

Original Paper

The Relationship Between Social Skills and Attitude Towards Substance Abuse Among High School Students



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ABSTRACT

Introduction: Substance abuse is one of the health, medical, and social problems in today's world that affects more or less all societies. Adolescence is one of the riskiest periods of life in terms of beginning high-risk behaviors such as drug use.

Objective: This study aimed to determine the relationship between social skills and attitudes towards substance abuse in high school adolescents in Rasht City, Iran.

Materials and Methods: In this analytical cross-sectional study, 750 male and female high school students in the 10th, 11th, and 12th grades of Rasht City in north of Iran were selected and examined using the cluster sampling method. Data collection tools included a demographic information questionnaire, a social skills questionnaire, and the addiction potential scale. The collected data were analyzed using the Spearman, Mann-Whitney, Kruskal-Wallis correlation tests, and logistic regression model.

Results: In the study, 51.1% of subjects aged 16-17 years, 57.7% were girls, 85.2% of them lived with their parents, and 82.9% of the students stated that there is no addict in their family. Based on the results, the Mean±SD score of social skills in students was 271.05±23.73. In various subscales of social skills, 62% to 73.9% of students were able to obtain a mean or upper grade. The students' highest skill was related to the decision-making subscale with the Mean±SD score of 28.90±3.76 and the lowest was related to coping with stress with the Mean±SD of 25.47±4.40. Also, regarding the attitude towards drug abuse, the highest Mean±SD score (more positive attitude towards drug abuse) was related to the subscales of drug use effects (2.68±0.90); and the lowest Mean±SD (more negative attitude towards drug abuse) was related to the subscale of drug use or the tendency to use drugs (2.14±1.02). According to the results, there was a significant reverse relationship between the mean±SD social skills and attitudes scores towards substance abuse ($r=-0.442$, $P<0.001$). The findings also showed that gender is considered as a predictor variable of substance abuse attitudes, so that boys were 1.36 times more positive than girls (OR: 1.36, 95% CI=0.980-1.900, $P<0.066$).

Conclusion: Based on the results, social skills training to increase self-efficacy and self-confidence in dealing with life's challenges and problems may have long-term effects in preventing the occurrence of high-risk behaviors such as substance abuse and creating the right attitude in them.

Keywords:

Adolescent, Social skill, Attitude, Substance abuse

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Highlights

- Adolescence is one of the riskiest periods of life in terms of beginning high-risk behaviors such as drug use.
- As adolescents' social skills increase, their positive attitudes toward substance abuse decrease.
- Positive attitudes toward substance abuse are higher in boys than in girls.

Plain Language Summary

Adolescence is one of the most dangerous periods of life in terms of initiating high-risk behaviors such as drug use. During this period, adolescents try drugs for a variety of reasons, such as gaining experience. It seems that a lack of social skills causes some behavioral disorders in adolescence. Social skills enhance people's ability to cope with the challenges, conflicts, and difficulties of everyday life. Therefore, the lack of social skills possibly, on the one hand, will decrease the individual's ability to provide appropriate answers to life's problems, and on the other hand, emotional and undesirable responses to life's provocations and events will increase. The present study aimed to investigate the level of social skills in adolescents in Rasht City, Iran and to investigate its relationship with attitudes toward substance abuse. Based on the findings, the level of social skills in most adolescents is moderate and insufficient. Also, although most teens are reluctant to take drugs, their attitudes toward the effects of drugs are often positive and they are unaware of the dangers of abusing drugs. Besides, according to the findings of the study, with increasing social skills in adolescents, their attitudes toward substance abuse will become more negative. Therefore, one of the educational priorities in adolescence is considering teaching social skills to prevent high-risk behaviors, including substance abuse, and generating the right attitudes in them.

Introduction

Addiction is one of the health, medical, and social problems of today's world [1] that has more or less affected all societies, and its devastating consequences are among the most challenging in health and medicine [2, 3].

Drug abuse refers to a non-compliant pattern of drug use that results in significant clinical destruction or discomfort [4]. Commonly, substance abuse agents include opioids (heroin and morphine), hallucinogens, Central Nervous System (CNS) depressant (alcohol, barbiturates), CNS stimulants (amphetamines, cocaine), cannabis (Marijuana or Hashish), and nicotine (cigarettes, tobacco) [5].

