

ORIGINAL ARTICLE

The Effect of Empowerment Training in Protecting Adolescents from Substance Abuse on Self-Efficacy, Self-Esteem, and Assertiveness Levels

Arzu Koçak Uyaroğlu¹, Ayşe Özcan²

¹Department of Psychiatric Nursing, Selçuk University Faculty of Nursing, Konya, Turkey

²Department of Nursing, KTO Karatay University School of Health Sciences, Konya, Turkey

ORCID iDs of the authors: A.K.U. 0000-0002-6581-4617, A.Ö. 0000-0003-3313-2918.

Main Points

- Adolescents constitute an important risk group in terms of substance use throughout the world.
- Early intervention programs are needed to protect adolescents from substance use.
- Community mental health nurses can identify the needs of adolescents in terms of health protection and improvement and conduct training programs to meet these needs thanks to their educational roles.

Abstract

The study aims to evaluate the effect of empowerment training in protecting adolescents from substance abuse on self-efficacy, self-esteem, and assertiveness levels. This a quasi-experimental research study with pretest-posttest design and a control group. The research sample was composed of 65 adolescents; 33 in the experimental group and 32 in the control group. The empowerment training program including 10 sessions in total, each lasting 45 minutes, was administered to the adolescents in the experimental group. Data were collected via the Adolescent Information Form, the Self-Efficacy for Protecting Adolescents from Substance Abuse Scale, the Rosenberg Self-Esteem Scale, and the Rathus Assertiveness Scale. In data analysis, variance analysis was used in repeated measures, and *t* test was used in independent groups. The increase in the self-efficacy mean scores of the adolescents in the experimental group in post-test and follow-up measurements was found to be statistically significant ($p < .01$). The difference between the experimental and control groups in terms of self-efficacy, self-esteem, and assertiveness scores was found to be statistically significant ($p < .01$). It was determined that the empowerment training program increased the self-efficacy levels of the adolescents in terms of protection from substance abuse, supported the development of self-esteem, and had a positive effect on their assertiveness.

Keywords: Adolescent, assertiveness, empowerment training, self-efficacy in protecting from substance abuse, self-esteem

Corresponding Author:

Arzu Koçak Uyaroğlu

E-mail:

akuyaroglu@selcuk.edu.tr

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Introduction

Adolescence is defined as a period of transition from childhood to adulthood. This period is characterized by sexual and social identity formation, efforts to dissociate from parents, and dramatic changes (Sawyer et al., 2018). With the increase in impulsivity during adolescence, there is a significant increase in the frequency of attempting risky behaviors. Studies show that among the risk-taking

behaviors frequently encountered in adolescence, substance abuse is gradually increasing and the age of substance abuse is decreasing day by day (Arslan et al., 2012; Jiloha, 2017). According to these studies, substance abuse is one of the major problems of the youth today around the world and in Turkey, which renders the implementation of early intervention programs for the protection against substance abuse essential.

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Adolescence is a turbulent period that includes both development and problems. It is believed that social skill programs may be effective to help adolescents evaluate life experiences in a healthy way, create a negative attitude toward substance abuse (Sohrabi et al., 2008), and reduce it (Tavousi et al., 2011). Educational programs that may prevent adolescents from experiencing negative experiences such as substance abuse may play a key role in making them healthy adults (İşmen Gazioğlu & Canel, 2015; Kia-Keating et al., 2011). When the literature is reviewed, it is seen that there is a relationship between self-efficacy, self-esteem, assertiveness, and adolescents' well-being (Güven, 2010).

Studies conducted so far have shown that individuals with high self-efficacy levels can cope with common risk-taking behaviors such as substance abuse (Carpenter & Howard, 2009), and people who have low self-esteem and are not assertive show substance abuse or smoking behaviors more (Atak, 2011; Toker et al., 2011). In this context, it can be stated that in order to protect adolescents from substance abuse, it is necessary to increase their self-esteem, assertiveness, and self-efficacy levels, which may empower adolescents. These efforts are at least as important as basic education on substance abuse because the main aspect of protecting against substance abuse is to refuse substance abuse at the point where the substance reaches the individual, thus minimizing the risk of abuse. Therefore, the aim of prevention programs to be implemented to protect adolescents from risky behaviors such as alcohol and substance abuse is to increase the adolescent's personal and social skills by strengthening their mental health and positive characteristics (Chang et al., 2015; Eslami et al., 2015).

