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1. Introduction

Effective communication skills play an important role in students’ academic achievement [1]. Lundberg, Sharg, and Larsen see communication as conveying meanings or messages through multiple symbols [2]. Communication skills include skills that individuals can employ in their interpersonal interactions and the communication process and consist of various skills, most notably verbal, effective listening, and feedback [3]. Communication is the mechanism that establishes human relationships and through this mechanism all intellectual manifestations and the means of transmitting and sustaining them develop in the place and time, upon which they are based. Although interpersonal com-

ABSTRACT

Background: The present study aimed to determine the effectiveness of social skills training in high-risk behaviors and communication skills among secondary school students in Kaleybar City.

Methods: This was a quasi-experimental study with a pre-test, post-test control group design. The statistical population of the study consisted of all the male high school students of Kaleybar City in the academic year of 2018-2019. First, two high schools were randomly selected from the districts of Kaleybar (East Azarbaijan province), one class was randomly selected from each school, and then, 40 students in the selected schools were randomly assigned into two groups: experimental (n=20) and control (n=20). The high-risk behaviors and communication skills scales were used for data collection. Descriptive statistics (mean and standard deviation) and covariance analysis were used to analyze the data at the significant level of 0.05.

Results: The results showed that social skills training focused on high-risk behavior and its components (violence, smoking, drug use, alcohol consumption, and the opposite sex) and communication skills (feedback, listening, and verbal skills) positively affected the students, reduced risky behaviors, and increased communication skills (P<0.05).

Conclusion: Paying attention to the social skills of students can crucially reduce their high-risk behaviors and enhance their communication skills.

Keywords: Communication, High risk, Social skill
munication is the greatest human achievement, ordinary people are usually unable to communicate well. Low-level communication may lead to loneliness and being away from friends, spouse, or children [4]. Finally, communication skills refer to a set of interpersonal relationships, including learning to listen, listening, and resolving conflict [5].

Students who have effective communication skills establish positive relationships with their teacher and classmates and create a conducive environment for learning [6]. In the process of academic assignments, communication skills can produce positive beliefs about competencies and positive attitudes towards classroom assignments; these beliefs and attitudes ensure that students pursue their academic goals. In the long run, their success in achieving educational goals forms positive beliefs and self-efficacy in students [7]. Conversely, dysfunctional communication skills can importantly predict high-risk behaviors among students. People who lack the skills to cope with their emotional experiences are more likely to engage in risky behaviors when managing and controlling their negative emotions [8]. Risky behavior refers to behaviors that increase the likelihood of harmful physical, psychological, and social consequences for the individual [9]. Moreover, high-risk behaviors are used as a mechanism for suppressing negative emotions. Thus, how a person’s cognitive appraisal works when dealing with a negative event is of paramount importance [10]. Besides, adolescence is accompanied by overt and inevitable developments. The interaction of the characteristics of this period with the environment can profoundly impact health and the tendency for risky behaviors [11].

Taking risky behaviors is a maladaptive strategy in the face of stressful and negative life situations. When it comes to risky behavior, it seems that the main event driving the negative mood is not probably addressed. When the risky behavior stops, individuals are prone to return to the negative state they were trying to escape. People who use high-risk behaviors to reduce their negative affective moods are prone to be deterred from negative emotions and oriented towards high-risk behavior, and vice versa. Particularly, high-risk behaviors become positively reinforced because they lead to a temporary release of negative emotion. Ultimately, this sense of temporary relaxation may increase the likelihood of such behaviors in the future [8].

School is a small social system in which children learn ethical rules, social norms, attitudes, ways of communicating with others, and educational skills. Unfortunately, social skills as an important factor in students’ ability to learn, have been overlooked in this context, and only parents pay attention to students’ inappropriate behavior, and this is contrary to the students’ desire [12]. Social skills include a set of abilities to initiate and maintain positive and productive social relationships, develop friendships and intimacy with peers, and create satisfying adjustments in school. These skills also allow individuals to engage with others, adapt to conditions, and meet the demands of the social environment [13]. According to the World Health Organization, it is predicted that after 2010, fewer people will be able to live a satisfying life without social skills and a positive self-concept. Training these skills impacts success in life through manipulating the psychosocial capacity of individuals. Therefore, training these skills enhances and enables individuals’ psychosocial capacity.