Addiction complications include cardiovascular disorders, liver and bile ducts, lung and respiratory failure, mental disorders (depression, anxiety, suicide), infections (AIDS, hepatitis), gastrointestinal disorders (esophageal cancer, gastric, and duodenal ulcers), skin complications (decreased skin resistance and sagging skin, discoloration of the skin to black and blue), sexual problems such as sexual dysfunction in men and women and menstrual disorders in women, and congenital defects for the fetus of the addicted mother [6, 7].

Based on a survey in 2012 by the National Institute on Drug Abuse (NIDA) in the United States, more than 22 million people older than 12 years (about 10% of the U.S. population) experienced substance abuse [8]. Iran is also at increased risk of increasing addiction among adolescents and young people due to its high youth population [7]. The results of a previous study on Iranian students showed that 12.8% of Iranian students have experienced substance abuse [9]. According to the results of a meta-analysis study on the prevalence of substance abuse among Iranian adolescents, the highest abuse was associated with hallucinogenic drugs with a prevalence of 25.3% [10].

Adolescence is the most dangerous period of life in terms of initializing high-risk behaviors such as drug abuse [4]. They are faced with a wide range of behaviors and lifestyle patterns during this period. This stage is part of the natural process of separation from parents, the development of a sense of independence, the formation of personal identity, and the acquisition of necessary skills for useful functioning in the adult's world [11]. These changes can turn adolescence into a dangerous stage for substance abuse.

Some causes of addiction drug abuse in adolescence are as follows: Socio-cultural influences, familial factors

(positive attitude of family members towards drug use, lack of communication between parents and children); social environment (lack of restrictions or serious regulations prohibiting drug use in school); lack of instruction on substance abuse skills (problem-solving, ability to say 'no'); cognitive expectations (positive attitudes and beliefs toward drugs); social and personal skills (anxiety coping skills, decision-making skills); and psychological and personality factors (lack of self-confidence and personality traits such as embarrassment and disability to say 'no') [9]. Thus adolescence is one of the most important periods of life to experience drug abuse. On the other hand, the risk of substance abuse threatens more people who have a wrong and even positive attitude towards the consequences of substance abuse [11].

It seems that by changing people's positive attitudes and strengthening their negative attitudes towards drugs, it is possible to prevent the tendency to substance abuse and its continuation [12]. Therefore, social skills are among the factors that have recently been considered by researchers in the prevention of addiction based on the change in adolescents' attitudes towards substance abuse. Social skills can improve people's ability to cope with the challenges, conflicts, and adversities of everyday life by increasing their coping skills [13, 14]. This issue is considered effective and useful because it enables the person to turn his knowledge, attitudes, and existential values into real and objective abilities [14]. The results of some studies also confirm the link between social skills and the prevention of high-risk behaviors in adolescents [15, 16].

Due to the importance of addiction in adolescents and the role of social skills in people's tendency to substance abuse at this age, the present study was conducted to determine the relationship between the social skills and attitudes toward substance abuse in high school adolescents in Rasht City, Iran.

Materials and Methods

The study has a cross-sectional design. The required sample size was set as 750 people, based on the relationship between critical thinking score (one of the subscales of social skills) and attitude to substance abuse at the rate of 0.15, based on the results of Ganji et al's study [17], and at 95% confidence level with 80% test power and the calculation of the coefficient effect of the plan type as 1.5.

The statistical population included all male and female students in the 10th, 11th, and 12th grades of schools in

districts 1 and 2 of Rasht City, and 750 people were examined by cluster random sampling method. For sampling, the clusters of each of the two educational districts of Rasht City were divided into northern, southern, eastern, and western regions. After receiving the approval from the university, by referring to the Education Department, the names of public and non-governmental schools in both districts and the number of students in all schools were extracted. Then, 15 schools (10 public schools and 5 private schools) were randomly selected for sampling from each region. From District 1, 340, and from District 2, 410 students were selected based on the number of students studying in that area, of which 556 were from public schools and 194 from private schools. Each school consisted of three grades: grade 10, grade 11, and grade 12. For more accurate sampling and participation of all students from all grades, in each school from all grades, and one class from each grade was randomly selected.

