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Development and Effectiveness of Psycho-Education Program Prevention of Sexual Abuse for Primary School Grade 3. And 4

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ABSTRACT

The aim of this study is to develop a psycho-education program called Personal Safety Awareness (PSA) psycho -education program to protect 3rd and 4th grade students from sexual abuse and to test the effectiveness of this program consisting of six sessions. The participants are 3rd and 4th grade students in a primary school in Izmit in Kocaeli province. 41 of the participants were assigned to the experimental group and 39 to the control group. Before and after the implementation of the training program pre-tests and post-tests related to the dependent variables, six months and a year after the implementation only the experimental group was given follow-up tests. The datas related to dependent variables were obtained through the Personal Safety Awareness Scale (PSAS)) and Piers Harris' Self Concept of Children Scale (PHSCCS). In the analysis of parametric and nonparametric datas, statistics were used to compare the groups. There was a significant increase in the PSAS scores of the students and no significant increase was found in the PHSCCS who participated in the PSA program compared to the pre-practise measurements. PSA psycho-education program had an effective on increasing children's personal safety awareness scores and did not have an effect on the self-esteems scores. These results indicate that the program can be used in educational environments in order to increase students' awareness and knowledge about abuse.

Claimed to be comprehensive and complex public health problem sexual abuse is an important problem with the dimensions of physical, emotional, social, moral, cultural and legal affecting all children of the world. Sexual abuse is defined as the use of a child or adolescent who has not yet completed his development by using force or with threat and luring to confront his sexual desire and needs by an adult (Işeri, 2008). In more general terms, sexual abuse is the use of a child by an adult for sexual pleasure (Crosson-Tower, 2008). Sexual abuse in the form of sexual intercourse non-contact caress, adult exposure of genitals, etc. includes behaviors (Berliner & Elliot, 2002).

According to research conducted in recent years, the rate of sexual abuse of 17 years old girls in the United States is 26.6% and male is 5.1% (Finkelhor, 2014). In America, 13% of males and 30-40% of females reported to be exposed to sexual abuse in their childhood (Finkelhor, 2009). According to the Council of Europe Convention on the Protection of Children from Sexual Abuse (2007) in European countries, one of every five child is reported to have been sexually abused. In recent years, meta-analysis research results showed that the prevalence of child and adolescent sexual abuse in the world scale was 11.8% (Stoltenborgh et al., 2011). In Turkey, the prevalence studies on this subject are quite limited. The results of a study examining the applications made to hospitals between 1990 and 1996 indicate that 26% of 50 cases were identified as sexual

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abuse (Oral et al., 2001). In a similar study by Agirtan et al. (2009), it is stated that 51% of 593 applications to the hospital between 2000 and 2006 were identified as sexual abuse. According to the results of the research conducted on university students, 12% of the participants reported that they were sexually abused during their childhood (Irmak, Aksel, & Thompson, 2016).

Children who have been exposed to sexual abuse experience many psychosocial problems. In addition to the negative impact on the ability to maintain social relationships (Mullen, Martin, Anderson, Romans & Herbison, 1996), self-esteem of these children has also decreased significantly (Beitchman et al., 1992). Sexually abused children also experience post-traumatic stress disorder (Kendall- Tackett, Williams & Finkelhor, 1993; Putnam, 2003), mental disorders such as anxiety and depression (Nickel et al., 2004; Usta, Akbaş & Aydın, 2018) and low life satisfaction (Nickel et al., 2004; Fergusson, Geraldine, McLeod & Horwood, 2013), their academic achievement decreases (Boden, Horwood & Fergusson, 2007; Currie & Spatz Widom, 2010; Koçtürk, Ulaş & Bilginer, 2019), they have exhibited important psychosocial problems such as evasion and adolescent pregnancy (Roberts, O'Connor, Dunn, Golding and ALSPAC, 2004), reported to they experince various problems interpersonal relationships (Csorba, Tsikouras, Lampe & Poka, 2012; Tailor, Piotrowski, Woodgate & Letourneau, 2014).

Governments, many non-governmental organizations, associations established on the issue, local governments, international organizations and policy-makers take various measures to prevent sexal abuse which not only have a negative impact on the lives of children in their childhood, but also have a traumatic experience that can be reflected in adulthood and may continue to last a lifetime. Some of these measures are to deter potential abusers by giving the a heavy prison sentence, to raise public awareness, to invite the public to sensitivity through media campaigns (Mendelson & Letourneau, 2015). In addition to social and legal measures and sanctions for offenders, awareness-raising activities for families are another dimension of prevention efforts.