Situational thinking and analysis lead to consistent and tolerant behavior [14] and higher academic achievement. In this regard, Sarani Yaztepe et al. showed that social skills training impacts students’ high-risk behaviors and reduces their high-risk behaviors; this effect is also stable at the follow-up stage [15]. In a study by Durlak et al. [16], training in social and emotional skills enhanced students’ academic and communication skills. Engels et al. [17] found that social skills training increased adolescent adjustment and peer relationships. Besides, social skills training can improve students’ communication skills. Also, in a study by Durlak et al. [16], training in social and emotional skills enhanced students’ academic and communication skills. So, social skills training can enhance students’ communication skills.

Therefore, using the necessary social skills training can activate the sense of internal control and enhance communication skills and social health. Also, students’ mental health can be ameliorated by teaching these skills, increasing the level of health, and reducing high-risk behaviors. Thus, this research is of particular importance owing to a large number of students with poor communication skills, low academic achievement, and the lack of necessary skills to establish good communication with their peers and others. The results would be helpful for students. Therefore, the present study was conducted to answer the question that whether social skills training impacts high school students’ behavior and communication skills.

2. Methods

This was a quasi-experimental study with a pre-test, post-test control group design. The statistical population of the study consisted of all the male high school students of Kaleybar City in the academic year of 2018-2019.
Multistage random sampling and random assignment were used to select the sample. First, two high schools were randomly selected from the schools of Kaleybar (East Azarbaijan province), then, one class was randomly selected from each school. Among the students selected, 40 students who gained a score of 90 or higher on the high-risk behaviors questionnaire were randomly assigned into two groups: experimental (n=20) and control (n=20). Initially, the questionnaires were distributed to the students of two secondary schools. After completing the questionnaires, the subjects in the experimental group were trained in social skills for 10 sessions; the control group received no training. After the social skills training, students completed the questionnaires again. The following tools were used to collect the data.

**Risk Behaviors Scale:** The Iranian adolescents’ risk scale was used to measure adolescents’ vulnerability to high-risk behaviors, such as violence, smoking, drug use, alcohol use, sexual behavior, and the opposite sex. This questionnaire was developed by Zadeh Mohammad and Ahmad Abadi [9] by reviewing valid and relevant tools in the area of adolescent risk. The scoring system of this scale can be either Likert (5, 4, 3, 2, 1, 0) or binary (1, 0), including agree and disagree options. So that it is used in binary scoring for the rate of occurrence. Shahbi Dilghmani [18] reported construct validity of this scale at a highly desirable level of 0.95, through exploratory factor analysis on a sample of 1204 subjects using the Kaiser-Meyer-Olkin sampling adequacy test and the Bartlett test. This is a multidimensional scale that has the highest factor (9.1%) in explaining the variance of the measured structure. The results also indicate that the validity of this scale and its subscales are at an appropriate level. The Cronbach alpha of 0.94 and 0.74, 0.78, 0.93, 0.90, 0.90, 0.90, 0.87, and 0.83 is achieved for dangerous driving, violence, smoking, drugs, alcohol, alcohol and sex, sexual intercourse, and the opposite sex, respectively.

**Communication Skills questionnaire:** The Barton communication skills questionnaire was used to measure communication skills. The questionnaire contains 18 closed-ended questions [19]. This questionnaire evaluates communication skills in three areas, including feedback, listening, and verbal skills; each domain includes six items. This questionnaire has been translated and validated by Moghimi for use in Iran. The validity of the questionnaire was assessed by experienced professors and experts and its reliability was confirmed by the Cronbach alpha test with an alpha value of 0.7. Depending on the type of response, each option is scored from 1 to 5 (strongly disagree to strongly agree). Accordingly, the scores of 18 and 90 indicate the lowest and the highest scores of managerial communication skills, respectively. Besides, the minimum and maximum scores for each part of the questionnaire are 6 and 30, respectively.

**Social skills education intervention:** This educational package was developed by Behpazhoh et al. [20] and examines the Matson list of social skills and the skills that students had difficulty with. The opinion of many psychologists and professors approved 12 one-hour sessions design. The goals of the social skills training program were to teach appropriate dealing with others, obey commands, obey orders, help others, increase attention, be patient, accept work results, and so on.

