Social Problem-Solving Activities in The Life Skills Course: Do Primary School Students Have Difficulty Solving Daily Life Problems?

Nur Ütkür Güllühan [1]

Abstract

This study aimed to investigate how a social problem-solving education program implemented in the life skills course affected the social problem-solving skills of third-grade primary school students. For this purpose, using a mixed-methods research design, the participant students received social skills education over 20 class hours. The data collection tools used in the study were the Social Problem-Solving Skills Scale, semi-structured interviews, and document analysis. The study was conducted with 35 students attending a public school on the European side of Istanbul, Turkey. The dependent t-test was employed to analyze the quantitative data and content analysis for qualitative data. As a result, it was seen that the qualitative data supported the quantitative data. According to the quantitative data, after receiving social problem-solving education, the students developed the skills of creating alternative solutions, selecting a suitable solution, and estimating the outcomes of the selected solution. The students were also found to retain these skills four months after the education program. Furthermore, it was determined that the students mostly liked solving social problems, were able to solve the problems clearly and by associating them with the topic, generally enjoyed the problem-solving process, and produced various creative outputs. It is thought that the results obtained from this study will guide teaching practices involving social problem solving-based activities.

Introduction

Changes and developments experienced in different areas of life today further complicate the problems faced by individuals. As a result, coping with problems in daily life has become one of the situations that should be taken into consideration from childhood. However, some problems encountered in life are too complex, and some individuals may not have the resources to solve them; thus, they may need guidance, especially in the school setting.

It is important that individuals can adjust the problems they face according to each specific situation and acquire the skills necessary to solve them. In this regard, students should be encouraged to develop the belief that they can successfully deal with the ever-changing environment and related

---

[1] Istanbul University-Cerrahpaşa, Hasan Ali Yücel Faculty of Education, Department of Basic Education, Turkey, nur.utkur@istanbul.edu.tr

problems. This will provide them with the opportunity to achieve brilliant success and fulfill their life goals (Canter, 2004).

Problem-solving skills include cognitive and behavioral activities in which a person tries to understand an existing problem and find an effective solution (Ranjbar, Bayani, & Bayani, 2013). In addition, these skills are a combination of an individual's ability to identify suitable solutions and eliminate inappropriate possibilities (Storm & Angello, 2010). Social problem-solving is defined as a cognitive-behavioral process used to seek successful solutions to the problems facing people in everyday life (Chang & D'Zurilla, 1996; Nezu, 2004). At the same time, social problem-solving refers to the problem-solving process in the real world. The word 'social' in this definition is an indicator of the factors affecting an individual's coping behaviors in the social environment (Ranjbar et al., 2013).

In Turkey, a life skills course is provided within the curriculum of the first three years of primary school education. As of the fourth grade of primary school, this course is replaced by the social studies course. These courses are designed to follow and complement each other, with their content covering various aspects of children's daily lives (Ministry of National Education [MoNE], 2018). For this reason, they are highly suitable to develop the social problem-solving skills of students through various activities.

The reason for implementing life skills education in Turkish schools is explained in the following extract from the course curriculum: "The rapid changes in science and technology, the changing needs of the individuals and society, and the innovations and developments in teaching-learning theories and approaches have a direct impact on the expected roles of individuals. This kind of change calls for individuals that can produce information, use it functionally in life, solve problems, think critically and take initiatives, are determined, have the necessary communication skills, empathize with others, and contribute to the society and culture" (MoNE, 2018, p. 3). In addition, problem-solving is included among the student skills aimed to be developed within the scope of the life skills course. The current study investigated how this skill can be developed in students, what kind of education is necessary, and the related outcomes.

Theoretical Framework

Social problem-solving evolved from a series of well-established research and practices that began with the definition of problem-solving by D'Zurilla and Goldfried in 1971 and progressed with the cognitive revolution in psychology (Dember, 1974). The basis of social problem-solving is the theory of Bandura (1986), which refers to social cognitive-behavioral changes. According to Bandura (1986), human behavior is generally shaped and controlled by environmental impacts. Social cognitive theory explains the psychosocial functioning of mutual causality. The mutual causality model includes intrinsic personal factors in the form of cognitive, affective and biological events. Behavioral models and environmental events also act as interactive determinants that influence each other in a bi-directional manner (Bandura, 1999).

Children have developmental stages from an early age, intertwined with their peers. Social problems are faced with language and social development. Therefore, children need to know skills that facilitate social problem solving (Ridley ve Vaughn, 1982). When children are provided with social development characteristics, their academic success increases and they become more successful in other social relationships. Thus, children are more accepted by their peers, teachers and families (Caprara, Barbaranelli, Pastorelli, Bandura ve Zimbardo, 2000).

Social problem-solving skills are closely related to the daily social movements of children, as well as their academic success (Walker, Degnan, Fox, & Henderson, 2013). The steps involved in the social problem-solving process are: recognizing the presence of a problem, identifying the problem, finding a solution to the problem, evaluating possible solutions, selecting a suitable solution, and finally evaluating the outcomes of the selected solution (Smith & Daunic, 2006). Using this approach, children

are taught how to think, rather than what to think. In this approach, students benefit from learning strategies and cognitive processes to control their own behavior without depending on external reinforcement (Urbain & Kendall, 1980).