Moral considerations were observed, e.g., the male questioner was assigned for boys' schools, and the female questioner was assigned for girls' schools. After obtaining written consent from the students and their parents, the questionnaires were distributed among them and completed self-reportedly.

The data collection tools included a demographic checklist such as age, gender, and educational background, social skills questionnaire, and the drug attitude assessment questionnaire (Drug Attitudes Scale [DAS]).

Khodadadi and Soltaninejad designed the standard questionnaire of ten social skills (High School Students' Version) in 2011 to measure social skills. The questionnaire contains 100 questions with 10 subscales (decision-making skills, effective communication, coping with stress, empathy, problem-solving, interpersonal relationships, critical thinking, creative thinking, emotion management, and self-awareness) [18]. For each skill, 10 phrases were considered and its reliability was reported 0.90. It is 4-choice and is scored by this method (completely agree=4, agree=3, disagree=2, and completely disagree=1). Questions that are scored in reverse order are given for the choice of fully agree 1, agree 2, disagree 3, and completely disagree 4 points. The final score is obtained from the total score of the individual in response to the questions ranged from 100 to 400. therefore, the higher a person's score, the more social skills they have [19].

The Addiction Potential Scale was designed by Weed in 1992 [20]. This tool, which is also used in Iran and its

validity and reliability have been determined, has 40 questions, 5 options, and measures 3 subscales, including attitudes towards the effects of drug use, the tendency to use drugs, and risks of drug use. It is rated based on a 5-point Likert-type scale as strongly agree=5; agree=4; have no idea=3; disagree=2; and strongly disagree=1. The scores ranged from 40 to 200, and the higher scores indicate the more positive the person's attitude is toward drugs [21].

Due to the psychometrics of both questionnaires used in Persian, the steps of determining validity and reliability were not performed. The study data were collected over 2 months (April to June 2018) and then the data were entered into SPSS V. 21 using statistical-descriptive tests (mean and standard deviation). Normal data distribution was investigated by the Kolmogorov-Smirnov test and due to the non-normal distribution of research data, Mann-Whitney, Kruskal-Wallis, Spearman, Friedman, and logistic regression nonparametric tests were used to analyze the results.

Results

The present study involved 750 adolescent students, 51.1% of whom were between the ages of 16-17 years. Girls made up 57.7%, and 48.1% were in the 11th grade. Up to 49.9% of fathers and 50.3% of mothers had diploma. The monthly income of 59.1% of the families was between 400 and 800 \$. Up to 85.2% of the students lived with their parents and 87.6% were urban residents. In the present study, 82.9% of the students stated no drug abusers in their family.

Table 1 presents the Mean±SD social skills scores in adolescents by ten subscales and total scores. According to Friedman test, the Mean±SD values of the ten subscales have significant statistical differences ($P=0.001$) with each other, so that the highest Mean±SD (28.90 ± 3.76) is related to decision-making skills and the

Table 1. Mean±SD of total score and subscales of social skills

Social Skills	Mean±SD	Median	95%CI for Mean		Sig.*
			Lower	Upper	
Decision making skills	28.90±3.76	29	28.63	29.17	
Effective communication	27.30±3.54	27	27.04	27.55	
Stress management skills	25.47±4.40	25	25.15	25.78	
Empathy skills	27.96±3.72	28	27.69	28.22	
Problem-solving skills	27.05±3.62	27	26.79	27.31	
Interpersonal relationship skills	26.83±3.27	27	26.60	27.07	0.001
Critical Thinking Skills	27.37±3.45	27	27.12	27.61	
Creativity skills	27.30±3.47	27	27.05	27.55	
Emotion management skills	25.75±3.55	26	25.50	26.01	
Self-awareness skills	27.12±3.86	27	26.84	27.40	
Total score (100-400)	271.05±23.73	264	272.75	269.35	

* Friedman test

Table 2. Mean±SD of the total score of attitude to drug abuse and its subscales

Attitude Subscales	Mean±SD	Median	95%CI		Sig.*
			Lower	Upper	
Effects of drug abuse	2.68±0.90	2	2.62	2.75	
Drug abuse or tendency to drug abuse	2.14±1.02	2	2.06	2.21	0.001
Risks of drug abuse	2.29±1.04	2	2.22	2.37	
Total score	2.46±0.84	2	2.40	2.52	