In addition to these efforts to raise awareness of families and to raise awareness of children in this way, psychoeducation programs have been developed to ensure that children have the necessary knowledge and skills to face the possibility of encountering risky situations and thus strengthen children (Wurtele, 2009). The number of school-based personal safety programs has increased rapidly, especially in the United States. Studies on the effectiveness of sexual abuse programs have revealed that children's knowledge of abuse situations has increased and their ability to protect themselves and refuse abuse has improved (Brassard & Fiorvanti, 2015; Finkelhor, 2009; Kenny, 2009; Wurtele, 1990). It is predicted that children who develop their rejection skills through education programs, who can recognize risky and dangerous situations, and who can display the necessary safe behavior in these situations, will be able to protect themselves from sexual abuse. The evaluation and effectiveness results of the training programs developed to increase skills by using methods such as asking children what to do by watching an abuse scenario, revealed that children's sexual abuse prevention skills increased after the implementation of the programs (Hebert et al., 2001; Wurtele & Owens, 1997).

Self-esteem, which is a dimension of the self-concept that develops as a product of the individual's interaction with his/her social and physical environment and expresses the level of satisfaction with one's self-concept, is one of the important research topics in the field of psychology and was defined by Rosenberg (1965) as the evaluations made and adopted by the individual about himself. Fryer, Kraizer and Myoshi (1987), who suggested that one of the main goals of sexual abuse prevention psychoeducational programs should be to increase children's self-esteem, found that there were strong relationships between children's self-esteem and safe behavior habits. This result suggests that children with high self-esteem have a higher tendency to display safe behaviors when necessary by protecting themselves from abuse. An important data obtained from the effectiveness research of the personal safety education program called *Stay Safe*, developed by MacIntyre and Carr (1999), is that a significant improvement was observed in the self-esteem of the children who participated in the education. Similarly, the result of *Safe Child*, another effective abuse prevention program, is that there is a significant increase in the self-esteem of the children participating in the program (Kraizer, Witte, & Fryer, 1989). Acquisitions such as knowing that he/ she has basic rights as a child, being able to protect his/ her rights

when necessary, and being able to say no with confidence, which are targeted by personal safety training programs, also increase self-esteem. It can be concluded that children with high self-esteem have a higher tendency to display safe behaviors when necessary by protecting themselves from abuse.

In the related literature, there are allegations that education programs for children aiming to prevent sexual abuse increase children's anxiety (Finkelhor & Dziuba-Leatherman, 1995) and aggression levels (Hebert et al, 2001) or that parents are concerned that they may have negative effects on children's sexual development (Tutty,1997). However, there is no evidence for these claims (Kenny et al., 2008). As a matter of fact, Tutty's (1997) research results are in a different direction. Tutty (1997) learned that only four parents' children showed anxiety reactions in his practice with more than 200 children. The fact that no increase was observed in the pretest-posttest anxiety measurement at the end of the application also reveals the positive effects of the training programs in question.

In Turkey, researches aimed at preventing child sexual abuse and training programs aimed at empowering children are very limited. When we look at the attempts to develop programs to prevent sexual abuse in Turkey, Ziyalar's (1998) work stands out first. The researcher investigated the applicability of the training program called Feeling Yes, Feeling No applied abroad in Turkey. Ziyalar demonstrated the applicability of the program to Turkish children based on the views of parents and teachers. Afterwards, a sexual abuse prevention program was developed by Cecen-Erogul and Kaf-Hasırcı (2013) for 4th grade students and by Uçar (2014) for mentally retarded children. Citak Tunc et al. (2018) The training program named Body Safety Training Program developed by Wurtele (2007) was adapted to Turkish culture and it was seen that the training program was effective in increasing the self-protection skills of pre-school children. Irmak et al. (2018) reported that as a result of the effectiveness study of the training program, in which they aimed to increase the self-protection skills of pre-school children and worked with 200 5-year-old children, the knowledge and skills of children on protection from abuse increased. Although limited in number, it is seen that the developed education programs are mainly aimed at pre-school children. Although it is especially emphasized in the relevant literature that children should be taught the knowledge and skills related to their personal safety from the pre-school period (Deblinger, Stauffer & Steer, 2001; Kenny et al., 2008; Pitts, 2015; Wurtele, Kvaternick & Franklin, 1992), the emphasis made by Tutty (2000) as a result of his research should also be taken into consideration. Tutty (2000) found in his study that the rate of benefiting from the program applied by children between the ages of 5 and 7 is not as much as the children between the ages of 8 and 12. When this result is evaluated, it can be seen as an important need to work on people older than pre-school. In addition, it is thought that this education should be given gradually at the next grade levels and programs developed for other grade levels of primary school are needed in order to consolidate the knowledge and acquisitions gained and transform them into skills.