Selbst and Gordon (2012) reported that a social problem-solving model that can be applied to children and adolescents should adopt a cognitive-behavioral approach. The first step in this model aims to help children who have difficulty in defining the problem by putting it into words. The second step is important for children experiencing difficulties in defining and expressing emotions. The third is the goal-setting step, in which the target and motivation levels are determined to achieve a specified goal. In the fourth step, when investigating possible solutions, children are encouraged to brainstorm possible problems. In the last step, children review their effective solution plan and decide how to use the skills they have acquired for the next problem (as cited in Pringle, 2017).

According to Merrill, Smith, Cumming, and Daunic (2017), social problem solving efforts can be used effectively to support the social and behavioral needs of students with or without significant behavioral problems. One of the studies involving social problem solving can be seen in the study of Rubin and Rose-Krasnor (1992) that social problem solving skills are influenced by many different variables. These include factors such as children's variable responses as well as environmental variables such as family and peer relationships (as cited in Walker et al., 2013).

A review of the literature reveals a large number of studies on social problem-solving conducted with children of various age groups starting from the pre-school period (Aksu, Yığman, Ünver, & Özdel, 2019; Altuntaş & Altınova, 2015; Arı &Yaban, 2012; Bozkurt Yükçü & Demircioğlu, 2017, 2020; Caprara et al., 2000; Cartıllı ve Bedel, 2015; Dereli, 2017, 2019; Dereli-İman, 2013; Güven, Ayvaz, & Göktaş, 2019; Kasik & Gál, 2016; Koruklu, 2015; Lillard, 2012; Mağden & Yaban, 2016; Merrill et al., 2017; Ogoemeka, 2011; Pringle, 2017; Ridley & Vaughn, 1982; Şahin, 2011; Uzunkol & Yel, 2016; Valadi, Gabbard, & Hooshyari, 2020; Walker et al., 2013; Yaban & Yükselen, 2007; Youngstorm et al., 2000). In these studies, various education and training programs implemented in schools were found to be effective in the development of children's social problem-solving skills. However, there is only limited research on the use of social problem-solving as part of the education program in primary school courses with social content. However, it is very important that social problem-solving education is integrated into the courses that contain social phenomena, such as life skills and social studies. Therefore, it is considered that this study will make a significant contribution to the literature by examining the incorporation of social problem-solving education into the life skills course in the primary school curriculum.

Social problem-solving is particularly important for children in the younger age group. However, there is no method integrated into the curriculum for the development of social problem-solving skills. Yet, the case study method, which is particularly suitable for use in courses that have social content, such as life skills and social studies, is closely associated with the nature of social problem-solving. As also stated by previous researchers, one of the most important steps in case studies involving social problems is to produce different solutions for the problem encountered. Furthermore, the fact that such studies contain conflicts and problems increases their quality (Beckisheva, Gasparyan, & Kovalenko, 2015; Welton & Mallan, 1999). Thus, individuals' social problem-solving skills can be determined in case studies in which they are engaged in activities related to solving problems. The importance of this study and its contribution to the literature was to determine how the students' problem-solving skills were affected by an educational program including case studies involving social problems, analyzing text containing elements from daily life, and introducing new solutions to problems.

For this purpose, the answers to the following research questions were sought:

1) Does the social problem-solving education provided for the students in the life skills course positively affect the social problem-solving skills of third-grade primary school students?

a) Does this education positively affect the third-grade students' skills to produce alternative solutions?
b) Does this education positively affect the third-grade students' skills to select a suitable solution?
c) Does this education positively affect the third-grade students' skills to estimate the outcomes of the selected solution?
d) Is there a significant difference between the students' post-test and follow-up test scores in all subdimensions of the scale?

2) What are the views of third-grade primary school students concerning the social problem-solving education provided?
3) What are the characteristics of the outputs produced by the students during social problem-solving activities?

Method

Research Design

In this study, from the mixed-methods research designs involving the use of qualitative and quantitative methods, the explanatory sequential mixed-methods design was adopted. In this design, first of all, quantitative data are collected and the data are analyzed. Qualitative data are then collected to help explain quantitative data (Creswell, 2016). This design was chosen because qualitative data were used to support quantitative data in the study.

Accordingly, quantitative methods were used to determine the effect of the social problem-solving education program on the social problem-solving skills of the students. In the quantitative dimension of the study, a single-group pre-test-post-test design was used, in which a pre-test was first applied to a group, then the experimental process was undertaken, and finally the post-test was administered (Creswell, 2016). In addition, four months after the administration of the post-test, a follow-up test was employed to determine the extent to which the students retained the social problem-solving skills they had acquired during the social problem-solving education program. Therefore, since the follow-up test is used in the quantitative dimension of the research, it is also prone to pre-test, post-test and follow-up test (PPF) pattern. The PPF design is a common experimental design for testing hypotheses about intervention effects in clinical child and adolescent research. In PPF designs, an outcome variable is measured on three separate occasions: prior to the initiation of the treatment, at the end of the treatment, and at a specified time after the conclusion of the treatment (Rausch, Maxwell, & Kelley, 2003). The reason for using a single group pretest-posttest pattern in this study is that a long-term (four class hours per week total four weeks) social problem solving training integrated into the life science curriculum was prepared. As the life skills curriculum does not include activities for social problem solving, an integrated education, not an alternative to the curriculum, has been prepared. Therefore, rather than measuring the effect of this training with the control group, it was aimed to test the effect of the training applied to the experimental group. Because, in cases where it is not possible to reach an equalized comparison group, it is necessary to use this pattern (Christensen, Johnson, & Turner, 2015). In this study, it was found appropriate to use a single group pre-test, post-test design, as there was no equivalent education model in the curriculum to be applied to the comparison group.

