Summary

Evaluation of the Effectiveness of the "Our Lesson: Safe Relationships" Program in Preventing Child Sexual Abuse

Duygu Eslek1

Ege University

Türkan Yılmaz Irmak

Ege University

Child sexual abuse is defined as the exploitation of a child by an adult for sexual pleasure (Crosson-Tower, 2008). Adolescence is a critical period in terms of realizing sexual development and evaluating previous sexual abuse experiences (Finkelhor Ormrod, Turner, & Hamby, 2005). Therefore, it is critical to study sexual abuse in adolescence. In addition, the adverse consequences of sexual abuse experienced in adolescence or before may emerge in this period (Finkelhor et al., 2005). It is wellknown that adolescents experience many adverse consequences due to sexual abuse experiences, such as eating and sleep disorders, suicidal thoughts, and having limited identity alternatives (Herman, 2007; Hibbard, Ingersoll, & Orr, 1990). Abuse prevention programs generated for adolescence are generally implemented to early adolescents (10-13 years old) (Davidson & Martellezo, 2008; Jacobs, Hashima, & Kenning, 1995; Müller, Röder, & Fingerle, 2014; Taal & Edelaar, 1997). The only study scrutinizing sexual abuse of early adolescents in Turkey was carried out by giving 20-minute education to early adolescents and delivering some brochures to their parents. In general, early adolescents have more knowledge of abuse (Adalı, 2007). In this study, the "Our Lesson: Safe Relations" program was generated based on the contents of the relevant programs in the literature.

The aim of this study was to develop a sexual abuse prevention program for early adolescence and to examine the effectiveness of this program. The hypotheses of this study are presented below:

- It is expected that the knowledge levels of early adolescents in the education group about protection from sexual abuse will increase from pre-test to post-test and that the scores of the comparison groups will not differ.
 - a) It is expected that the knowledge levels of early adolescents in the education group about protection from sexual abuse will increase from pre-test to post-test (the Sexual,

- Physical and Emotional Abuse Knowledge and Attitude Scale) and that the scores of the comparison groups will not differ from pretest to post-test.
- b) It is expected that the knowledge levels of early adolescents in the education group about protection from sexual abuse will increase from pre-test to post-test (the Sexual Abuse Sub-Scale) and that the scores of the comparison groups will not differ from pretest to post-test.
- c) It is expected that the knowledge levels of early adolescents in the education group about protection from internet-related sexual abuse will increase from pre-test to posttest (the Internet-related Abuse Knowledge Scale) and that the scores of the comparison groups will not differ from pre-test to posttest.
- d) It is expected that the knowledge levels of early adolescents in the education group about being able to say "No" and decision-making will increase from pre-test to post-test (the Scale of Being Able to Say "No" and Decision-making) and that the scores of the comparison groups will not differ from pre-test to post-test.
- 2) It is expected that the skill levels of early adolescents in the education group on protection from sexual abuse will increase from pre-test to post-test (the number of the answers, the effective answers, the diversity of the answers) and that the scores of the comparison groups will not differ from pre-test to post-test.
- 3) It is expected that the knowledge levels of early adolescents in the education group about sexual education will increase from the pre-test to the post-test and that the scores of the comparison groups will not differ from pre-test to post-test.

Address for Correspondence: ¹Res. Asst. Duygu Eslek, Ege University, Faculty of Letters, Department of Psychology, Bornova / İzmir E-mail: duygu.eslek@gmail.com