One of the main roles of nurses is to protect and improve health. Within this context, protection against substance abuse, protecting young people from risky situations, and the treatment and rehabilitation of addicted adolescents are among the responsibilities of nurses (Albayrak & Balci, 2014; Nkowane & Saxena, 2004; Öz & Yılmaz Bahadır, 2009). On the other hand, it is reported that adolescents constitute the most important risk group in terms of substance abuse, and it is assumed that psychological empowerment will protect adolescents from substance abuse in the long run. In addition, when the national literature is examined, it is seen that there are not enough experimental studies that will contribute to forming a basis to protect adolescents from substance abuse and sustain this protection. This study aims to contribute to the protection of adolescents from substance abuse as well as to the literature in this respect. The study was conducted in order to evaluate the effect of the empowerment training given to a group of adolescents between 12 and 14 years old studying in a secondary school affiliated to Konya Provincial Directorate of National Education on self-efficacy, self-esteem, and assertiveness levels in protection from substance abuse.

Methods

Research Type

This research is a quasi-experimental study with pretest-posttest design and a control group.

The research constitutes the first stage of the first author's doctoral thesis. In the first phase of the study, which was carried out in two stages, quantitative research techniques were employed to determine the effectiveness of the empowerment training

program designed for adolescents aged 12 – 14. In the second stage, qualitative interviews were conducted to evaluate the views and experiences of adolescents regarding the empowerment program applied.

Research Hypotheses

In the experimental group to which the empowerment training was given, H1-1: The Self-Efficacy for Protecting Adolescents from Substance Abuse Scale score is higher than the control group; H1-2: The post-test and follow-up mean scores for the Self-Efficacy for Protecting Adolescents from Substance Abuse Scale are higher than the pre-test mean score; H1-3: Rosenberg self-esteem score is higher than the control group; and H1-4: Rathus Assertiveness score is higher than the control group.

Participants

The target population of the study was the 12- to 14-year-old students of two secondary schools randomly selected in the Karatay district of Konya province ($n = 170$). Power analysis was performed to determine the study group, and the number of students to be included in the study was determined based on 5% error margin and .05 significance level. The power analysis was conducted using the Minitab 14.0 statistical program. Studies in the literature were referred to for the standard deviation values of the scales (Akkuş et al., 2016; İlhan et al., 2016; Kaya & Oğurlu, 2015). The highest working volume was determined as 27 students in each group (experiment and control) with 95% power; however, 33 adolescents were selected for both groups using the simple random method, considering the losses that may occur during the study. After the pretest was applied to both groups, one of the adolescents in the control group dropped out of formal education, and thus, the control group consisted of 32 adolescents. It was observed that the adolescents in the experimental and control groups were similar in terms of their demographic characteristics ($p > .05$) (Table 1).

Selection Criteria

Inclusion criteria: The adolescents who were between 12 and 14; who had no problems reading, writing, and understanding Turkish; who reported during the pre-test that they have not used or tried substance before; and whose parents gave consent for participation in the study were included in the study.

Exclusion criteria: The adolescents who participated in a similar training program before or who were participating in such training at the time of our study were excluded from the study.

Dismissal criteria: The adolescents who did not attend at least two sessions and who disrupted group harmony were dismissed from the study.

Data Collection Tools

The data were collected using the Adolescent Information Form, the Self-Efficacy for Protecting Adolescents from Substance Abuse Scale, the Rosenberg Self-Esteem Scale, and the Rathus Assertiveness Inventory.

Adolescent Information Form: It was developed by the researcher by reviewing the relevant literature. It includes a total of 11 questions. Eight questions are about the socio-demographic characteristics of the adolescents and their family (age, gender, parents'

Table 1.
Demographic Characteristics of the Adolescents in the
Experimental and Control Group

| Characteristics | Experimental Group | | Control Group | | χ^2 | p |
|---|--------------------|------|------------------|------|----------|------|
| | Mean \pm SD | | Mean \pm SD | | | |
| Age | 13.30 \pm 0.58 | | 13.37 \pm 0.55 | | | |
| | n | % | n | % | | |
| Gender | | | | | | |
| Female | 21 | 63.6 | 14 | 43.8 | 2.585 | .138 |
| Male | 12 | 36.4 | 18 | 56.2 | | |
| Mother's level of education | | | | | | |
| Illiterate | 6 | 18.2 | 8 | 25.0 | 0.447 | .558 |
| Primary school | 27 | 81.8 | 24 | 75.0 | | |
| Father's level of education | | | | | | |
| Primary school | 23 | 69.7 | 20 | 62.5 | 0.376 | .606 |
| Secondary school and above | 10 | 30.3 | 12 | 37.5 | | |
| Mother's employment status | | | | | | |
| Working | 1 | 3.0 | 4 | 12.5 | 2.052 | .152 |
| Not working | 32 | 97.0 | 28 | 87.5 | | |
| Father's employment status | | | | | | |
| Working | 26 | 78.8 | 25 | 78.1 | 0.004 | .948 |
| Not working | 7 | 21.2 | 7 | 21.9 | | |
| Perceived family income | | | | | | |
| Good | 15 | 45.5 | 8 | 25.0 | 3.013 | .222 |
| Average | 13 | 39.4 | 18 | 56.2 | | |
| Poor | 5 | 15.2 | 6 | 18.8 | | |
| Place where families lived the longest | | | | | | |
| Village/town | 5 | 15.2 | 11 | 34.4 | 3.569 | .168 |
| City | 17 | 51.5 | 11 | 34.4 | | |
| Metropolis | 11 | 33.3 | 10 | 31.2 | | |

Note: SD = standard deviation.

level of education, parents' employment status, family income, and the place where they lived the longest), while the remaining three questions aim to determine substance abuse.