Lastly, qualitative methods were employed to determine the characteristics of the outputs produced by the students at the end of the provided education. The qualitative research design in the study is case study. Case study is a system of situation description where the researcher collects detailed information about real life, a current situation or multiple restricted situations over a given time, through multiple sources of information (Creswell, 2015). Due to the nature of this study, this research pattern is suitable for the qualitative part.

Study Group

The research was conducted in a public school located in the European side of Istanbul, Turkey. While selecting the study group, purposeful sampling was used. Purposeful sampling focuses on information-rich situations that will shed light on questions sought (Patton, 2014). In addition, when using this sampling method, the characteristics of the people who will form the research universe are determined and people who fit these characteristics are reached (Christensen et al., 2015).

In line with purposeful sampling in this study, the reason for the selection of third-grade primary school students was that they represent the last grade receiving the life skills course in primary school. As the students were older than those in the first and second grades, it was thought that more effective results would be obtained in terms of problem-solving. The reason for choosing this class among the four 3rd grades in the school where the research was conducted is that it is the most suitable class for the purpose of the study. There were 35 students in this class, of whom 17 were male and 18 were female. One of the conditions required for this study is that there is not much difference between the number of girls and boys in the class. The other is that the class size is not overcrowded so that the work can be done more easily. Thus, it is planned that rich information can be obtained from the group to be trained in the study. The necessary ethical permission was obtained from the school principal, classroom teacher, the students, and the parents/legal guardians of the students. Since the working group consists of people under the age of 18, it is ethically important to include parents in leave.

Data Collection Tools

The Social Problem-Solving Skills Scale developed by Uzunkol and Yel (2016) was used to collect quantitative data, and semi-structured interviews and document analysis were performed to obtain qualitative data.

Social problem-solving skills scale

The reason for using this scale in the study is to determine to what extent students can solve social problems after and before the education program. This is an analytical rating scale developed to measure students' social problem-solving skills. It aims to measure the responses of the students to questions related to case studies including socially problematic situations that they may encounter in their daily lives (Uzunkol & Yel, 2016). The scale has three dimensions: "producing alternative solutions, choosing the appropriate solution and estimating the results of the solution". In this study, each sub-dimension was evaluated separately. Furthermore, Cronbach's alpha (internal consistency) coefficients were calculated as .78 for producing alternative solutions, .73 for selecting a suitable solution, and .82 for estimating the outcomes of the selected solution (Uzunkol & Yel, 2016). As a result, the Social Problem-Solving Skills Scale was found to be a valid and reliable analytical rating tool.

Semi-structured interviews

In the qualitative part of the study, semi-structured interviews were conducted with the participant students in order to elicit their views concerning the implemented social skills program. The reason for using this data collection tool in the study is to determine the opinions of the students about the education given. During this process, the students were interviewed individually, with each interview lasting about 20 minutes. After the data were transcribed, codes and categories appropriate for the purpose were created and examined using content analysis. The questions in the semi-structured interview form aimed to determine whether the students enjoyed the activities involved in the social problem-solving education program, which characteristics of these activities they liked most, and the students' general views concerning the program.

Document analysis

The reason for using this data collection tool in the study is to determine the characteristics of the products produced by the students during education. The characteristics of the student outputs produced during the implemented program were examined by content analysis based on the criteria of 'story completion, providing a title for the story, and solving the problem presented in the story.' The model stated by Selbst and Gordon (2012) played a role in determining these criteria (as cited in Pringle,

2017). In addition, it was shaped in line with the views of Rowe and Newton (1994), who made suggestions for the solution of problems and the evaluation of events including social issues in the classroom.

During the determination of the semi-structured interview questions and the criteria for document analysis, expert views were obtained from the education faculty members of Istanbul University-Cerrahpasa and Marmara University, Turkey to ensure validity. In addition, in line with the views elicited from all the third-grade teachers in the participant school, the final versions of the questions and criteria were obtained. A total of eight experts (three instructors and five classroom teachers) were subjected to the content validity test of Lawshe (1975, as cited in Yurdugül, 2005). The content validity indexes of the items were calculated to confirm that they all served the purpose of measurement. The content validity index was 0.94 for the interview questions and 0.98 for document analysis, suggesting that the items and analysis were valid. According to the views of the classroom teachers, some of the interview forms were revised. The teachers mostly recommended reducing the number of questions and using shorter question forms.

Procedure

The Social Problem-Solving Skills Scale was administered to the third-grade students as a pre-test before the social problem-solving education program. Then, the program, designed according to the model of Selbst and Gordon (2012), was implemented (as cited in Pringle, 2017) over a total of 16 class hours (four class hours per week). Each week, the following gains from the third-grade primary school textbook were taken into consideration in the preparation of the lesson plans, text, questions, and worksheets:

- Recognizing her/his strengths and aspects that need to be improved.
- Recognizing the effect of her/his behavior on their peers, as well as herself/himself.
- Providing examples that emphasize the necessity to obey traffic safety rules.
- Assuming responsibility in protecting nature and the environment (MoNE, 2018).