- a) It is expected that the knowledge levels of early adolescents in the education group about sexuality and adolescence developmen will increase from the pre-test to the post-test (the Adolescence and Sexuality Misbeliefs Scale and the Knowledge Test on Changes in Adolescence) and that the scores of the comparison groups will not differ from pre-test to post-test.
- b) It is expected that the knowledge levels of early adolescents in the education group about gender will increase from the pre-test to the post-test (the Gender Scale) and that the scores of the comparison groups will not differ from pre-test to post-test.
- c) It is expected that the knowledge levels of early adolescents in the education group about establishing safe relationships will increase from the pre-test to the post-test (the Friendship and Romantic Relationships Scale) and that the scores of the comparison groups will not differ from pre-test to post-test.
- 4) According to the measurements taken from early adolescents and their parents, it is expected that the positive effects of the program will increase in the education group from the pre-test to the post-test while the negative effects do not differ and that the positive and negative effects will not differ in the comparison groups from the pre-test to the post-test.
 - a. It is expected that emotional awareness scores of early adolescents in the education group will increase from pre-test to post-test (the Emotion Awareness Questionnaire) and that the scores of the comparison groups will not differ from pre-test to post-test.
 - b. It is expected that social anxiety scores of early adolescents in education and comparison groups will not differ from pre-test to post-test (The Social Anxiety Scale for Adolescents).
 - c. Based on the measurements taken from the parents, it is expected that the positive effects of the program (taking care of clothing, talking about own feelings, establishing constructive relationships with peers, self-confidence, talking about sexuality, talking about sexual abuse, and solving problems in a constructive way) will increase in the education group from pre-test to post-test and that the scores of the comparison groups will not differ from pre-test to post-test.
 - d. Based on the measurements taken from the parents, it is expected that the negative effects of the program (being afraid of unfa-

- miliar adults, being afraid of going to sleep, being afraid of relatives, being afraid of being alone in the dark, having polemics and quarrels with friends, being uncomfortable with kissing and hugging of family members, being rude to strangers, disobedience) will not differ in education and comparison groups from pre-test to post-test.
- 5) It is expected that the increased knowledge and skills of early adolescents in the education group from pre-test to post-test will not differ from post-test to follow-up measurement.
- 6) It is expected that the knowledge and skill scores of early adolescents in education and comparison groups will not differ from pre-test to post-test by age.
- 7) It is expected that the knowledge and skill scores of early adolescents in education and comparison groups will not differ from pre-test to post-test by gender.

Method

Participants

The sample of the study consisted of 232 early adolescents attending 5th and 6th grades and their parents. Participants were recruited from two public secondary schools in a middle socioeconomic level district. The education group and the first comparison group were selected from the first school, and the second comparison group was selected from the second school. Participants were aged between 9-13 years (M = 10.7, SD = 0.7). While 62% of the participants were females (n = 143), 38% were males (n = 89). Among the participants, 48% (n = 111)attended 5th grade, and 52% (n = 121) attended 6th grade.

Measures

Information Form An "Information Form" was created by the researchers to obtain sociodemographic characteristics of early adolescents.

Sexual Health Knowledge and Attitude Inventory. The inventory was developed by Öztürk and Siyez (2015) to evaluate the effectiveness of sexual health education. The inventory is composed of six 5-point Likert-type scales: the Knowledge Test on Changes in Adolescence (KTCA), the Friendship and Romantic Relationships Scale (FRRS), the Scale of Being Able to Say "No" and Decision-making (SSND), the Sexual, Physical, and Emotional Abuse Knowledge and Attitude Scale (SPEAKAS), the Gender Scale (GS), the Adolescence and Sexuality Misbeliefs Scale (ASMS), and the Sexual Abuse sub-scale (SASS) of the Sexual, Physical, and Emotional Abuse Knowledge and Attitude Scale The internal consistency coefficients calculated in this study were .72, .61, .58, .63, .79, .44, and .48 respectively.

The Internet-related Abuse Knowledge Scale (IAKS). It was developed by the researchers to evaluate the knowledge levels of early adolescents about protection from internet-related abuse (Eslek & Yılmaz Irmak, 2018). The 5-point Likert-type scale consists of 12 questions. In this study, the Cronbach's Alpha internal consistency coefficient of the IAKS was found to be .81.

The Safe and Unsafe Situation Assessment Form (SUSAF). It consists of six open-ended questions created to evaluate the early adolescents' skills of protection from abuse. This form was created by the researchers upon a comprehensive investigation of the topics in the relevant literature (Hazzard, Webb, Kleimer, Angert, & Pohl, 1991; Hébert, Lavoie, Piché, & Poitras, 2001). Quantitative content analysis was performed with the system proposed by Yılmaz Irmak, Kızıltepe, Aksel, Güngör and Eslek (2018), and the variables, such as the number of the answers (NA), the effective answers (EA), and the diversity of the answers (DA) were generated for all stories.