Present Study

The development of school-based psycho-educational programs aimed at preventing child sexual abuse, which aims to empower children due to their effectiveness in preventing child sexual abuse, is a long overdue area to work on in Turkey. When the limited number of educational programs reached are examined, the measurement tools used have limitations in terms of being developed for children in need of special education (Uçar, 2014), based on short-term monitoring (Çeçen-Eroğul & Kaf-Hasırcı, 2013) or targeting a different age group than the study here. (Irmak et al., 2018; Çıtak Tunç et al., 2018). In addition, in parallel with the increase in the tendency to use social networks out of purpose, the need to emphasize protection from abuse situations experienced in the virtual environment, as in the content of the training program here, stands out as an important requirement in terms of sexual abuse prevention training programs. The main problem of this research is the limited number of child abuse prevention programs for primary school students, including abuse that can be encountered on the internet, which can be easily implemented, accessible and effective by experts.

The aim of this research is to develop and test the effectiveness of a psycho-educational program called the *Personal Safety Awareness (PSA)* program, which was developed to help primary school 3rd and 4th grade students protect themselves from sexual abuse. Within the framework of this general purpose, the following hypotheses were tested.

<u>Hypothesis 1:</u> The PSA psycho-education program significantly increases children's awareness of personal safety, which is assessed by the Personal Safety Awareness Scale (PSAS).

- 1.1. Experimental group PSAS posttest scores were significantly higher than pretest scores. On the other hand, there is no significant difference between the PSAS pretest and posttest scores of the control group.
- 1.2. Considering the difference between the PSAS pretest scores of the experimental and control groups, the posttest scores of the experimental group are significantly higher than the posttest scores of the control group.
- 1.3. There is no significant difference between the PSAS posttest scores of the experimental group and the follow-up test scores after six months and one year.

<u>Hypothesis 2:</u> The PSA psycho-education program significantly increases children's self-esteem as assessed by the Piers Harris Children's Self-Concept Scale (PHSCCS).

- 2.1. The PHSCCS posttest scores of the experimental group were significantly higher than the pretest scores. On the other hand, there is no significant difference between the pretest and posttest scores of the control group.
- 2.2. Considering the difference between the PHSCCS pretest scores of the experimental and control groups, the posttest scores of the experimental group are significantly higher than the posttest scores of the control group.
- 2.3. There was no significant difference between the PHSCCS posttest scores of the experimental group and the follow-up test scores after six months and one year.

Method

Research Design

In this study, pre-test, post-test and quasi- experimental model (Büyüköztürk, 2007) with control group were used in order to determine the effect of PSA psycho-education program which prepared by the researchers on 3rd and 4th grade students' on personal safety awareness and self-esteems. 2x3 mixed pattern (split-plot factorial pattern) was used in the study. In the split-plot pattern, the first factor shows experimental treatment groups (experimental and control groups), while the second factor shows repeated measures of the dependent variable (pretest, posttest and follow-up test measurements). The independent variable of the study is the *PSA Psycho-Education Program*, while the dependent variables are *personal safety awareness levels* and *self-esteem levels*.

Study Group

All 80 students studying in the 3rd and 4th grades of a primary school in Kocaeli province Izmit district participated in the research. The distribution of the students participating in the research by grade level and gender is shown in Table 1.

Table 1. Distribution of Experimental and Control Group Students by Grade Level and Gender

	3rd Grade			4th Grade			
Group				Gender			General
	Female	Male	Total	Female	Male	Total	Total
Experimental	10	10	20	10	11	21	41
Control	8	11	19	11	9	20	39
Total	18	21	39	21	20	41	80

Measures

Personal Safety Awareness Scale (PSAS). The scale was developed by the researcher within the scope of this research. The scale measures the level of knowledge of students related to personal safety, including the risk of sexual abuse. There are 20 items in PSAS. Each correct answer "1", each wrong or "do not know" answer is evaluated as "0" points. The increase in the total score indicates that the student has more information about personal safety and protection from abuse. In this case, the highest score from the scale is "20" and the lowest score is "0".