Expert views were obtained throughout the stages of the preparation of the education program. A total of eight experts (mentioned above) were consulted particularly for the creation of the stories to be used in the activities and determination of the questions included in the stories. According to the recommendations of the experts, the content of the stories and questions was revised. Particular attention was paid to ensure that the stories contained examples of problems that might be encountered by the participant students in daily life. Once the final version of the education program was attained though the necessary revision according to the expert views, the content validity test, developed by Lawshe (1975), was undertaken (as cited in Yurdugül, 2005). Each stage and activity included in the education program was considered as an item, and the content validity index for the program was calculated as 0.98. Thus, the devised education program was determined to be valid in terms of reflecting the content of social problem-solving.

While preparing this training, it is aimed to use case study scenarios with a problem in accordance with the achievements. The fact that the student can solve these problems that he / she may encounter in his / her real life shows the positive steps he has taken towards gaining social problem solving skills. Because it is known that social problem solving trainings are held in the classroom environment by using case studies consisting of real life scenarios. Generally, the events presented in story format involve social problem solving and are discussed for discussion with groups in the classroom environment. It is very effective to handle case studies in this way in the classroom environment. Because, in this way, students can have additional information about the existing social problem and their difficulties in the analysis process are prevented (Beckisheva et al., 2015; Mostert, 2007). For this reason, using case studies in problem solving activities can also improve the social problem solving and critical thinking skills of individuals during learning and teaching. It is also based on enabling students to solve problems, discuss, analyze a situation and evaluate solutions (Jones, 2003).

The content of each stage of the training program implemented is summarized below (A sample lesson plan is presented in Appendix 1).

1. Recognizing and defining the problem

   - Encouraging the students to discuss and brainstorm the problems they might encounter in their daily lives.

   - Providing images and text as examples of various problems that might occur.

   - Discussing the possible solutions to these problems.

2. Solving the problem

   - Analyzing a story that contains elements from daily life and presents a social problem.

   - Posing various questions about the problem presented in the story and noting the responses.

   - Having the students solve the problem presented in the story together in groups.

   - Completing an unfinished story for the purpose of finding a solution to the problem.

   - Finding an appropriate title for the problem presented in the story.

3. Evaluation and reviewing

   - Creating a product concerning the solution of the problem presented in the story.

   - Drawing, writing slogans, poems or lyrics, and creating posters or brochures concerning the solution of problem presented in the story.

   - Sharing the outputs first with the group members and then the whole class, and reviewing the products.

   - Presenting and discussing the resulting products.

After the social problem-solving education program given to the students by the researcher, the students were administered the Social Problem-Solving Skills Scale once more as a post-test. Then, semi-structure interviews were conducted with the students. In addition, the researchers conducted a document analysis on the outputs produced by the students during the activities of the program. Four months after the post-test, the same scale was administered one last time to the students in order to evaluate whether they retained the social problem-solving skill they had acquired during the implemented program.

Data Analysis

In order to determine which tests were to be employed for the analysis of the results of the pre-test and post-test, the distribution of normality was examined using the Kolmogorov-Smirnov test. According to the results, the data were normally distributed at 95% confidence interval ($p > 0.05$). Then, to confirm this result, the skewness and kurtosis values of the subdimensions of the Social Problem-Solving Skills Scale were calculated. According to the results, the data met the assumption of normality because the skewness and kurtosis of the three subdimensions of the pre-test and post-test measurements remained within the range of -2.0 and +2.0 (George & Mallery, 2010). As a result, it was concluded that the scores obtained from the pre-test and post-test measures of all subdimensions of the Social Problem-Solving Skills Scale were normally distributed. Thus, it was decided to use a parametric test (the dependent t-test) with the SPSS 16.0 program for the analysis of the quantitative data obtained from the research.

In the qualitative part of the study, the data from the semi-structured interviews and document analysis were examined using the content analysis method. The data were coded in relation to the characteristics of social problem-solving. In this process, the common characteristics of the codes were found to establish general categories and specific subcategories. All data were placed under these general and specific themes. In addition, quotations from the students' views were included to support these themes. Rather than student names, codes, such as S1, S2, S3… were used to refer to the participants.

For the coder reliability in the analysis of qualitative data, support was received from a doctoral expert working in the Classroom Education Department. It was asked to encode the data obtained from the expert. The codings of the researcher and the expert were compared with each other, and the coding reliability formula of Miles and Huberman (1994) was used. The agreement of the analysis between the researcher and the expert was calculated in accordance with the formula "Reliability = Number of Agreement / Number of Agreement + Number of Disagreements."According to Miles and Huberman (1994), when this value is greater than 0.70, the analysis is considered reliable. The average of the coefficients obtained from the researcher and the experts was calculated as 0.93 for the interview data and 0.96 for the data related to document analysis. Accordingly, as the analysis of the data collection tools used in this study is over 0.70, the data collection tools are considered reliable.

Validity and Reliability of the Study

In order to ensure that the results of the study are valid and reliable, studies regarding the validity and reliability of data collection tools have been carried out, and validity and reliability measures have been taken regarding the working process. Necessary studies were carried out in line with the criteria included in the research of the Topu, Baydaş, Turan, and Göktaş (2013). Accordingly, the validity and reliability measures taken in the working process are as follows:

Validity Measures

- Data collection and data analysis process is explained in detail.