The Social Anxiety Scale for Adolescents (SAS-A). The scale was developed by La Greca and Lopez (1998) to assess social anxiety in adolescents. The 5-point Likert-type scale with 22 items was adapted to Turkish by Aydın and Tekinsav Sütçü (2007). The Cronbach's Alpha internal consistency coefficient of the scale was reported as .88, and it was found as .85 in this study.

Emotion Awareness Questionnaire (EAQ). It was developed to evaluate adolescents' thoughts and feelings about their emotions (Rieffe, Oosterveld, Miers, Meerum Terwogt, & Ly, 2008). The scale was adapted to Turkish by İnceman (2016) with a study conducted with 9th-grade students. The scale was used with its 25 items. The Cronbach's alpha values of the sub-scales range between .68 and .77. They were found to range between .62 and .75 in this study.

Parental Information Form. The parental form, which was created by Yılmaz Irmak et al. (2018) to evaluate the possible positive and negative effects of the program and is used in the abuse prevention program in preschool children, was adapted to be administered to early adolescents by the researchers. In addition to 6 questions related to the demographic characteristics of parents, it consists of 15 questions about positive and negative effects of the program on adolescents, such as talking about own feelings and being afraid of being alone in the dark, etc.

Program Content

The education was implemented as 6 modules, 80 minutes per week for 6 weeks. The modules of First Meeting and Adolescence, Sex, Gender, and Relationships (romantic and friendship relationships), Sexuality and Value of Body, Abuse and Protection Methods I, Abuse and Protection Methods II, Internet-related Abuse

and Protection Methods were presented within interactive education sessions. The modules ended with mindfullness activities

Program Fidelity

Three criteria were taken into consideration regarding the implementation accuracy of the program (Lynas & Hawkins, 2017). The first was that the researchers created an implementation manual for the program. The instructor gave the same education to each group with a commitment to the implementation manual. Second, the instructor noted down completed and uncompleted activities in each group. All modules of the program were 98% completed in the groups, according to these notes. The reason why the program could not be 100% completed in all groups was that group interactions took longer times in some groups. The last one was that all participants attended three or more sessions. Thirty-eight percent of early adolescents attended all sessions, 21% attended five sessions, 28% attended four sessions, and 13% attended three sessions.

Findings

Findings of the Sociodemographic Characteristics of the Sample

Findings of the Characteristics of Early Adolescents. The results of the Chi-square analysis conducted on the sociodemographic characteristics of the education, first comparison, and second comparison groups revealed that there were no statistically significant differences among the groups by variables class, gender, birth order, receiving sexual education, receiving sexual abuse prevention education, reporting any physical abuse experience, reporting any emotional abuse experience, and reporting any sexual abuse experience.

Findings of the Sociodemographic Characteristics of the Parents. The Chi-square test was used to examine whether the parents of the participants in education, first comparison, and second comparison groups differed by sociodemographic characteristics. The groups were found not to differ significantly by the person filling the form (mother or father), mother's age, and father's age. The education and first comparison groups were found to differ significantly from the second comparison group by maternal education ($\chi^2(4) = 41.614$, p < .001), paternal education ($\chi^2(4) = 21.668$, p < .001), ve monthly income ($\chi^2(2) = 16.160$, p < .001).

Findings of the Effectiveness of the Program

Following the evaluation of the sample characteristics, the measurements taken from the participants for the effectiveness and the positive and negative effects

of the program were subjected to variance analyses for repeated measures (3 (Group: education, first comparison, and second comparison) X 2 (Time: pre-test and post-test) X 2 (Grade: 5th and 6th grades) X 2 (Gender: Male and Female)) to test the hypotheses of the study. However, since the main effect and interaction effects related to gender were found to be statistically insignificant, variance analyses were replicated without including the gender variable to facilitate the comprehension of the findings.

