-old female students, students living in high-risk areas of Tehran, and single students. The exclusion criteria included students absent for more than two sessions, students with no motivation to participate in the sessions, and failure to perform the exercises. Based on these criteria, the number of participants remained constant until the end of the study.

3.1. Research Instrument

The risk and protective factors questionnaire for assessing risk and protective factors among teenagers of 13 to 18 was used to collect the data. The questionnaire was created and validated by Mohammad Khani. It was validated by carrying out piloting on 3000 students in the country (28).

A differential validation of the risk and protective factors questionnaire through a comparison of drug-abusing students and non-users showed that the scale was able to differentiate the two groups and had a good level of differential validation. Also, confirmatory and exploratory factor analysis of the questionnaire in a sample of in-danger students in Tehran showed that the questionnaire was theoretically consistent with the theoretical model and had good construct validity (28).

A 110-item form of the questionnaire was used in the present research. This questionnaire had 18 subscales in four personal areas: psychological, family, community, and school. In this study, since the intervention was carried out on students exclusively, the individual/psychological factors of the questionnaire were evaluated by the investigator. Of the nine personal/psychological subscales, risk factors such as weak school bonding and irregularities in the family and social environment were selected for the scale in terms of attitudes toward drug use. This is because the above factors are considered the most important and powerful predictors of substance use in adolescents. Essentially, training on aspects such as individual empowerment, social attitudes, and self-concept material can impact both directly and indirectly on substance consumption behavior.

4. Results

The descriptive findings, including the mean and standard deviation of the variables, are shown in Table 1 below.

The covariance assumptions are shown in Table 2. According to this table, the results of Levene's test in terms of attitudes toward the drug use subscale are not significant. Also, the results of the regression slope are not significant.

Table 1. Mean and Average of Variables

Variables	Experimental Group	Control Group
Pre-test	41.63 ± 3.51	40.43 ± 4.43
Post-test	34.73 ± 2.16	41.40 ± 4.34

Table 2. Covariance Assumptions

	F	P Value
Levene's test	0.98	0.48
regression slope	0.90	0.52

Therefore, the assumption of covariance in the control and experimental groups is confirmed. In Table 3, the results of the covariance analysis are significant. This means that the psycho-social strengthening program was effective in decreasing the score in terms of attitudes toward drug use.

5. Discussion

The present study explores the effectiveness of the psycho-social strengthening program on changing in-danger female students' attitudes toward drug use. The results of covariance analysis show that covariance F is significant. A significant F means that the psycho-social strengthening program could affect students' positive attitudes toward drug use. This finding is in line with the theoretical and empirical findings of other studies in this area.

Mohammad Khani showed that the teaching of life skills can significantly change teenagers' tendency to use drugs by focusing on individual endangering factors like attitudes toward drug use, self-concept, self-control skills, social skills, and locus of control (31). A study emphasizing the performance of four methods for preventing drug use in order to change attitudes toward addiction and drugs showed that attending life skills classes and training through films are more effective methods and should be given priority (32).

Therefore, the role of schools as an important and critical element of preventing such problems is of great importance. Given the importance of caring about high-risk behaviors and the role of psycho-social strengthening in decreasing them, it is better for such interventions to be implemented at an early age in schools so that they will have greater preventative and sustainable effects. The problem with any research aimed at preventing drug use and instructing individuals in this regard is that there is little research or instruction in the area of psycho-social strengthening. Therefore, it is suggested that future studies be led

Table 3. Covariance Analysis

Attitudes Toward Drug Use/Source	Sum of Squares	Df	F	P Value	Partial Eta Squared
Group	798.29	1	63.45	0.000	0.41
Pre-test	144.11	1	9.97	0.005	0.34
Error	717.12	57			
Total	8887.000	60			

in this direction so that future mothers and coaches can benefit from this important training and help in delivering an empowered generation to society.

One of the main limitations of the present study is that it was impossible to match the control and experimental groups with regard to the range of attitudes they had to drug use before the intervention.

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Footnote

Authors' Contribution: Study concept and design: Yasaman Kasiri; acquisition of data: Yasaman Kasiri; analysis and interpretation of the data: Yasaman Kasiri; drafting of the manuscript: Yasaman Kasiri; critical revision of the manuscript for relevant intellectual content: Sadeq Nasri; statistical analysis: Sadeq Nasri and Yasaman Kasiri; administrative, technical, and material support: Najaf Tahmasbi Pour; study supervision: Najaf Tahmasbi Pour.

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