The educational approach of the program is mainly based on the cognitive and social learning approach as well as direct and indirect methods, such as verbal expression, role modeling, role-playing, subjective review, feedback, group discussion, and positive reinforcement. This approach also involves questions and answers. The intervention program consisted of 12 sessions of 60 minutes each (three sessions per week).

Session 1: Getting to know the members of the group, expressing the rules of the group, discussing the importance of social skills, giving feedback on how to communicate, giving voice, and giving assignments about how to introduce yourself to others;

Session 2: Presenting a homework report and giving feedback, practicing on how to introduce yourself and greetings and dealing with others, and giving proper homework;

Session 3: Presenting the task report and giving feedback, practicing everyday exchange practices, practicing the conversation and continuing it appropriately and ending it, giving the task of starting a conversation with others;

Session 4: Presenting homework reports and giving feedback, discussing the importance of following school and home commands and rules, and disciplining homework;

Session 5: Presenting a homework report and giving feedback, practicing how to ask others, providing a model on how to deal with a person who refused our demand, demanding homework, and providing responses;

Session 6: Presenting homework report and giving feedback, discussing the importance of getting older to do things, and listening and listening skills.
Session 7: Presenting homework report and giving feedback, training on emotion control skills, expressing positive and negative emotions, and giving appropriate homework;

Session 8: Presenting a task report and giving feedback; practicing how to express emotion; providing a template for how to express various emotions, such as happiness, anger, grief, and skills in asking for help and helping others; and enhancing social health strategies;

Session 9: Presenting assignment session reports and giving feedback, practicing irrevocable claims, discussing how to say no to irrevocable requests, assigning how to reject irrelevant requests, and practicing the skill of saying no;

Session 10: Presenting a homework report and giving feedback; discussing why we should criticize; giving homework on feedback, apologizing, and accepting others;

Session 11: Presenting a task report and giving feedback, practicing criticism, providing a model for appropriate and effective criticism, doing tasks to tackle and accept criticism, and practicing problem-solving and failure;

Session 12: Presenting the assignment task report and giving feedback, summarizing the sessions, evaluating session results, and conducting self-assessment.

The intervention program seeks to increase the students' understanding of social skills and focus on promoting social performance, then, emphasizes the maintenance and generalization of social skills.

Descriptive statistics (mean and standard deviation) and covariance analysis were used to analyze the data at the significant level of 0.05.

3. Results

Table 1 reports the dispersion and central tendency of the research variables (high-risk behaviors and social skills) by group and test type.

According to Table 1, the mean score of communication skills in the experimental group is higher than in the control group (Table 1). On the other hand, the mean score of high-risk behaviors was lower in the experimental group than in the control group. As can be seen in Table 1, social skills training increased the social skills scores and decreased risky behaviors in the experimental group, while no difference appeared in the control group.

Before the covariance analysis test, the covariance analysis assumptions for the homogeneity of the matrices were tested with the Box, Wilks lambda, and Levin tests (Table 2). According to the results of the Box test, which was not significant for any of the variables, the homogeneity of variance-covariance matrices is in place. Based on the Wilks lambda test, which was significant at the level of 0.02, and the Levin test, the variables of communication skills and high-risk behaviors are not significant, so, there is a similarity of variances. Therefore, based on these assumptions and prerequisites of the covariance analysis test, the covariance analysis test was used for the analysis.

The results of the Wilks lambda statistic showed the significant effect of the group on the combination of variable components of high-risk behaviors (P<0.001, F=7.52, Wilks lambda=0.43). The above test allowed the applicability of the multivariate analysis of covariance. Also, the results of the Wilks lambda statistic showed that the effect of the group on the combination of variable components of communication skills was significant (P<0.001, F=7.32, Wilks lambda=0.60). The above test allowed the applicability of multivariate analysis of covariance (since the components of communication skills were examined, the multivariate analysis of covariance was used.)

After adjusting for pre-test scores, there was a significant effect on factors among the group subjects (Table 3). The mean scores of the experimental group that received the social skills training decreased significantly. Therefore, social skills training impacted students' high-risk behaviors and significantly reduced these behaviors.