Findings of the Participants' Knowledge Levels on Protection from Child Sexual Abuse. According to the analysis performed to test the "Hypothesis 1a", a statistically significant difference was found between pretest and post-test the SPEAKAS scores $F_{2,229} = 3.832$, p = .02. The pre-test scores of the first comparison group (M=34.4, SD=4.8) were found to be statistically higher than of the second comparison group (M = 32.3, SD= 4.5). For this reason, pre-test scores were taken as a covariate, and post-test SPEAKAS scores of the groups were compared using the ANCOVA analysis (3 (Group: Education, First Comparison, and Second Comparison) X 2 (Grade: 5th and 6th grades)) (Miller & Chapman, 2001; Tabachnick and Fidell, 2013). The main effect of the Group variable was statistically significant, F_2 $_{218}$ = 5.580, p = .004, η 2 = .05. According to the paired comparisons performed to uncover the source of significant differentiation, the post-test scores of the education group (M=36, SD=5.5, p=.01) and the first comparison group (M=36, SD=5.1, p=.02) were found to be significantly higher than of the second comparison group (M = 32.3, SD = 4.5). It was found that the main effect of the Grade variable, and the interaction effect of the variables Group X Grade were not statistically significant. The SPEAKAS scores of the education and first comparison groups increased at the end of the education and were found to be higher than of the second comparison group.

To test the hypotheses "1b," "1c," and "1d," a mixed analysis for repeated measures (3 (Group: Education, First comparison, and Second comparison) X 2 (Time: pre-test and post-test) X 2 (Grade: 5^{th} and 6^{th} grades)) was performed to total scores of the participants on the SASS, IAKS, and SSND. The interaction effect of Time X Group was found to be statistically significant for the SASS (Wilk's $\lambda = .968$, $F_{2,219} = 3.610$, p = .03, $\eta 2 = .03$) According to the paired comparisons performed to uncover the source of significant differentiation, while the scores of the education group on the SASS increased significantly from pre-test (M = 14.2, SD = 2.7) to post-test (M = 16, SD = 2.5) (p < .001), there were no significant changes on the scores of the first and second comparison groups. However, the interaction effect of Time

X Group was not significant for the IAKS and SSND. It was also found that the interaction effects of Time X Grade and Time X Group X Grade were not significant for the SASS, IAKS, and SSND; as a result, the knowledge scores of both 5th and 6th-graders in the education group on protection from abuse, protection from sexual abuse increased from pre-test to post-test, while the scores of the comparison groups did not significantly change. The knowledge scores in the all groups protection from internet-related abuse, and being able to say "No" and decision-making didn't differ.

Findings of the Participants' Skill Levels on Protection from Abuse. The scores of the participants on the NA, EA, and DA were subjected to a variance analysis for complex measures (3 (Group: Education, First Comparison, and Second Comparison) X 2 (Time: pre-test and post-test) X 2 (Grade: 5th and 6th grades)) to test the "Hypothesis 2". The analysis revealed that the interaction effect of Time X Group was statistically significant for all the scales (Wilk's $\lambda = .957$, $F_{2,161} = 4.532$ p < .01, $\eta 2 = .05$; Wilk's $\lambda = .934$, $F_{2,161} = 7.080$ p < .01, $\eta 2 = .05$; Wilk's $\lambda = .938$, $F_{2,161} = 6.312$ p < .01, $\eta 2 = .05$) According to paired comparisons to examine the source of differentiation, the scores of the education group (NA (M = 9.6 SD = 2.3; M = 11.3, SD = 3.6), EA (M = 8.9, SD= 2.6; M = 11, SD = 3.8), and DA (M = 8, SD = 2.2; M= 9.7, SD = 2.8) increased significantly from pre-test to post-test (p< .001), while the scores of the first and second comparison groups did not change from pre-test to post-test. While there was no significant differentiation in Time X Grade interactions for the NA and EA, the interaction effect of Time X Grade was significant for the DA. According to the paired comparisons performed to uncover the source of significant differentiation, it was discovered that the scores of the 5th-graders on the DA increased significantly from pre-test (M = 7.6, SD = 2.5)to post-test (M = 8.6, SD = 2.8) (p < .001), the scores of the 6th-graders did not change significantly. The interaction effect of all variables was not statistically significant for the scales. According to the results, skill levels of the participants in the education group on protection from abuse increased from pre-test to post-test, while comparison groups did not differ significantly.