- Sampling features and sample selection method are explained in detail.

- While collecting the data, the consent form was filled in to the parents of the participants, and the ethics committee permission was obtained for the study.

- The application process of the study has been explained in detail. A sample lesson plan is included.

- The rationale for the method used was explained in detail by associating it with the literature.

- Limitations of the study were specified.

- Validity and reliability measures regarding data collection tools were taken. These are explained in detail.

Reliability Measures

- Organized the study by reading the Turkish language specialist.

- Expert opinions were received at each stage of the study. Expert opinions were subjected to Lawshe (1975) test and necessary arrangements were made (as cited in Yurdugül, 2005).

- Support was received from a secondary researcher for the reliability of the coding in qualitative analysis.

- The consistency between the data has been checked.

Results

The following subsections present the results obtained from the application of quantitative and qualitative data collection tools according to the research questions.

Effect of the Social Problem-Solving Education Program on the Students' Skills to Create Alternative Solutions

Table 1 presents the dependent t-test results of the students' pre-test and post-test scores in the subdimension of producing alternative solutions.

Table 1. The dependent t-test results of the students' pre-test and post-test scores in the subdimension of producing alternative solutions

Producing alternative solutions	N	$\bar{x}$	Sd	SH_x	t-test	
					t	Sig.
Pre-test	35	.68	.58	.09	-9.976	.000
Post-test	35	2.40	1.06	.17		

According to the dependent t-test results concerning the subdimension of producing alternative solutions (Table 1), a statistically significant difference was found between the students' pre-test and post-test scores (t = -9.976, p <.01). The mean post-test scores of the students (2.40) were significantly higher than their mean pre-test scores (0.68). After the 20-hour program, there was a significant increase in the students' scores regarding the skills related to this dimension.

Effect of the Social Problem-Solving Education Program on the Students' Skills to Select a Suitable Solution

Table 2 presents the dependent t-test results of the students' pre-test and post-test scores in the subdimension of selecting a suitable solution.

Table 2. The dependent t-test results of the students' pre-test and post-test scores in the subdimension of selecting a suitable solution

Selecting a suitable solution	N	$\bar{x}$	Sd	SH_x	t-test	
					t	Sig.
Pre-test	35	.74	.74	.12	-9.757	.000
Post-test	35	2.74	1.09	.18		

According to the dependent t-test results concerning the subdimension of selecting a suitable solution (Table 2), a statistically significant difference was found between the students' pre-test and post-test scores (t = -9.957, p < .01). The mean post-test scores of the students (2.74) were significantly higher than their mean pre-test scores (0.74). After the education program, there was a significant increase in the students' scores regarding the skills related to this subdimension.

Effect of the Social Problem-Solving Education Program on the Students' Skills to Estimate the Outcomes of the Selected Solution

Table 3 presents the dependent t-test results of the students' pre-test and post-test scores in the subdimension of estimating the outcomes of the selected solution.

Table 3. The dependent t-test results of the students' pre-test and post-test scores in the subdimension of estimating the outcomes of the selected solution

Estimating the outcomes of the selected solution	N	$\bar{x}$	Sd	SH_x	t-test	
					t	Sig.
Pre-test	35	.88	.75	.12	-6.376	.000
Post-test	35	1.91	1.26	.21		

According to the dependent t-test results concerning the subdimension of estimating the outcomes of the selected solution (Table 3), a statistically significant difference was found between the students' pre-test and post-test scores (t= -6.376, p <.01). The mean post-test scores of the students (1.91)

were significantly higher than their mean pre-test scores (0.88). After the 20-hour program, there was a significant increase in the students' scores regarding the skills related to estimate the outcomes of the selected solution.

In line with these data, it can be stated that after the social problem-solving program, the students developed the necessary skills to produce alternative solutions, select a suitable solution, and estimate the outcomes of the selected solution.

Follow-up of the Students' Social Problem-Solving Skills in All Subdimensions of the Scale

After implementing the social problem-solving education and administering the post-test to the students, it was seen that they had developed the necessary skills to produce alternative solutions, select a suitable solution and estimate the outcomes of the selected solution. In order to determine the permanence of these skills and the effectiveness of the education provided, the same scale was administered four months after the post-test. Tables 4 to 6 present the relationship between the post-test and follow-up test scores of the students in the subdimensions of producing alternative solutions, selecting a suitable solution, and estimating the outcomes of the selected solution, respectively.

Table 4. The results of the dependent t-test for the students' post-test and follow-up scores in the subdimension of producing alternative solutions

| Producing alternative solutions | N | $\bar{x}$ | Sd | SH_x | t-test | |
					t	Sig.
Post-test	35	2.40	1.06	.17	1.358	.183
Follow-up test	35	2.31	.99	.16		

The students' mean post-test and follow-up test scores in the subdimension of producing alternative solutions were 2.40 and 2.31, respectively (Table 4). Concerning the relationship between the scores of these two tests, although the mean follow-up test score was lower than the mean post-test score, there was no statistically significant difference between the two (t = 1.358, p > .01). This suggests that even after four months, the students retained the skills related to producing alternative solutions they had acquired during the social problem-solving education program.