Self-Efficacy for Protecting Adolescents from Substance Abuse Scale: The scale was developed by Eker et al. (2013). It is a self-report-based attitude scale consisting of 24 items, 1 of which is a control item. The factor loadings of the scale items vary between 0.38 and 0.87. As a result of the factor analysis, it was determined that the scale ensured construct validity with 24 items, which are scored on a 5-point Likert scale (1—I am not sure at all, 2—I am barely sure, 3—I am moderately sure, 4—I am quite sure, 5—I am extremely sure). While 23 items in the scale are positively scored, scoring in the control item is done as “5—I am not sure at all” and “1—I am extremely sure.” The minimum score that can

be obtained from the scale is 23 and the maximum score is 115. Higher scores indicate higher levels of self-efficacy in protection from substance abuse. The total internal consistency coefficient (Cronbach's) of the scale was found to be .81, and the test – retest correlation was found to be positively and significantly correlated ($p < .001$). In our study, the Cronbach's alpha of the scale was found to be .96 in the pilot study conducted with 370 students in a school apart from the two schools where the study was conducted.

Rathus Assertiveness Scale: The Assertiveness Scale developed by Rathus (1973) determines the degree of assertiveness in behavioral norms of a person. It was adapted to Turkish by Voltan (1980), and the Cronbach's alpha coefficient was found to be .70 and the test – retest reliability was found to be .92. The Rathus Assertiveness Scale, which can be administered to adolescents and adults, consists of 30 items scored on a 6-point scale from –3 to +3. The items are scored from “very characteristic of me” to “very uncharacteristic of me” and some items are reserve coded. While 17 items are expressed as negative, 13 items are expressed as positive statements. In the scoring of the scale, items 1, 2, 3, 4, 5, 9, 11, 12, 13, 14, 15, 16, 17, 19, 23, 24, 26, and 30 are reserve coded, while the remaining items (6, 7, 8, 10, 18, 20, 21, 22, 25, 27, 28, and 29) are coded as they are. The total score ranges from –90 to +90, with –90 as the highest degree of non-assertiveness (timidity) and +90 as the highest degree of assertiveness. Scores of +10 and above on average indicate assertiveness. In the study of İlhan et al. (2016), Cronbach's alpha coefficient of the scale was found to be .84.

Rosenberg Self-Esteem Scale: The scale was developed by Morris Rosenberg (1965) and adapted to Turkish by Çuhadaroglu (1986). The validity of the scale was found to be .71, and the reliability coefficient determined by the test – retest method was .70. The scale has 12 subscales. The first of the subscales is aimed at determining self-esteem directly, while the others are aimed at determining the elements that affect self-esteem. The self-esteem subscale consists of 10 items which are answered using a 4-point Likert scale format ranging from “strongly agree” to “strongly disagree.” The maximum score that can be obtained from the scale is 6, and the minimum score is 0. A score between 0 and 1.99 refers to high self-esteem, while scores between 2 – 4.99 and 5 – 6 refer to average self-esteem and low self-esteem, respectively. In the study of Kaya and Oğurlu (2015), Cronbach's alpha coefficient of the scale was found to be .80.

Implementation Steps and Data Collection

The implementation of the research and the data collection process were carried out in four stages between February 2016 and December 2016. In the first stage, pre-test data were collected using the data collection tools in February 2016 before the empowerment training. In the second stage, the relevant literature (Çeçen & Koçak, 2007; Kaya & Saçkes, 2005; Kutlu, 2009; Voltan, 1980) was reviewed by the researcher, and the Empowerment Training Program, which was developed by the researcher and which was composed of 10 sessions, was administered to the experimental group. The training aimed to increase self-esteem in adolescents, help them gain assertiveness skills, and increase their basic knowledge about abuse. During the preparation stage, expert opinions were received, and the scope of the

training was finalized in line with the recommendations of the experts (Table 2). The training was carried out once a week for one class hour for 10 weeks. In the third stage, after the training was completed, a post-test was administered to the experimental and control groups. In the fourth stage, data collection forms were re-administered to the participants in December 2016 for follow-up purposes 6 months after the training was completed.

In order to prevent bias in the data collection process, an assistant researcher who was informed about the study and the data collection tools provided help in collecting pre-test, post-test, and follow-up data. The data collected by this researcher, who had no information about the groups, were entered into the Statistical Package for the Social Sciences (SPSS).