Findings of the Participants' Knowledge Levels on Sexual Education. A mixed analysis of variance for repeated measures (3 (Group: Education, First Comparison, and Second Comparison) X 2 (Time: pre-test and post-test) X 2 (Grade: 5^{th} and 6^{th} grades)) was conducted on the scores of the participants on the ASMS and KTCA to test the hypothesis "3a" The interaction effects of Time X Group on the ASMS and KTCA were found not to be statistically significant (Wilk's $\lambda = .934$, $F_{2,219} = 7.718$, p = .001, $\eta 2 = .06$; Wilk's $\lambda = .793$, $F_{2,206} = 26.805$,

p < .001, $\eta 2 = .21$). The results of the paired comparisons revealed that the scores of the education group on the ASMS (M = 19.4, SD = 2.2; M = 22, SD = 4.5) and KTCA (M = 7.2, SD = 3.3; M = 11.6, SD = 4.5) increased significantly from pre-test to post-test (p < .001) while there was no statistically significant change on the scores of the first and second comparison groups. The interaction effect of Time X Grade was found to be statistically significant for the KTCA (Wilk's $\lambda = .967$, $F_{2.206} = 7.057$, p = .009, $\eta 2 = .03$). According to the paired comparisons, the scores of the 5th-graders increased from the pre-test to the post-test (M = 6.3, SD = 3.4, M = 7.1, SD = 4.4) (p = .03), but the scores of 6th-graders increased more (M =8.2, SD = 3.5; M = 10.4, SD = 4.3) (p < .001). On the other hand, the interaction effect of Time X Grade was found not to be significant for the ASMS. Also, the interaction effect of Time X Group X Class was not statistically significant. Therefore, while the sexuality and adolescence knowledge scores of both 5th- and 6th graders in the education group increased from the pre-test to the post-test, there was no increase in the comparison groups.

The results of the analysis conducted to test the "Hypothesis 3b" showed that a statistically significant difference was found between the pre-test GS scores F_{22} $_{229}$ = 5.166, p = .004. The mean pre-test score of the education group (M = 23, SD = 5) was found to be higher than of the second comparison group (M = 20, SD = 5.5). Pre-test scores were taken as a covariate, and post-test GS scores of the groups were compared using the AN-COVA analysis (3 (Group: Education, First Comparison, and Second Comparison) X 2 (Grade: 5th and 6th grades)). The main effect of the Group variable was found to be statistically significant $F_{2,218} = 17.150$, p < .001, $\eta 2 =$.14. In paired comparisons, the mean of the education group's post-test scores (M = 26, SD = 5) was found to be significantly higher than of the first comparison group (M = 22.4, SD = 5, p < .001) and the second comparison group (M = 20, SD = 5.6, p < .001). In addition, the main effect of the Class variable was not statistically significant. Accordingly, 5th- and 6th-graders had similar gender knowledge levels at the end of the education.

The FRRS scores were analyzed with variance analysis for complex measures 3 (Group: Education, First Comparison, and Second Comparison) X 2 (Time: pretest and post-test) X 2 (Grade: 5th and 6th grades)) to test the "Hypothesis 3c. "As a result, the interaction effects of the variables were not found to be statistically significant.

Findings of the Positive and Negative Effects of the Program

Early Adolescents. To evaluate the hypotheses "4a" and "4b", the EAQ and SAS-A scores of the participants were subjected to variance analysis for complex

measures 3 (Group: Education, First Comparison, and Second Comparison) X 2 (Time: pre-test and post-test) X 2 (Grade: 5th and 6th grades)). The interaction effects of Time X Group and Time X Group X Grade were not statistically significant for the scores on the EAQ and SAS-A. The interaction of Time X Grade was significant for the SAS-A (Wilk's $\lambda = .981$, $F_{2.196} = 3.731 p < .05$, $\eta = 0.981$ = .02). Paired comparisons revealed that the social anxiety scores of 5th-graders decreased significantly from the pre-test (M = 46, SD = 13.4) to the post-test (M =44, SD = 14.1, p = .02), while there was no statistically significant change on the scores of the 6th-graders. Also, the interaction effect of Time X Grade was not significant for the EAQ. According to the results, emotion awareness and social anxiety scores did not differ by the groups and grades at the end of the education.