In the scope of the construct validity studies of PSAS, firstly exploratory factor analyses based on tetrachoric correlation matrix was made to datas which obtained from 234 (52.5%) girls, 212 boys (47.5%), 188 (%42.2) 3rd grade, 258 (%57.8) 4th grade, total 446 students. According to factor analysis, factor loadings of 20 items of PSAS ranged from .38 to .79. The total variance explained with one dimension is 41%.

Fit statistics related to the single factor structure of PSAS were obtained according to the results of the tetrachoric factor analysis. Considering the criteria of goodness of fit, chi-square / degree of freedom (2.14), NNFI (.98) and CFI (.98) and GFI (.96) values of the model were excellent, AGFI (.94) and RMSEA (.05) values shows that the model has a good fit. Confirmatory factor analysis was also performed to see if the obtained structure was verified.

The discriminative values of the items of the scale ranged from .37 to .71 and the item difficulty values were between .59 and .85. The results of t-test for the comparison of the upper and lower 27% groups according to the total scores obtained from the PSAS indicate that the difference between the two groups was significant (t $_{(118)} = -34.07$, p < .001).

The criterion validity of the PSAS was tested with the *Good Touch Bad Touch Scale* which was developed by Church et al.(1988) and was adapted to Turkish children by Ceçen-Erogul and Kaf-Hasirci (2013). The scale was practised to 272 students concurrently with PSAS and the correlation coefficient between the total scores was calculated as .66 (p <.05). The internal consistency coefficient of the scale, calculated by the KR-20 formula was .85 (n = 80). The test-retest correlation coefficient which calculated via practised with 4 weeks break to 79 participants was .79 (p <.01). The findings obtained from the validity and reliability analyzes indicate the conformity of the psychometric values of the PSAS.

Piers Harris Self Concept of Children Scale (PHSCCS). The scale was developed by Piers and Harris (1964) for students aged 9 to 16 years. In the scale which aiming to measure students' feelings, thoughts and attitudes towards themselves is answered as "Yes" or "No"to descriptive expressions. The scores obtained range from 0 to 80. High score indicates the existence of a positive self-concept. Piers and Harris (1964) at the results of the factor analysis showed that the scale had six factors as Behaviors, Intelligence and School Status, Physical Appearance, Anxiety, Popularity and Happiness and Satisfaction. The adaptation study of the PHSCCS to Turkish children was conducted by Oner (1994). The reliability of the scale was tested with internal consistency and test-retest analysis. The reliability coefficients obtained with Spearman Brown and Kuder Richardson 21 formulas were between .78 and .93, the correlation coefficients obtained with Pearson Product-Moment were found to be between .71 and .77.

"The Student Problem Marking" lists have been formed while testing the criterion-dependent validity of the scale. Correlations were obtain on the level .68 and .64 were obtained between scale and criterias. Multiple factor analysis was applied to the students' score for construct validity. It was observed that the factors explained 42% of the total variance (Oner, 1994).

In the scope of this study, confirmatory factor analysis was applied for the validity of the six-factor structure of the PHSCCS. As a result of analysis of the data obtained from 130 (52%) girls, 119 (48%) men, 107 (43%) 3rd class, 4th class 142 (57%) who attended, total of the 249 students; chi-square/ degree of freedom (2713.97 / 1807) 1.50 and the fit indices obtained RMSEA .04, NNFI .88, CFI .89, IFI .89, GFI .74 and AGFI .72. Considering the criteria for fit indices, it can be said that the values are not sufficient for a perfect and good fit

but acceptable. The low level of GFI and AGFI, which is an important determinant, can be explained by the very different number of items in the factors (Devellis, 2017). For example, there are sixteen items in the "Behavior" subscale on the scale, while six items are included in the "Intelligence and School Status" subscale.

The internal consistency coefficient of the scale, which was calculated with the KR-21 formula was .89, and the test-retest correlation coefficient calculated by applying it to 42 participants at four weeks intervals was .79 (p < .01).