Table 5. The results of the dependent t-test for the students' post-test and follow-up test scores in the subdimension of selecting a suitable solution

| Selecting a suitable solution | N | $\bar{x}$ | Sd | SH_x | t-test | |
					t	Sig.
Post-test	35	2.74	1.09	.18	1.358	.183
Follow-up test	35	2.65	.99	.16		

For the subdimension of selecting a suitable solution, the students scored 2.74 and 2.65 on average in the post-test and follow-up test, respectively (Table 5). No statistically significant difference was observed between the post-test and follow-up test (t = 1.358, p > .01), indicating that the social problem-solving education program had a permanent effect on the students' skills related to selecting a suitable solution measured four months after the post-test.

Table 6. The results of the dependent t-test for the students' post-test and follow-up test scores in the subdimension of estimating the outcomes of the selected solution

| Estimating the outcomes of the selected solution | N | $\bar{x}$ | Sd | SH_x | t-test | |
					t	Sig.
Post-test	35	1.91	1.26	.21	.466	.644
Follow-up test	35	1.85	1.21	.20		

When the relationship between the students' post-test and follow-up test scores in the subdimension of estimating the outcomes of the selected solution was analyzed, it was determined that the mean value of the latter (1.85) was lower compared to the former (1.91); however, this difference was not statistically significant (t = .466, p > .01) (Table 6).

Students' Views Concerning the Social Problem-Solving Training Program

This subsection discusses the third-grade students' views concerning the social problem-solving training they received. Table 7 presents the extent to which the students liked the activities included in the program.

Table 7. The students' liking the activities included in the program

Main themes	Number of students (f)
Like the activities	32
Do not like the activities	1
No response	2
Total	35

Thirty-two students reported to like the activities in the program, one did not like these activities, and two did not respond to this question (Table 7). When the students were asked to elaborate why they liked the activities, they provided the reasons given in Table 8.

Table 8. The reasons behind the students' liking the activities in the program

Main themes	Sub-themes	Number of students (f)
Characteristics of activities	They are enjoyable	10
	They are easy to perform	2
Characteristics of the students	I enjoy solving problems	10
	I have better relationship with my friends	5
	I enjoy playing games	3
	I learn better with the education program	3
	Activities make me laugh	2
	Total	35

The students' reasons for liking the activities in the implemented program were examined under the two main themes of the characteristics of activities and the characteristics of the students. Concerning the characteristics of the activities, 10 students found them enjoyable and two considered them easy to perform. As an example for this theme, S2 explained her/his view as follows: "The activities we performed were very enjoyable and nice. So, I wasn't bored at all".

Examining the characteristics of the students as a factor that affected their liking for the activities, it was determined that 10 students enjoyed solving problems. S7 gave the reasons for her/his liking of the activities as follows: "I very much enjoyed solving the problems in the stories given. I felt very good when trying to solve the problems". S27, one of the students commenting on the positive effect of the program on her/his relationship with other students, explained this as, "It was very good to work with my friends. I started to get along with the children I used to fight with. Even those who used to mistreat me are now OK with me". Table 9 shows the characteristics of the activities favored by the students.

Table 9. Characteristics of the activities liked by the students

Themes	Number of students (f)
All activities	20
Problem-solving	18
Story completion	8
Drawing	7
Writing	5
Story reading	3
Painting	2
Total	63

Table 9 presents a total of 63 statements of the participant students related to the activities implemented. Twenty students stated that they liked all the activities performed within the scope of the education program and 18 enjoyed the problem-solving activities. Specifically, story completion was liked by eight students, drawing by seven, writing by five, story reading by three, and painting by two. The students' views concerning the problem-solving process involved in the activities are given in Table 10.

Table 10. The students' views concerning problem-solving

Themes	Number of students (f)
Easy to solve the presented problems	28
Both easy and difficult to solve the presented problems	5
Difficult to solve the problems	2
Total	35

The themes given in Table 10 show that 28 of the students found it easy to solve the problems. S23 presented her/his view about this issue as, "It was easy to solve the problems in the text because I had encountered all those problems before in my life. This is why I didn't have any difficulty". Another participant, S30, stated, "It was easy to solve the problems because I learned more easily when solving the problems". In addition, S32 provided the following explanation: "Solving the problems was easy and fun because my friends and I found solutions to the problems easier by working together". Also S12 said, "It was easy to solve problems. Because when we have such problems at home, we can do the same activities with my mum. That's why I'm used to such things".

There were five students that considered problem-solving both easy and difficult. Among these students, S17 commented, "The problems were thought through; so, they were both easy and difficult". In addition, S1 explained, "It was easy to solve the problems because I had usually solved them before. But it was also a little hard because the teacher wasn't helping. We solved them on our own".

Two students referred to the difficulty of performing the evaluation activities after the problem-solving stage, of whom S31 stated, "It was easy to solve the problems but I had difficulty performing the drawing activity after problem-solving" and S33 responded, "I did not have any difficult solving the problems but it was hard to find titles for the stories".

The overall views of the students concerning the problem-solving activities showed that they did not generally have difficulty in this process. What was challenging for some students was to create products related to the solution after the problem-solving process.

Characteristics of the Outputs Produced by the Students

This subsection presents the data obtained as a result of examining the characteristics of the outputs produced by the students during the social problem-solving education program. Table 11 shows the characteristics of the products presented by the students in relation to the story completion activity.