Parents. To test the "Hypothesis 4c", the positive effects (taking care of clothing, talking about own feelings, establishing constructive relationships with peers, self-confidence, talking about sexuality, talking about sexual abuse, and solving problems in a constructive way) were compared with the Wilcoxon Signed-Ranks test by the group variable. The results showed that talking about own feelings decreased (z = -2.017, p = .04), while talking about sexual abuse increased (z = -2.065, p = .04) in education group. In the first comparison group, taking care of clothing (z = -2.740, p = .006) and talking about own feelings (z = -2.740, p = .04) decreased. Besides, there was no statistically significant difference in the second comparison group.

To test the "Hypothesis 4d", the negative effects (being afraid of unfamiliar adults, being afraid of going to sleep, being afraid of relatives, being afraid of being alone in the dark, having polemics and quarrels with friends, being uncomfortable with kissing and hugging of family members, being rude to strangers, disobedience) were compared with the Wilcoxon Signed-Ranks test by the grade variable. The results showed that there was no statistically significant difference in terms of the negative effects of the program by the grade variable. When the test was replicated by the group variable, it was concluded that while being afraid of being alone in the dark decreased in the education group (z = -3.326, p = .001), no statistically significant difference was observed in the first and second comparison groups.

Continuation of the Effect of the Program

In this section, the post-test and follow-up measurements of the education group were compared with the paired samples t-test to test the "Hypothesis 5". The results showed that the SASS scores increased significantly from the post-test (M = 15.8, SD = 2.4) to the follow-up measurement (M = 16.5, SD = 2.6), (t = -2.310,

p = .03). Moreover, the SPEAKAS scores significantly increased from the post-test (M = 36.1, SD = 5.5) to the follow-up measurement (M = 37.5, SD = 5.8), (t =-2.310, p = .02).

The scores on the NA, EA, DA ASMS, KTCA, and GS from post-test to follow-up measurement did not differ statistically significantly. According to the results, the increases seen in pre-test and post-test regarding the knowledge and skill levels on adolescence, sexuality, gender, protection were maintained in the follow-up measurement.

Discussion

The education program applied in this study was found to increase the knowledge and skill levels of early adolescents on abuse, sexual abuse, adolescence, sexuality, and gender. However, the knowledge levels of the participants on being able to say "No," internet-related abuse, and establishing safe relationships did not change. Accordingly, these results suggested that the hypotheses "1a," "1b," "2," "3a," and, "3b" were accepted, but the hypotheses "1c," "1d," and "3c" were rejected. The program can be asserted to be effective in preventing sexual abuse, which was the main purpose of the program, but it needs to be improved in terms of some topics other than sexual abuse. In addition, emotion awareness and social anxiety levels of the participants did not differ after the program. According to the measurements taken from the parents, it was found that early adolescents' talking to their parents about sexual abuse increased, and there were no negative effects. Therefore, the "Hypothesis 4a" was rejected, but the hypotheses "4b," "4c," and "4d" were accepted, which points out that the program had no negative effects. According to the follow-up measurements taken two months later, the knowledge level of the participants on abuse and sexual abuse increased, which proves that the effect of the program was maintained after 2 months from the program, and the "Hypothesis 5" was accepted. The absence of differentiation by age and gender leads to the acceptance of the hypotheses "6" and "7."

When the program was evaluated as a whole, it can be uttered that its abuse, adolescence, gender, and sexuality modules realized the pre-determined educational objectives. It may be suggested to increase the time allocated to the education module related to being able to say "No," and parents should also be called for assistance in this regard. It can be suggested to improve the module related to internet-related abuse by increasing the allocated time, providing media literacy-based education (Davidson & Martellezo, 2008), and using more technological methods (watching videos, playing video games, presentations). The module on establishing safe relationships should be re-organized, and the number of activities and the time allocated to the modules should be increased. It should also be taken into consideration while developing the module that changes to relationships cannot be made in a short period of time. There were participants from only the middle socioeconomic level in the study since it was aimed to take measurements and to give education on internet-related abuse. Further studies may consider recruiting the participants from low and high socioeconomic levels (if virtual media access is available). Follow-up measurements were taken just two months after the study. Follow-up measurements can be taken within longer time intervals. The fact that the instructor was an external woman expert had not an adverse effect on the study. It is recommended that the program should be expanded in a way that school psychologists and guidance teachers can apply.