Process

At the beginning of the research, necessary permission was obtained from the Ethics Committee for data collection for scale development studies and for the implementation of the training program. After the ethics committee approval, Kocaeli Provincial Directorate of National Education was applied to and permission was obtained for research and implementation studies. In the selection of the school where the application will be made, the supportive administrator approaches that accept the practice in the school have been decisive. Before the implementation of the PSA psycho-education program, a seminar on Duties of the Family on Child Abuse and Child Personal Safety Awareness was held with the families of the 3rd and 4th grade students who formed the experimental and control groups. In this seminar, the researcher introduced himself and the training program and explained the application conditions. After the questions from the families were answered, family consent forms were obtained. Experimental and control group students were also informed about the purpose and content of the training program and informed consent forms were obtained. Before the implementation of the curriculum, measurement tools were given to the students as a pre-test. Data collection and training program implementation was carried out by a psychological counselor and a researcher who is also a doctoral student. After the pretest data were collected, the implementation of the training program started in the first week of May. The applications were made between May 2 and June 7 in the second academic year of 2017. The training program was applied to two experimental groups with different grade levels at different times. At the end of the training, measurement tools were reapplied to the experimental and control groups as a posttest. Six months and one year after the implementation of the training program, the experimental group was reached and the measurement tools were given again as a follow-up test. Since the students attending the 4th grade graduated from their schools and continued their education in different schools during the application, the training program could only be applied to the control group students attending the 3rd grade.

Contents of PSA Psycho-Education Program

When the preparation of the content of PSA, firstly, the education programs which are widely used in the world and whose effectiveness are determined by scientific research have been reached, these programs were examined in terms of the subjects discussed and the methods and techniques used. Some of the programs reached are *Second Step, Safe Child, Teatreetells, Stay Safe, Lauren's Kids*. In these programs, it was seen that focus on issues safe/ dangerous concepts, good/bad touch, safe behavior, asking for help from the adult when required and it was seen that using case study, role play, puzzle, play game, dicussion, and question- answer methods. Also examined a limited number of research for the prevention of sexual exploitation in Turkey, the general framework of education programs are determined in terms of content and methods used.

PSA psycho-education program consist of six sessions. In each session, a different subject was taken and applied in 80 minute sessions one day a week. In the content of training program which continued six-weeks; it was used case study, question-answer, role play, video monitoring, game, puzzle solution and discussion methods. The relevant literature was used in the selection of the methods and techniques used to gain knowledge and awareness about the mentioned subjects.

The first session of the training program deals with children's rights, neglect and abuse. The aim of this session is to make students aware of their rights as children and to recognize situations that threaten their rights and neglect and abuse. The second session focused on the basic safety rules. The aim is to enable students to be aware of safe and unsafe situations and behaviors to gain personal safety and to know what they can do in these situations. In the third session, personal boundaries, good/bad touches and special areas were discussed.

It is aimed that students will be able to distinguish between the situations that violate their personal limits and the disturbing touches. In the fourth session, shyness, aggression, assertiveness activities and practices of "saying no" in undesirable cases were made. In this session, it was aimed that students will develop social skills related to saying no. In the fifth session, special safety rules, threat, bribery, safe / unsafe secrecy issues are emphasized and the students were aimed to learn security rules related to special body regions, to distinguish between threat, bribery and safe and secure / unsafe secrets. Finally, in the sixth session the risks in the virtual environment and topics of the measures to be taken against the risks were focused. In this session, it is aimed that students know the risks in virtual environments and understand the importance of staying safe.

Data Analysis

In this study with a pretest-posttest control group, the differences between the pretest and posttest of the experimental and control groups were analyzed by Wilcoxon signed-rank test and t-test, the differences in pretest-posttest difference scores were analyzed by difference analysis and Mann Whitney U test. Wilcoxon Signed Rank Test and t-test were used to analyze the differences between the posttest and follow-up tests of the experimental group. In deciding on these methods, examination and analysis of the basic assumptions formed the basis. SPSS.22, LISREL 8.8 and Factor 10.4 package programs were used in the analysis of all data related to the scale development, validity and reliability analyses, and the results of the experimental and control groups pretest, posttest and follow-up tests.

Findings

Hypothesis 1. In order to test the hypothesis of the research, which is expressed that the PSA psycho-education program significantly increases the personal security awareness of children as assessed by the Personal Security Awareness Scale (PSAS), it was analyzed that whether there is a significant difference between the PSAS pretest and posttest scores of the experimental and control groups, whether there is a significant difference between the posttest scores of the experimental group and the control group, considering the difference between the PSAS pretest scores of the experimental group, and whether there is a significant difference between the PSAS posttest scores of the experimental group and the follow-up six months and one year later.