After adjusting for pre-test scores, there was a significant effect on factors among group subjects (Table 4). The mean scores of the experimental group that received the social skills training increased significantly. Therefore, social skills training affected communication skills and their components (feedback, listening, and verbal skills) in students and significantly enhanced communication skills.
4. Discussion

The present study aimed to investigate the effectiveness of social skills training in the tendency to high-risk behaviors and communication skills among secondary school students. The first finding showed that social skills training affected high-risk behaviors and reduced these behaviors in students. This finding is consistent with the results of Sarani Yaztepe et al. [15] and Ahmadi and Moini [21]. Among adolescents at risk, the presence of daring problems, such as being active in the community, being shy, lacking in skills to make new friends, and being able to reject irrational demands may affect the harmful effects of these health behaviors. Therefore, teaching life skills to high-risk male students affects their self-control skills and emotional intelligence. Life skills training can help control and balance the amount of emotion and reduce the dangerous effects of emotion. The excitement not only stimulates the individuals but also motivates them to move, also, it may force people to express a story or an action that they neither say nor act in natural terms. When the excitement is overwhelming, a wide variety of changes occurs in the individual and involves all the aspects of the body and its activity [22].

### Table 1. Mean±SD of high-risk behaviors and communication skills in the experimental and control groups in the pre-test and post-test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>Mean±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence</td>
<td>7.55±1.87</td>
<td>8.50±1.39</td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>7.05±1.27</td>
<td>7.10±1.37</td>
<td></td>
</tr>
<tr>
<td>Substance consumption</td>
<td>8.25±1.29</td>
<td>8.05±1.29</td>
<td></td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>8.60±1.90</td>
<td>7.95±1.57</td>
<td></td>
</tr>
<tr>
<td>Relationship with the opposite sex</td>
<td>5.90±1.25</td>
<td>6.55±1.43</td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td>18.75±1.94</td>
<td>19.60±1.47</td>
<td></td>
</tr>
<tr>
<td>Listening</td>
<td>19.55±1.43</td>
<td>19.45±1.33</td>
<td></td>
</tr>
<tr>
<td>Verbal skills</td>
<td>18.01±1.71</td>
<td>18.85±1.72</td>
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</tr>
<tr>
<td>Post-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence</td>
<td>6.90±1.41</td>
<td>8.60±1.82</td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>5.95±1.39</td>
<td>7.85±1.46</td>
<td></td>
</tr>
<tr>
<td>Substance consumption</td>
<td>6.95±1.73</td>
<td>8.30±1.75</td>
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</tr>
<tr>
<td>Alcohol consumption</td>
<td>6.60±1.50</td>
<td>8.55±1.50</td>
<td></td>
</tr>
<tr>
<td>Relationship with the opposite sex</td>
<td>5.35±1.66</td>
<td>6.75±1.37</td>
<td></td>
</tr>
<tr>
<td>Feedback</td>
<td>20.50±1.70</td>
<td>19.30±1.86</td>
<td></td>
</tr>
<tr>
<td>Listening</td>
<td>20.80±2.11</td>
<td>18.70±1.94</td>
<td></td>
</tr>
<tr>
<td>Verbal skills</td>
<td>20.25±1.86</td>
<td>18.55±1.46</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2. Multivariate analysis of the covariances of high-risk behaviors and communication skills

<table>
<thead>
<tr>
<th>Variables</th>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
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<tr>
<td>Risky behaviors</td>
<td>Wilks lambda</td>
<td>0.42</td>
<td>7.52</td>
<td>0.001</td>
</tr>
<tr>
<td>Communication skills</td>
<td>Wilks lambda</td>
<td>0.60</td>
<td>7.32</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Ahmadi and Moini [21] showed that social skills can influence and reduce students’ high-risk behaviors. When the risky behavior stops, the people are prone to return to the negative state they were trying to escape. People who use high-risk behaviors to reduce their negative affective moods are prone to be deterred from negative emotions and tendency to high-risk behavior, and vice versa. Particularly, high-risk behaviors become positive reinforcers that lead to a temporary release of negative emotions.

Another finding showed that social skills training affected students’ communication skills and enhanced their communication skills. This finding is in agreement with the results of the research by Durlak et al. [16], Engels et al. [17], Short [23], and Chalmers-MacDonald [24]. Shorts [23] showed that social skills training reduced behavioral disorders and increased self-control and social interactions in children. Social skills training affects the communication and social health of students. Chalmers-MacDonald [24] showed that social skills training impacted the social behavior and academic achievement of male and female elementary students. Also, social skills training can improve students’ communication skills and increase their health.