Table 11. Characteristics of the outputs presented by the students related to story completion

Main themes	Sub themes	Number of students (f)
Related to the lesson topic	Completed the story by associating it with the lesson topic	27
	Did not provide a suggestion to complete the story	8
Related to problem-solving	Completed the story in a way that clearly solved the problem	17
	Completed the story in a way indirectly solved the problem	12
	Did not make an association with problem-solving	6

When the outputs of the students in relation to the story completion activity was examined, it was found that they mostly gathered under the two main themes of 'related to the lesson topic' and 'related to problem-solving'.

Twenty-seven students completed the story by associating it with the lesson topic and eight students left this item blank, not providing a suggestion to complete the story. Concerning the association between the completed stories and problem-solving, a total of 17 students completed the story in a way that clearly solved the problem, 12 students' story completion indirectly solved the problem, and the remaining six students did not make an association with problem-solving when trying to complete the story.

When the data obtained were examined, it was seen that the students who completed the stories by relating them to the lesson topics and those that completed the stories with the purpose of clearly solving the problem in the story were in the majority. Table 12 presents the data regarding the activity to provide an appropriate title for the solution of the problem presented in the story within the scope of the implemented program.

Table 12. Characteristics of the titles presented by the students in the story activities

Themes	Number of students (f)
Wrote a creative title for the solution of the problem	21
Wrote the name of the lesson topic as the title of the text	11
Left the section blank	3
Total	35

Twenty-one students were able to provide a creative title for the solution of the problem given in the story. For example, S1 offered the title, "Don't Be a Traffic Monster" for the text about traffic rules, S11 suggested using "I Don't Upset My Friends" for the story about the effect of one's behavior on others, and S23 presented the title, "This Environment Belongs to All of Us" for the text related to the protection of environment. Eleven students chose to give the name of the lesson topic as the title of the text; i.e., "Traffic Rules" and "Protect the Environment" were among the titles offered by the students for the related texts. In addition, three students left this section blank without providing any suggestions for titles.

After solving the problems in the stories, the students were engaged in producing creative outputs related to the solutions they identified. The data obtained in relation to these outputs are given in Table 13.

Table 13. The outputs of the students related to the solutions to the problems presented

Themes	Number of students (f)
Produced a creative poster	11
Wrote a slogan	10
Drew pictures	9
Prepared brochures	3
Wrote poems/lyrics	2
Total	35

In relation to the solutions to the problems presented in the stories, 11 students produced a creative poster, 10 wrote a slogan, nine drew pictures, three prepared brochures, and two wrote poems/lyrics. It was also determined that the students were happier to present their products in the form of drawings or paintings.

For all the results obtained, the qualitative data supported the quantitative data. In line with the quantitative data, it can be stated that after the social problem-solving education program, the students developed their skills related to creating alternative solutions, selecting a suitable solution, and estimating the results of the selected solution. Furthermore, the qualitative data revealed that the majority of the students liked the activities of the program, solved the problems clearly and by associating them with the lesson topic, generally enjoyed the process, and presented creative outputs.

Discussion and Conclusion

Social problem-solving aims to enable individuals to identify problems they face in daily life and find appropriate solutions for them. It is therefore important to include this skill in the life skills course provided in primary education in Turkey considering that this course is designed to cover different everyday experiences and contexts.

In this study, it was determined that the social problem-solving education program implemented with third-grade students in the life skills course had positive effects on the students' social problem-solving skills. The students' pre-test and post-test scores in the Social Problem-Solving Skills Scale developed by Uzunkol and Yel (2016) revealed that their scores in the subdimensions of producing alternative solutions, selecting a suitable solution, and estimating the results of the selected solution increased following their participation in the program. In addition, it was determined that four months after the implementation the students had retained the skills they acquired during the social problem-solving education program.

This result is consistent with the findings of Uzunkol and Yel (2016), who investigated the effects of the value education program provided for the third-grade students within the life skills course. The authors reported that the value education program had a positive effect on the students' social problem-solving skills and empathy levels. In another literature study, Mağden and Yaban (2016) reached parallel results. They explored the role of teaching programs prepared to support the social problem-solving skills of psychosocially disadvantaged eight- to 12-year-old children attending a primary school. The results obtained showed that there were significant differences between the pre-test and post-test scores of the children. In addition, the teaching program contributed to the children's ability to identify more solutions and alternatives to hypothetical problems.

It is seen that the educational programs implemented in this study have a positive effect on the social problem solving skills of the students, such as the achievement of significantly higher results from the Social Problem Solving Skills Scale of the students. For example, in a study conducted by Lillard (2012), it was revealed that the Montessori education program positively affected the social problem-solving skills of preschool children. The Montessori program provided opportunities for children to use appropriate social problem-solving strategies, and in particular to understand the judgments of other

individuals and take into account the goals of others. Similarly, Dereli (2017) examined the effect of the Montessori education program on the psychosocial development and social problem-solving skills of four- to five-year-old children attending pre-school education and reported that this program was effective in children's psychosocial development and social problem-solving skills. In the study of Altuntaş and Altınova (2015), it was concluded that the education program prepared with creative drama had a significant effect on the social problem solving skills of university students.

In another study, Valadi et al. (2020), it is seen that there is a significant relationship between the environments in which 18-42 month-old children are at home and their environment, and the effect of social problem solving skills, social-personal and communication skills. For this reason, in this study, it was stated that various toys and the environments that have problems in the home and outside should be around the child, which can activate the child in lifelong learning. This situation coincides with the fact that the daily life problems in the social problem solving education in the current study are reflected to the child, so that the child solves the problems and acquires these skills.