- 1.1. The fact that the skewness (-1.35) and kurtosis (1.15) values of the experimental group's posttest scores for PSAS were not in the range of -1+1, and the z-value of the skewness (-3,66) coefficient was higher than 2.58 for α =.05, this indicates that the distribution is not normal. The Wilcoxon signed-rank test, which is the non-parametric equivalent of the t-test for related samples, was used to analyze whether there was a significant difference between the PSAS pretest-posttest scores due to the non-normal distribution of the experimental group's PSAS posttest scores. PSAS pretest score of the experimental group mean = 16.24 (S = 2.51) posttest score was found to be mean= 18.95 (S = 1.35). According to the results of the analysis on whether the difference between the scores is significant, the students' PSAS posttest mean rank (20.28) differs significantly from pretest rank difference mean (12.88), posttest rank difference total (689.50) pretest rank difference total (51.50). was found to be high (z = -4.645, p < .05). According to results the comparison of the pretest and posttest mean scores of the control group with the t-test, it was observed that there was no significant difference (t_{38} = 1.84, p > .05) between the mean PSAS pretest score of the control group (M= 15.17, S = 3.07) and the mean of the posttest score (M= 15.87, S = 2.39).
- 1.2. Considering the difference between the PSAS pretest scores of the experimental and control groups, ANCOVA was used to examine the difference between their posttests, but since the data on the pretest and posttest of the groups were not normally distributed, difference analysis was used instead of ANCOVA for this analysis. In this direction, it was examined whether there was a significant difference between the PSAS pretest-posttest difference scores of the experimental and control groups. According to the results, the pretest-posttest difference mean score of the experimental group belonging to PSAS was M = 2.70 (S = 2.72); pretest-posttest difference mean score of the control group M = .69 (S = 2.34). In order to test the significance of the difference between the pretest-posttest difference scores of the experimental and control groups, the Mann Whitney U test was applied to the data that did not meet the normal distribution assumption. According to the

results, the rank means (49. 22) and rank totals (2018.0) of the experimental group's PSAS pretest-posttest difference scores were found to be significantly higher than the rank means (31. 33) and rank totals (1222. 00) of the control group's pretest-posttest difference scores (U = 442.0, p < .05). This result means that the PSAS scores of the experimental group increased significantly more than the control group after the training.

1.3. Wilcoxon signed-rank test was used to evaluate whether there was a significant difference between the PSAS posttest scores of the experimental group and the follow-up test scores at six months and one year, since PSAS posttest data were not normally distributed. According to the values obtained, the mean PSAS posttest score was M=18.95 (S=1.35), the six-month follow-up test mean score was M=18.53 (S=1.46) and the one-year follow-up test mean score was M=18.46 (S=1.72). When the rank mean and rank totals of the experimental group's PSAS posttest and six-month follow-up test difference scores are taken into account, the difference is not significant (z=-1.79, p>.05). Similarly, there is no significant difference between students' PSAS posttest and one-year follow-up test difference scores mean rank and total rank (z=-1.83, p>.05). These results show that the effect of the PSA psycho-education program on students' awareness of their personal safety continued for six months and one year.

Hypothesis 2. In order to test the hypothesis of the research, which is expressed that the PSA psycho-education program significantly increases the self esteem of children as assessed by the Piers Harris Self Concept of Children Scale (PHSCCS), it was analyzed that whether there is a significant difference between the PHSCCS pretest and posttest scores of the experimental and control groups, whether there is a significant difference between the posttest scores of the experimental group and the control group, considering the difference between the PHSCCS pretest scores of the experimental group and whether there is a significant difference between the PHSCCS posttest scores of the experimental group and the follow- up six months and one year later.