* The Friedman test

Table 3. Correlation of mean total scores of social skills with mean scores of subscales and total score of drug abuse attitudes

Attitude Subscales	Mean±SD	r	Sig.*
Effects of drug abuse	2.68±0.90	-0.291	0.001
Drug abuse or tendency to drug abuse	2.14±1.02	-0.501	0.001
Risks of drug abuse	2.29±1.04	-0.455	0.001
Total score	2.46±0.84	-0.442	0.001

* The Spearman correlation coefficient

Table 4. Relationship between attitude to drug abuse and ten social skills subscales by controlling the effects of demographic variables

Sub-scales of Social Skills	B	SE	Sig.*	Odds Ratio	95%CI	
					Upper	Lower
Decision making skills	-0.083	0.026	0.001	0.920	0.875	0.967
Interpersonal relationship skills	-0.114	0.028	0.0001	0.892	0.845	0.942
Critical Thinking Skills	-0.071	0.029	0.013	0.931	0.881	0.985
Creativity skills	-0.102	0.027	0.0001	0.903	0.856	0.952
Emotion management skills	-0.063	0.026	0.014	0.939	0.894	0.988
Gender (boys vs. girls)	0.311	0.169	0.066	1.364	0.980	1.900
Constant	11.707	1.098	0.0001		121465.373	

* Logistic Regression

lowest Mean±SD (25.47±4.40) to stress management skills. Table 2 presents the Mean±SD scores of attitudes toward drug abuse in the subjects. According to the Friedman test, the mean scores of drug abuse attitudes subscales had a significant difference (P=0.001) with each other. The highest Mean±SD (2.68±0.90) was related to the subscales of drug abuse effects and the lowest Mean±SD (2.14±1.02) to the subscales of drug abuse or tendency to drug abuse.

The Mann-Whitney and Kruskal-Wallis tests showed that social skills scores in terms of gender (P=0.001), level of education (P=0.001), family income (P=0.001), level of education of father (P=0.04) and mother (P=0.01), living situation (with parents, with father, with mother, with grandparents, with other relatives) (P=0.001), and the presence of a drug abuser in the family (P=0.001), had significant differences. Based on the results of these tests, the score of attitude to drug abuse was significantly different in terms of family income (P=0.03), living situation (with parents, with father, with mother, with grandparents, with other relatives) (P=0.004) and presence of a drug abuser in the family (P=0.001).

Table 3 presents the relationship between the total score of social skills and the subscales of attitudes to drug abuse. Based on the Spearman correlation test, the total score of social skills has a reverse correlation with the subscales of effects of drug abuse (r=-0.291, P=0.001), drug abuse or tendency to drug abuse (r=-0.501, P=0.001), risks of drug abuse (r=-0.455, P=0.001) and total score of attitude to drug abuse (r=-0.442, P=0.001).

Table 4 presents the correlation between attitudes to drug abuse and the subscales of ten social skills and controlling the effects of demographic variables. According to the logistic regression model, after controlling the effects of demographic variables, decision-making skill variables (OR=0.9, 95%CI=0.875-0.967, P=0.001), interpersonal communication skills (OR=0.8, 95%CI=0.845-0.942, P=0.0001), critical thinking skills (OR=0.9, 95%CI=0.881-0.985, P=0.013), creativity skills (OR=0.9, 95%CI=0.856-0.952, P=0.0001), and emotion management skills (OR=0.9, 95%CI=0.894-0.988, P=0.014) can reduce the positive attitude to drug abuse.

Discussion

According to the results of the present study, the score of the majority of students was higher than the mean score obtained from the tools of social skills. This result is consistent with the results of Kazemi's study [22] and is inconsistent with Karimi's study [23] which found that students' living skills levels were below average. The possible causes of the differences can be attributed to the different cultures of the ethnic groups, the different economic conditions, the number of samples, and the simultaneous participation of both sexes in the present study compared to previous studies.