Data Analysis

The data were analyzed using the SPSS 20 statistical analysis program. Kolmogrov – Smirnov and Shapiro – Wilk tests were used to evaluate the normality of the data. In order to determine the reliability of the scales, Cronbach’s alpha internal consistency analysis was performed, and chi-square analysis was used to determine the similarities between the experimental and control groups in terms of demographic characteristics. In the analysis of within-group differences, the variance analysis was performed in repeated measures, and the significance of the difference between groups was analyzed using *t*-test in independent groups. The results were evaluated at 95% CI and *p* < .05 significance level.

The power of the study and the effect size were calculated based on the multi-directional variance analysis in repeated measures. The effect size calculation developed by Cohen is the most widely used formula. According to Cohen’s *d* formula, when the *d* value is lower than .2, it indicates that the effect size is small, and when it is .5, the effect size is medium, and when it is greater than .8, the effect size is large (Cohen, 1988).

Ethical Considerations

Prior to the research, permission was obtained from the Ethics Committee of the university (decision number 2015/06). Also, permission was obtained from Konya Provincial Directorate of National Education for the implementation of the training in the schools. An informed consent form was sent to the parents of the students who are between the ages of 12 and 14 and who

study in the two schools where the study would be conducted. In the consent form, the importance and purpose of the study were explained. Detailed information was given to the students whose parents gave consent for participation in the study, and also, informed consent was obtained from the experimental and control group students. After the study was completed, it was planned to give empowerment training to the adolescents in the control group. However, training could not be administered to the control group due to the long duration of the training and the lack of permission due to the fact that it might hinder education and training.

Results

The post-training and the follow-up measurements revealed that the self-efficacy scale mean scores of adolescents in the experimental group increased compared to the pre-training measurements, and the effect size was also high. The difference between the pre-test, post-test, and follow-up self-efficacy scores of the experimental group for protection from substance abuse was found to be statistically significant (*p* < .01). In the control group, it was observed that the adolescents’ mean self-efficacy score for protection from substance abuse gradually decreased in the post-test and follow-up and the difference between them was statistically significant (*p* < .01). The within-group comparisons showed that this significance was due to the total follow-up and pre-test scores. In terms of total scale score, the difference between post-test and pre-test and between follow-up and post-test was not statistically significant (*p* > .05).

Inter-group comparisons showed that the self-efficacy scale post-test and follow-up scores are higher in the experimental group, self-efficacy has changed positively, and the effect size is high. The difference between the self-efficacy post-test and follow-up mean scores of the adolescents in the experiment and control groups was found to be significant (*p* < .01). The difference between the pre-test mean scores of both groups was not found to be significant (*p* > .05) (Table 3).

It is seen that Rosenberg’s self-esteem post-test mean score and follow-up mean score changed positively in the experimental group. The difference between the Rosenberg self-esteem pre-test mean scores in the experimental and control groups was not

Table 2.
Empowerment Training Sessions

| Sessions | Topics |
|--------------|---|
| Session I | Opening, getting to know each other, and exploring adolescents’ feelings about themselves |
| Session II | Adolescents’ realization of what they like and dislike about themselves |
| Session III | Understanding that everyone has different roles in life and their performance within those roles may differ |
| Session IV | Setting goals/understanding that goal setting affects our feelings about ourselves |
| Session V | Achieving personal goals and perfection, understanding that perfection is impossible and unnecessary |
| Session VI | The concept of assertiveness |
| Session VII | Defining nonverbal behaviors (aggression, timidity, and assertive behaviors) |
| Session VIII | Developing the ability to say “no” |
| Session IX | Learning addiction, addiction criteria, and addiction cycle |
| Session X | Poster competition on “Stay Away From Us” and closing |

Table 3.

Distribution of Self-Efficacy Scores of the Adolescents in the Experimental and Control Groups for Prevention from Substance Addiction According to Pre-test, Post-test, and Follow-Up Measurements (n = 65)

| Groups | Pre-test (1) Mean ± SD | Post-test (2) Mean ± SD | Follow-Up (3) Mean ± SD | F | p | Within-Group Difference* | | | Effect Size (η^2) (95% CI) |
|-----------------------------|---------------------------|----------------------------|----------------------------|----------------|------|-----------------------------|------|------|---|
| | | | | | | 2_1 | 3_1 | 3_2 | |
| Experimental group (n = 33) | 70.45 ± 16.60 | 110.96 ± 3.25 | 105.45 ± 6.27 | 150.959 | <.01 | <.01 | <.01 | <.01 | .907 (.820, .932) |
| Control group (n = 32) | 69.34 ± 14.38 | 68.31 ± 12.82 | 66.46 ± 11.47 | 10.526 | <.01 | >.05 | >.05 | >.05 | .412 (.117, .572) |
| Inter-group difference | t | 0.288 | 18.254 | 16.918 | | | | | |
| | p | >.05 | <.01 | <.01 | | | | | |
| Effect size (Cohen's d) | t | .071 | 4.561 | 4.218 | | | | | |
| | p | (-0.416, 0.557) | (3.624, 5.487) | (3.331, 5.094) | | | | | |

*2_1 comparison of pre-test and post-test, 3_1 comparison of follow-up and pre-test, 3_2 comparison of follow-up and post-test.
SD = standard deviation.

found to be statistically significant ($p > .05$); however, the difference between the post-test mean scores and follow-up mean scores was found to be significant ($p < .01$) (Table 4).