- 2.1. In order to see the difference between the PHSCCS pretest and posttests of the experimental and control groups, the t-test was applied for the related samples. The results of the analysis show that there is no significant difference between the posttest mean score (M = 63.63, S = 11.20) of the experimental group and the pretest mean score (M = 62.14, S = 9.94) of PHSCCS ($t_{40} = 1.58$, $t_{20} > 0.05$). The results of the control group were that the pretest scores were significantly lower than the posttest scores ($t_{38} = 0.3.14$, $t_{20} = 0.05$). In other words, a significant decrease was observed in the self-esteem of the control group students who did not receive the application.
- 2.2. ANCOVA was used to compare the posttests by checking the difference between the experimental and control group PHSCCS pretest scores, but since the data of the PHSCCS pretest and posttest scores did not meet the assumption of equality of variances, it was decided to perform a difference analysis. Pretest-posttest difference mean score of PHSCCS of the experimental group was M=1.48 (S=6.00); the mean pretest-posttest difference scores of the control group were found to be M=-4.76 (S=9.48). Since the distribution of the difference scores between the pretest and posttest of the groups was not normal, the significance of the difference scores was checked with the Mann Whitney U test. The rank means (51.62) and rank totals (2116.50) of the experimental group's PSAS pretest-posttest difference scores were found to be significantly higher than the rank means (28.81) and rank totals (1123.50) of the control group's pretest-posttest difference scores (U=343.50, p<0.05).
- 2. 3. The t-test was used to analyze whether there was a significant difference between experimental and control groups' PHSCCS six-months and one-year follow-up test scores and the posttest scores. According to the results of the analysis, no significant difference was found between PHSCCS posttest mean scores (M= 63.60, S=11.33) and the six-month follow-up test mean scores (M= 61.87, S= 12.42) of the experimental group (t_{39} = 1.13, p > .05). There was no significant difference between the PHSCCS posttest mean scores and the one-year follow-up test mean scores (M= 61.89, S= 12.03) of the experimental group (t_{38} = 1.29, p > .05).

Discussion

As a result of analyzing the first hypothesis of the research, it was observed that the PSA psycho-education program was effective in increasing the knowledge and awareness levels of students about their personal safety and this effect continued for a year.

When the related literature is examined; it is seen that many training programs have been developed to prevent child sexual abuse and the results are consistent with the research conducted here (Cecen-Eroğul & Kaf-Hasırcı, 2013; Kraizer, 1994; Hebert et al., 2001; Irmak et al., 2018; Lanning & Maasey-Stokes, 2006; Tutty, 2000; Wurtele & Owens, 1997). For example, Hebert et al. (2001) applied the personal safety training program called ESCAPE, which they adapted from the American Program for the Prevention of Attacks Against Children, to 133 students, 64 of which were first grade and 69 third grade. In the study, the effect of the education program on the change in children's knowledge and skills was evaluated with a scale (CKAQ) consisting of 11 questions, which measures children's personal safety knowledge and is similar to the measurement tool used in this study. Children were asked to show scenarios involving various abuse situations via video and to express their views on what to do. In addition, the families of the students participating in the training program were asked to evaluate the behavioral change in their children through the "Family Perception Scale". The results show that there is a great improvement in the personal safety knowledge and ability of displaying safe behavior of the children included in the education program. Tutty (2000) aimed to inform children about touching styles and to say no in the program she developed for 231 primary school students. In the effectiveness study of the program called Who Tells, she found that children developed skills to protect themselves and the level of knowledge on this subject increased significantly.

One of the limited number of studies on the prevention of child sexual abuse in Turkey was conducted by Çeçen-Eroğul and Kaf-Hasırcı (2013). In this study, a sexual abuse prevention program for 4th grade students was developed and its effectiveness was examined. It was found that the knowledge of good touch/bad touch of the students who participated in the training increased significantly compared to those who did not. The first study conducted with preschool children in Turkey belongs to Irmak et al. (2018). As a result of the research conducted by the researchers who developed the *I'm Learning to Protect Myself with Mica* training program with 200, 5-year-old children and their parents, the self-protection knowledge and skill scores of the children who participated in the training were found to be significantly higher than the scores of the children who did not. The results of the education program that Çıtak Tunç et al. (2018) applied to 83 pre-school children by adapting the education program developed by Wurthele (2007) to Turkish children also indicate that children's knowledge of protection from abuse has increased. The results of the education programs in the Turkish and foreign literature are in line with the results of the study here. In summary; The effectiveness studies of programs aiming to inform and empower children about abuse in order to prevent sexual abuse show that providing information to children about sexual abuse and ways of protection is effective in increasing children's knowledge and awareness on this issue.

The subjects focused on in the personal safety trainings developed for the protection of children from sexual abuse are mainly; safe/dangerous concepts, general safety rules to be followed at home and outside, protecting personal boundaries, distinguishing between good touch/bad touch and good secret/bad secret, safety rules about private parts of the body, recognizing risky situations, being able to say no in unsafe situations, It is the ability to ask for help from an adult that they trust in a disturbing situation (Rispens, Alema & Goudena, 1997). Within the scope of this research, similar topics are included in parallel with the literature.