Social skills include a set of abilities that enhance the power of adaptation and positive and efficient behaviors. Consequently, people can accept responsibility for their social role without having to harm themselves or others and face the challenges and problems of daily living effectively. Social interaction breaks down into a step-by-step process where each step requires a different set of skills. The first stage of communication requires the acquisition of skills that include skills for attention and comprehension. The socially appropriate information that exists in situations is necessary because the appropriateness of interpersonal behavior depends on the situations. In other words, the occurrence of socially correct behaviors is highly dependent on the proper understanding of interpersonal and environmental cues, which guide us to effective answers. The examples of capture skills include the appropriate cognition of the individuals with whom we interact; it refers to the correct understanding of the feelings and desires that others express. It is actually listening to what others are saying and knowing the personal goals of the individual who interacts with us. Therefore, social skills training increases the assertiveness of students and their self-concept [24].

Disability in social skills can affect almost every aspect of students’ lives because it reduces their sensitivity to people. Then, their poor understanding of social situations and the small number of skills reduce their communication. The disruption of social skills may be the most crippling problem that a student can experience. In the psychology and education literature, a social problem is regarded as a primary separate and separate from educational problems, but failure in learning and academic

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variables</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
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<tr>
<td>Group (experimental)</td>
<td>Violence</td>
<td>33.74</td>
<td>1</td>
<td>33.74</td>
<td>15.52</td>
<td>0.001</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Smoking</td>
<td>33.23</td>
<td>1</td>
<td>33.23</td>
<td>16.88</td>
<td>0.001</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>Substance consumption</td>
<td>14.65</td>
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<td>14.65</td>
<td>4.48</td>
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<td>0.12</td>
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<tr>
<td></td>
<td>Alcohol consumption</td>
<td>20.31</td>
<td>1</td>
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<td>8.79</td>
<td>0.006</td>
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<td>21.62</td>
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<td>21.62</td>
<td>9.31</td>
<td>0.004</td>
<td>0.22</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Source</th>
<th>Dependent Variables</th>
<th>Type III Sum of Squares</th>
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<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (experimental)</td>
<td>Feedback</td>
<td>13.85</td>
<td>1</td>
<td>13.85</td>
<td>4.98</td>
<td>0.003</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Listening</td>
<td>52.89</td>
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<td>52.89</td>
<td>12.55</td>
<td>0.001</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Verbal skills</td>
<td>23.40</td>
<td>1</td>
<td>23.40</td>
<td>7.95</td>
<td>0.008</td>
<td>0.18</td>
</tr>
</tbody>
</table>
performance can lead to secondary social and emotional problems. In general, the social problem of academic inefficiency can be very effective [25]. Social perception is the ability to understand social situations and equally be sensitive to the feelings of others. Students with impaired social perception are unable to perform the types of independent activities that their peers are expected to perform. They are also incapable of judgment, morals, and attitudes in the social environment and are insensitive to the atmosphere of social situations; this negative attitude causes them to behave inappropriately [26]. Therefore, social skills training increases students’ communication skills owing to the increase of their perception of social ability.

This study had some limitations. The findings were based on attitudinal scales and may be originated from the participants’ unconscious tendency to evade responses, this may jeopardize the results of the research. Since the present study was conducted on high school male students in Kaleyber City of East Azarbaijan province, the rate of high-risk behaviors in the students’ population could be higher than in the present sample. Thus, other cities need to be cautious about that. Therefore, social skills training is recommended to be applied to increase students’ health and reduce their problems.

5. Conclusion

The social skills training should be also included in in-service training programs for counselors and teachers as well as mothers and fathers’ enhancement programs so that they can adapt to students and enhance their communication skills, considering that parents play a necessary role.

Ethical Considerations

Compliance with ethical guidelines

All ethical principles are considered in this article. The participants were informed about the purpose of the research and its implementation stages. They were also assured about the confidentiality of their information and were free to leave the study whenever they wished, and if desired, the research results would be available to them.

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors’ contributions

Study design: Ayat Fathi; Data collection and analysis: Ayat Fati and Raheleh Alipour; Manuscript preparation: Hassan Khodaei.

Conflict of interest

The authors declared no competing interest.

References