It was observed that the Rathus Assertiveness Scale post-test and follow-up mean scores changed positively. Similarly, it was revealed that the change in the experimental group continued in a positive direction; however, the mean follow-up score was found to decrease compared to the post-test mean score. While the difference between the Rathus Assertiveness Scale pre-test mean scores of the experimental and control groups was not statistically significant ($p > .05$), the difference between the post-test and follow-up mean scores of the two groups was found to be statistically significant ($p < .01$) (Table 5).

Discussion

This study, which was conducted to evaluate the effect of the empowerment training program given to adolescents to protect them from substance abuse on their self-efficacy, self-esteem, and

assertiveness levels, revealed that a significant difference was achieved in the self-efficacy, self-esteem, and assertiveness levels of the adolescents in the experimental group. In this respect, the research hypotheses H1-1, H1-2, H1-3, and H1-4 were accepted.

It was determined that the empowerment training supported positive changes in self-efficacy in protecting against substance abuse. It also led to a significant difference in the post-test and follow-up mean scores of the self-efficacy scale, and the effect size was high. Self-efficacy is important for adolescents to express themselves, take responsibility for their health, avoid problematic behaviors, and especially protect themselves from substance abuse. Therefore, a positive change in self-efficacy may help adolescents manage their lives and protect themselves from negative experiences. Substance abuse is a serious disease and a social health problem that is spreading rapidly all over the world, generally starting in adolescence and dangerously seen even in pre-adolescence. Therefore, as can be seen in our study, it is believed that the support activities to be carried out through psychosocial empowerment will be one of the protective actions that will keep

Table 4.

Distribution of Rosenberg Self-Esteem Mean Scores of the Adolescents in the Experimental and Control Groups According to Pre-test, Post-test, and Follow-Up Measurements (n = 65)

| Groups | | Pre-test | Post-test | Follow-Up |
|-----------------------------|---|-------------|-------------|-------------------|
| | | Mean ± SD | Mean ± SD | Test Mean ± SD |
| Experimental group (n = 33) | | 2.42 ± 0.68 | 1.26 ± 0.37 | 1.30 ± 0.41 |
| Control group (n = 32) | | 2.34 ± 0.67 | 2.31 ± 0.68 | 2.28 ± 0.63 |
| Inter-group difference | t | .432 | -7.569 | -7.407 |
| | p | >.05 | <.01 | <.01 |

SD = standard deviation.

Table 5.

Distribution of the Rathus Assertiveness Scale Mean Scores of the Adolescents in the Experimental and Control Groups According to Pre-test, Post-test, and Follow-Up Measurements (n = 65)

| Groups | | Pre-test | Post-test | Follow-Up |
|-----------------------------|---|----------------|----------------|-------------------|
| | | Mean ± SD | Mean ± SD | Test Mean ± SD |
| Experimental group (n = 33) | | -24.84 ± 16.14 | 50.21 ± 15.56 | 31.78 ± 20.35 |
| Control group (n = 32) | | -31.06 ± 15.32 | -25.93 ± 16.11 | -30.59 ± 14.24 |
| Inter-group difference | t | 1.591 | 19.369 | 14.351 |
| | p | >.05 | <.01 | <.01 |

adolescents away from substance abuse. It is also emphasized in the literature that studies aiming at empowering adolescents psychosocially should also aim to increase self-efficacy, assertiveness skills, and self-esteem of adolescents (Güven, 2010). Similar to other studies, our study also aimed to increase the assertiveness and self-esteem levels of adolescents so that they can reach high self-efficacy levels and thus can protect themselves from substance abuse.