Regarding the attitude to drug abuse, the mean scores obtained in adolescents show that most of the adolescents under study do not have a positive attitude to drug abuse. This result is consistent with the results of

Moradi's study [24] which showed students' negative attitudes to drug abuse. In this study, most of the students in the subscale of the effects of drug abuse had a more positive attitude and did not have enough insight into the negative effects of drug abuse. However, the study of Moradi et al. reported the maximum positive attitude in the subscale of the effects of drug abuse, which is contrary to the results of the present study [24].

According to the results of this study, by controlling the effect of demographic variables, by increasing the score of students in some social skills, the relative chance for a positive attitude toward drug abuse decreases. Thus, the subscales of decision-making skills, interpersonal skills, critical thinking skills, creativity skills, and the score of the emotion management subscale can predict the students' attitudes.

Fooladvand's study found that adolescents who were weak at decision-making turned to drugs instead of solving their problems [11]. Also, the results of Pirzadeh et al. research emphasized that the more problem-solving skills students have, the less likely they will be addicted to addiction, which the present research is consistent with others [25]. Adolescents' ability to solve problems seems to give them more power to deal with stressful situations and to find the most logical solution to their problems. Therefore, this issue can help them to have a negative attitude towards drugs as a way to deal with stress or even avoid problems.

According to the research findings, attitudes toward drug abuse have a significant relationship with demographic variables, family income, living conditions, and living situations. Students with higher family incomes had a positive attitude toward drug abuse. Regarding the relationship between economic status and attitudes towards drug abuse, the findings of the present study were consistent with the results of Lutz's research, which indicated a positive attitude towards drug abuse in adolescents with a more favorable economic situation [26]. However, it was inconsistent with the results of Delavar's research, which reported an inverse relation between attitudes toward drug abuse and the favorable economic situation [27], and Moradi's research, which did not show a significant relationship between the two components [24].

The important point about the economic situation of the family and the attitude toward drug abuse is that addiction does not always originate from poverty, and the opposite may be true [28, 29]. Having financial resources can also lead an adolescent to abuse drugs. Of

course, in this regard, it is very important to pay attention to the cultural differences of different societies.

The results show that families in which there were no drug abusers had a negative attitude towards addiction. Perhaps in some families where addiction is blatant and visible to other family members, especially adolescents, a gradual decrease in the ugliness of addiction may indicate that the family has insufficient skills to conduct appropriate educational behaviors for adolescents.

In this study, the variables of educational level (the 10th grade), gender (boy), place of residence (city), parental education (diploma and above), and living situation (living with parents) were related to higher levels of social skills. Higher education for parents can increase their level of awareness, and passing it on to their children can lead to higher levels of social skills in them.

The tendency to drug abuse and addiction, in addition to being an individual issue, is also a social problem, and these types of problems can not be resolved by the individual reforming. The issue of drugs must be dealt with in different and scientific ways. Based on the results of previous research, the most important and effective period for preventive education is adolescence. Social skills training prepares adolescents to deal with the problems of adapting to society and going through this sensitive period [15, 16]. Cooperation between departments of education, schools, and nurses in the field of children and community health is also important.

Paying more attention to the condition of adolescents' social skills, discovering the skills in which students and adolescents are weak, making the right decisions to improve them, and allocating more time to teach important social skills to adolescents can create negative attitudes in them toward drug abuse. Investigating the weaknesses of families in teaching social skills to adolescents can be considered in future studies. Questioning about attitudes toward drug abuse through a questionnaire may cause parental and adolescent bias; therefore, this way of gathering information may not reflect the whole reality of this case, which is one of the limitations of the present study.

Ethical Considerations

Compliance with ethical guidelines

This research was registered with the Code Number: 96111404 in Guilan University of Medical Sciences and received a code of ethics (Code: IR.GUMS).

REC.1396.505) from the Ethics Committee of the Research and Technology Vice-Chancellor of the same university. The necessary permits were obtained from the Education Department of Rasht City, and the parents of the students completed a written consent for their children to participate in the study. The questionnaires were anonymous and participants were assured that their information would be confidential.

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Authors contributions

Conceptualization and designing: All authors; Manuscript draft preparation: Mehri Ghobadi and Masoumeh Jafari Asl; Data collection and Statistical analysis: Ehsan Kazemnezhad Leili, Mehri Ghobadi and Seyedeh Zahra Shafipour; and Review and editing: All authors.

Conflict of interest

The authors declared no conflict of interest.

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