It is thought that the methods and techniques used in addition to the themes covered in sexual abuse prevention programs have an important role in the effectiveness of the programs. Similar to the education programs reached, the methods mainly used in the education program developed in this research; case studies, question-answer, discussion, role playing, game and material development. According to the Kolb's model (1985), individuals learn by feeling with concrete experience, by monitoring with reflective observation, by thinking with concrete conceptualization and by making with through active experience and the learning styles of individuals consist of the components of these four areas. Similarly, Felder and Silverman (1988) have identified three styles of visual, auditory and kinesthetic in learning. These methods used in the training program allow students to learn, feel, think and do. The effectiveness of the program can be attributed to the variety of methods used.

As a result of the analysis of the second hypothesis of the research, which is stated that the "PSA psychoeducation program significantly increases the self-esteem of children as assessed by PHSCCS", it was observed that the PSA psycho-education program was not effective in increasing the self-esteem scores. In the literature, it was came across that education programs aimed at teaching children to protect themselves from abuse also developed students' self-esteem (MacIntyre & Carr, 1999; Kraizer, 1994; Kraizer, Witte & Fryer, 1989). When an evaluation is made on the reason for the difference between the research here and some of the research results in the literature, it can be argued that the development of the education program with a content that gives more practice and aiming to develop skills may affect the self-esteem more positively. It may be possible with more comprehensive and long-term training program. Because self-esteem development is included a long-term process that starts from infancy (Kohut, 1971). In the development of self-esteem, esteem of others, competence and self-factors are effective (Kohut, 1971). When considering these factors, respect others', positive emotional interaction of the person with others (Yörükoğlu, 2007), the ideas of others, related parent support, competence to cope with the problems that arise as they grow, self-control ability (Özkan, 1994), school success (Demo & Savin-Williams, 1983) are influential in the development of self-esteem. It is an understandable result that the six-session training program, which aims to raise awareness of personal safety in students, didn't increased the self-esteem of children, as the development of self-esteem depends on many factors.

Considering the discussions about the programs aimed at preventing sexual abuse in the literature, it was seen that the programs increased the fear and anxiety of children (Finkelhor & Dziuba-Leatherman, 1995). As a precaution in the education program here, activities aimed at empowering children were included in the content of the education program. For example, in one session, children's rights were studied and it was aimed to realize their rights as a child. The emphasis throughout the training is to emphasize the importance of asking a safe adult for help when faced with a situation that threatens their safety. During the sessions, each child was asked to identify the safe adult, and it was ensured that they were not alone. After the implementation of the training program, feedback was received from the interviews with the students at different times that the students felt good and safe. There was no observation shared by the classroom teacher that there was any negative effect. Therefore, it is thought that the education program does not cause a negative effect on children.

As a result, the PSA psycho-education program, which has been found to be effective in increasing students' awareness of personal security, is a psycho-education program that can be applied by psychological counselors in schools in order to increase the knowledge and awareness of primary school 3rd and 4th grade students about their personal safety.

Limitations

It is a limitation of the research that it was developed for the said grade levels, taking into account the developmental characteristics of only 3rd and 4th grade students. When it is desired to develop a program that covers all grade levels, two different types of curriculum content and measurement tools are needed because the cognitive characteristics and literacy skills of preschool and 1st and 2nd grade students are different from those of 3rd and 4th grade students. For this reason, it was preferred to work with the youngest age group who knew how to read and write. Half of the students in the experimental and control groups were fourth-year students and graduated from their schools shortly after the implementation of the curriculum. It was not easy to reach each student, as some students moved to a different city, as were many students attending different secondary schools. The fact that the follow-up tests were not applied to the students in the control group can be considered as a limitation due to the time limitations of the study.

Suggestions

The KGF psycho-education program developed in this study was found to be effective in raising the awareness of primary school 3rd and 4th grade students about their personal safety. In this context, it can be suggested that the KGF psycho-education program be implemented in schools by school counselors as a program to prevent sexual abuse by empowering children. KGFS developed within the scope of this research can be used as a measurement tool with proven validity and reliability to determine the level of awareness of 3rd and 4th

grade students about their personal safety. Education programs aimed at empowering children can be expanded by developing programs at different grade levels.

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