It was determined that the self-efficacy mean scores of the adolescents in the experimental group increased significantly in the post-test and follow-up measurements of the empowerment training program, and the effect size was also high. In the inter-group comparisons of the adolescents in the control group, it was observed that the self-efficacy mean scores decreased in the post-test and follow-up measurements compared to the pre-training level. The reason for the negative change in self-efficacy can be explained by familiarization with the scale items and the conflict that the adolescents experienced as a result of the realization that their current potential would not be sufficient to have these skills. In addition, the reason may be that the adolescents, who grew 1 year older in the process of the study, have had an increased potential to exhibit risky behaviors. Self-efficacy is a concept that determines an individual's belief in achieving the desired result and the energy to change undesirable behavior (Bandura et al., 1999). In other words, even if the individual fails to exhibit a behavior, self-efficacy is related to how much that individual insists on that behavior (Chavarria et al., 2012). The concept of self-efficacy emerges as an important factor in protecting oneself against substance abuse due to these features it contains. In the study by Akkuş et al. (2016), it was reported that the level of self-efficacy in preventing substance abuse significantly increased in the group which received training. The study conducted by Schwinn et al. (2010) emphasized that the use of substances was low in adolescents in the experimental group which received the internet-based interventions developed to prevent substance abuse. They further revealed that the adolescents improved their self-efficacy. In other studies, self-efficacy has been reported to have an important effect on adolescents' rejection of an offer to use substance and to protect adolescents from turning to risky behaviors (Chavarria, 2012; Rahman et al., 2016). In light of these findings, it can be stated that factors such as the positive change in self-efficacy beliefs of individuals or the individual's high self-efficacy play an important role in trying, quitting, and re-trying the substance. Self-efficacy of an individual is interconnected by two concepts: to have the necessary knowledge and skills and to develop appropriate behavior. If an adolescent has both of these concepts of self-efficacy, he/she will probably be able to cope effectively with difficult living conditions and find the strength to avoid substance abuse. Our study showed that the empowerment training program, which consists of 10 sessions designed in line with the needs of adolescents and which aimed to increase the self-efficacy levels of adolescents, positively affected the self-efficacy scores of the adolescents in the experimental group, and the follow-up measurements performed 6 months later revealed that this positive change has continued.

The post-test and follow-up mean scores of the adolescents indicate that experimental group has higher self-esteem than

the control group, and the effect of the empowerment training on self-esteem is positive. Since most of the behaviors acquired during adolescence are transferred to adulthood, this period significantly affects the life process of adolescents. For this reason, programs aiming to increase self-esteem in adolescence are important. In the literature, it is emphasized that programs implemented for this purpose have positive effects on self-esteem and that these programs are implemented especially in early adolescence and adolescence (Çeçen & Koçak, 2007; Kaya & Saçkes, 2005; Özdemir, 2016; Şimşek & Tel, 2017). In addition, there are studies stating that there is a negative correlation between self-esteem and substance abuse and that the risk of abuse can be reduced with educational programs administered to adolescents with low self-esteem (Atak, 2011; Zengin & Altay, 2014). Self-esteem, which reflects the subjective evaluation of one's own worth, affects and is affected by many variables in an individual's life. Adolescents with low self-esteem may see themselves as inadequate and are quickly affected by what is happening around them, and their beliefs and attitudes may change according to the environment. Considering such developmental characteristics of adolescence and the risks it entails, the contribution of trainings to increase self-esteem can be fairly valuable. In our study, it was emphasized that adolescents discover their own roles in increasing their self-esteem and realize that the idea of being perfect is unreal. They also realize the characteristics they like and do not like in themselves. In this context, it can be argued that such interventions are important for adolescents to become psychosocially strong and healthy adults.

The Rathus Assertiveness Scale post-test and follow-up mean scores are higher in the experimental group than the control group, which indicates that the empowerment training program has a positive effect on the assertiveness levels of adolescents. Assertive individuals are those who can protect their rights without violating the rights of others and can express their feelings in an appropriate and acceptable manner. In this context, adolescence is an important period in the development of assertiveness skills. Assertive behavior is important for an individual to be satisfied with life and to communicate effectively with other people. Adolescents struggle with developmental tasks such as creating identity, becoming a member of a society, and choosing a profession. For this reason, educational programs aiming to empower adolescents psychosocially may help them form and express their thoughts, feelings, and perceptions in a realistic way by increasing their assertiveness skills, thus developing self-confidence. Mahmoud and Abd Hamid (2013) reported that the training program they implemented had positive effects in terms of developing assertiveness skills. Şimşek and Tel (2017) emphasized that the structured education program they implemented improved the assertiveness skills of adolescents. It is also seen in the relevant literature that training programs have an important place in developing assertiveness skills (Çeçen Eroğul & Zengel, 2009; Tavakoli et al., 2014; Vatankhah et al., 2013). Similar to other studies, our study also argues that as adolescents express themselves without humiliating others, decrease their aggressive reactions, and improve their skill of saying "no," they will be able to avoid substance abuse.

Our study revealed that empowerment training protects adolescents from substance abuse by increasing their self-efficacy

levels, supports the development of self-esteem, and has a positive effect on assertiveness skills. Although the training was given to a limited number of students, it is important in terms of showing that it equipped the students with the foundation that will protect them from substance abuse and it can contribute to the sustainability of this protection.

Limitations and Directions/Suggestions for Future Research

This study has some limitations. The reason behind carrying out the study in two different schools is that we did not want the students in the experiment and control groups to influence each other. For this reason, no random assignment was employed in the experimental and control groups, which led to a limitation in the sample. The results of the study cannot be generalized due to lack of external validity; however, they can contribute to making generalizations (Nahcivan, 2014).

Within the scope of the findings and the educator and counseling roles of the community mental health nurse, it may be recommended to determine the risk groups in society in terms of substance abuse, to develop and implement programs to empower the adolescents in priority risk groups, to test the effectiveness of the programs with experimental studies, to work with the peer education model in educational programs, and to carry out similar studies in different regions with different sociodemographic characteristics and to compare the results.

Ethics Committee Approval: Ethical committee approval was received from the Ethics Committee of Selçuk University (Approval No: 2015/06).

Informed Consent: Detailed information was given to the students whose parents gave consent for the study, and informed consent was obtained from the experimental and control group students.

Peer-review: Externally peer-reviewed.

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References

- Akkuş, D., Eker, F., Karaca, A., Kıpısız, Ö., & Açıkgöz, F. (2016). High school youth peer education program an effective model to prevent substance abuse happen? *Journal of Psychiatric Nursing*, 7(1), 34 – 44.
- Albayrak, S., & Balcı, S. (2014). The prevention of drug abuse in young adults. *Journal of Education and Researchin Nursing*, 11(2), 30 – 37.
- Arslan, H. N., Terzi, O., Dabak, S., & Pekşen, Y. (2012). Substance, cigarette and alcohol use among high school students in the provincial center of Samsun. Turkey. *Erciyes Tıp Dergisi/Erciyes Medical Journal*, 34(2), 79 – 84. [\[CrossRef\]](#)

- Atak, H. (2011). Psycho-social markers of smoking, and the relationships between smoking and life satisfaction, and subjective well-being in the years of transition to adulthood. *Journal of Clinical Psychiatry*, 14, 29 – 43.
- Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and Social Psychology*, 76(2), 258 – 269. [\[CrossRef\]](#)
- Carpenter, C. M., & Howard, D. (2009). Development of a drug use resistance self-efficacy (durse) scale. *American Journal of Health Behavior*, 33(2), 147 – 157. [\[CrossRef\]](#)
- Çeçen, A. R., & Koçak, E. (2007). An experimental study: The effect of self esteem enhancement programme on middle school students' self esteem level. *Eurasian Journal of Educational Research*, 27, 59 – 68.
- Çeçen-Eroğul, A. R., & Zengel, M. (2009). The effectiveness of an assertiveness training programme on adolescents' assertiveness level. *Elementary Education Online*, 8(2), 485 – 492.
- Chang, F. C., Chang, Y. C., Lee, C. M., Lung, C. N., Liao, H. J., Lee, S. C., Miao, N., Lin, S., & Zeng, W. (2015). Effects of a school-based drug use prevention programme for middle-school students in Taiwan. *Drugs: Education, Prevention and Policy*, 22(1), 43 – 51. [\[CrossRef\]](#)
- Chavarría, J., Stevens, E. B., Jason, L. A., & Ferrari, J. R. (2012). The effects of self-regulation and self-efficacy on substance use abstinence. *Alcoholism Treatment Quarterly*, 30(4), 422 – 432. [\[CrossRef\]](#)
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed, pp. 77 – 82). Hillsdale, NJ: Erlbaum.
- Çuhadaroğlu, F. (1986). *Self-esteem in adolescents* [Doctoral Dissertation]. Ankara: Hacettepe University Faculty of Medicine.
- Eker, F., Akkuş, D., & Kıpısız, O. (2013). The development and psychometric evaluation study of self-efficacy for protecting adolescences from substance abuse scale. *Journal of Psychiatric Nursing*, 4(1), 7 – 12. [\[CrossRef\]](#)
- Eslami, A. A., Ghofranipour, F., Bonab, B. G., Zadeh, D. S., Shokravi, F. A., & Tabatabaie, M. G. (2015). Evaluation of a schoolbased educational program to prevent adolescents' problem behaviors. *Journal of Education and Health Promotion*, 4, 1 – 7.
- Güven, M. (2010). An analysis of the vocational education undergraduate students' levels of assertiveness and problem-solving skills. *Procedia – Social and Behavioral Sciences*, 2(2), 2064 – 2070. [\[CrossRef\]](#)
- İlhan, N., Sukut, Ö., Akhan, L. U., & Batmaz, M. (2016). The effect of nurse education on the self-esteem and assertiveness of nursing students: A four-year longitudinal study. *Nurse Education Today*, 39, 72 – 78. [\[CrossRef\]](#)
- İşmen Gazioğlu, A. E., & Canel, A. N. (2015). A school-based prevention model in the fight against addiction: Life skills training. *Addicta: The Turkish Journal on Addictions*, 2(2), 5 – 44.
- Jiloha, R. C. (2017). Prevention, early intervention, and harm reduction of substance use in adolescents. *Prevention. Indian Journal of Psychiatry*, 59(1), 111 – 118. [\[CrossRef\]](#)
- Kaya, A., & Saçkes, M. (2005). The effect of a self-esteem enrichment program on the level of self-esteem of the eight grade students. *Turkish Psychological Counseling and Guidance Journal*, 3(21), 49 – 56.
- Kaya, F., & Oğurlu, Ü. (2015). The relationship among self-esteem, intelligence, and academic achievement. *Journal of Human Sciences*, 12(1), 951 – 965.
- Kia-Keating, M., Dowdy, E., Morgan, M. L., & Noam, G. G. (2011). Protecting and promoting: An integrative conceptual model for healthy development of adolescents. *Journal of Adolescent Health*, 48(3), 220 – 228. [\[CrossRef\]](#)
- Kutlu, Y. (2009). The efficiency of the assertivite training for a group of student nurses. *Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi*, 2(3), 3 – 11.

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- Mahmoud, S., & Hamid, R. A. (2013). Effectiveness of assertiveness training programme on self esteem & academic achievement in adolescents' girls at secondary school at Abha city. *Journal of American Science*, 8(9), 262 – 269.
- Nahcivan, N. (2014). Araştırma amacı, araştırma soruları, hipotezler ve sınırlılıklar. In S. Erdoğan, N. Nahcivan & N. Esin (Eds.), *Hemşirelikte araştırma-süreç, uygulama ve Kritik* (pp. 65 – 86). İstanbul, Turkey: Nobel Tıp Kitabevi.
- Nkwane, A. M., & Saxena, S. (2004). Opportunities for an improved role for nurses in psychoactive substance use: Review of the literature. *International Journal of Nursing Practice*, 10(3), 102 – 110. [\[CrossRef\]](#)
- Öz, F., & Yılmaz Bahadır, E. (2009). A significant concept in protecting mental health: Resilience. *Hacettepe University Faculty of Health Sciences Nursing Journal*, 82 – 89.
- Özdemir, N. K. (2016). An experimental study: The impact of bibliocounseling on self-esteem of sixth grade students. *Elementary Education Online*, 15(1), 136 – 147.
- Rahman, M. M., Rahaman, M. M., Hamadani, J. D., Mustafa, K., & Shariful Islam, S. M. S. (2016). Psycho-social factors associated with relapse to drug addiction in Bangladesh. *Journal of Substance Use*, 21(6), 627 – 630. [\[CrossRef\]](#)
- Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *Lancet. Child and Adolescent Health*, 2(3), 223 – 228. [\[CrossRef\]](#)
- Schwinn, T. M., Schinke, S. P., & Di Noia, J. (2010). Preventing drug abuse among adolescent girls: Outcome data from an internet-based intervention. *Prevention Science*, 11(1), 24 – 32. [\[CrossRef\]](#)
- Şimşek, N., & Tel, H. (2017). *The effect of structured education on the level of anger managemet, assertiveness and self-esteem of adolescents getting help from social services agency. Balikesir Health Sciences Journal*, 6(1), 22 – 29.
- Sohrabi, F., Hadian, M., Daemi, H. R., & Farid, A. A. (2008). The effectiveness of healthy behavior training program in changing attitude of students towards substance abuse. *International Journal of Behavioral Sciences*, 2(3), 209 – 220.
- Tavakoli, P., Setoodeh, G., Dashtbozorgi, B., Komili-Sani, H., & Pakseresht, S. (2014). The influence of assertiveness training on self-esteem in female students of government high schools of Shiraz, Iran: A randomized controlled trial. *Nursing Practice Today*, 1(1), 17 – 23.
- Tavousi, M., Heidarnia, A. R., Montazeri, A., Taromian, F., & Ahmadi, M. (2011). A Theory based intervention: Effect on substance abuse prevention in adolescents. *Payesh*, 10(1), 91 – 99.
- Toker, T., Tiryaki, A., Özçürümez, G., & Iskender, B. (2011). The relationship between traumatic childhood experiences and proclivities towards substance abuse, self-esteem and coping strategies. *Turkish Journal of Psychiatry*, 22(2), 83 – 92.
- Vatankhah, H., Daryabari, D., Ghadami, V., & Naderifar, N. (2013). The effectiveness of communication skills training on self-concept, self-esteem and assertiveness of female students in guidance school in Rasht. *Procedia – Social and Behavioral Sciences*, 84, 885 – 889. [\[CrossRef\]](#)
- Voltan, N. (1980). The validity and reliability study of Rathus Assertiveness Inventory. *Psikoloji Dergisi*, 3(10), 23 – 25.
- Zengin, S., & Altay, B. (2014). Students studying in the department of teacher self-esteem examination according to their substance use. *Gümüşhane University Journal of Health Sciences*, 3(3), 892 – 907.