When the qualitative results of the current study were examined, it was observed that the students generally liked the activities included in the social problem-solving education program. One of the reasons behind this positive attitude was that the students started to have better relationships with their peers through working together to complete the activities. According to the statements of these students, during the implementation of the program, they even got along with children they used to disagree with before the training. This result is supported by Dereli-İman (2013), who determined that the social problem-solving skills of pre-school children significantly predicted pre-school behavioral problems. In other words, as the social problem-solving skills of children increase, their behavioral problems decrease. Furthermore, Koruklu (2015) examined the direct and indirect relationships between undergraduate students' personality, self-esteem and social problem-solving, as well as the mediating role of self-esteem in the relationship between personality and social problem-solving. The author found that social problem-solving was positively correlated with self-esteem, extraversion, sensitivity, openness, conscientiousness, and compatibility, and negatively correlated with emotional instability. As in the studies by Dereli-İman (2013), and Koruklu (2015), the present study also revealed the development of positive behavioral traits in students with the help of the social problem-solving education program, and they also started to get on better with their classmates.

Among the other results of the study, the majority of the students stated that they liked all the activities in the implemented program, and particularly the problem-solving, story completion, drawing, writing, story reading and painting activities. Some of the students that found it easy to solve the problems in the stories commented that working with their peers had a more facilitating effect on the solution of these problems. This may be due to some children being more withdrawn when working on their own but having increased self-confidence in group work. A similar situation was observed by Walker et al. (2013), who investigated the effects of developmental change and shyness on social problem-solving in preschool children. Their findings showed that shyness had an influence on the development of social problem-solving in early childhood. The authors noted that while the social problem-solving skills improved over time in some of the shy children, others continued to experience difficulties in problem-solving and social interactions. Based on the results of the study, the authors suggested that engaging in positive peer interactions at an early age is crucial for shy children to develop social problem-solving skills. In another longitudinal study, Youngstorm et al. (2000) examined the social problem-solving skills in the period from preschool to the first year of primary school. Generally, it was determined that as the students' age increased, they worked more comfortably to find solutions to problems and presented more prosocial solutions. In addition, peer relations were also in the foreground. For example, it was concluded that in primary school years, shy children were more passive in social problem-solving compared to sociable students.

In this study, when the students' views about problem-solving were examined, it was seen that they did not generally have difficulty in this process. For some of the students, it was sometimes difficult while at other times it was easy to solve the problems. This is a remarkable result because the students who elaborated their views on this issue commented on the fact that the teacher did not help them solve the problems. In one of the parallel studies in the literature belonging to Şahin (2011), one of the social skills, cognitive problem-solving, was investigated, and the Turkish and Flemish preschool teachers' views were elicited using the Teacher's Interpersonal Problem-Solving Questionnaire. According to the results, the Turkish teachers tended to solve problems as they arose. They usually chose to offer a solution or suggestion for the problem presented. However, preschool teachers in Belgium analyzed the problems with the children and guided the children to produce various solutions and used awards frequently in this process. The author suggested that guiding children in the problem-solving process is more important than directly presenting a solution. In the current study, it was also observed that students who said that it was easy to solve problems attempted to solve similar problems with their families at home. In accordance with this result, in Dereli's (2019) study, it is said that parents' social problem solving is an important factor in the acquisition of children's social problem solving. Similarly, in the study of Cartıllı and Bedel (2015), it was found that social problem solving skill education has a significant effect on increasing the constructive and functional problem solving skill levels of mothers and their relationships with their children.

Another finding of the current study concerned the students' approach to story completion. The students generally completed the stories that contained problems by associating them with the lesson topic and trying to find a clear solution to the presented problem. Those that attempted to complete the stories without referring to the topic at hand or the presented problem were in the minority. In addition, the results regarding the activity in which the students were asked to provide a creative title for the given text showed that the majority of the students produced a creative title about the problem. Furthermore, after solving the problems presented in the text, the students were able to prepare creative posters, write slogans, make drawings, prepare brochures and write poems/lyrics about their solutions. Supporting these results is the study by Ogoemeka (2011), who revealed that social problem-solving and creativity were closely related.

In the study of Ogoemeka (2011), various factors affecting the social problem solving skills of middle school third grade students were examined. According to the results, it was seen that adaptation was effective in predicting social problem solving. After examining various factors affecting the social problem-solving skills of the third-grade secondary school students, the author noted that adjustment was effective in predicting social problem-solving. When the variables were analyzed individually, creativity and cognitive ability were found to be strong predictors of adjustment, and creativity was a strong predictor of social problem-solving. Based on these findings, the author proposed to organize an intervention program to develop students' emotional intelligence, creativity, cognitive abilities, self-efficacy, and problem-solving skills.

Based on the results of this research, it can be stated that the education program developed based on identifying and solving social problems increased the students' related skills. Therefore, it is important to include routine activities related to social problem-solving in the curriculum of courses with social content, such as life skills and social studies. In conclusion, social problem-solving education is very important in all educational stages from the preschool years to primary, secondary, high school and university education. As revealed by the studies in the literature, social problem-solving has considerable positive effects on students, and this skill is important for students to solve many problems both in school and daily life.

The limitations of this study are:

- The study is limited to 35 students in one of the third grades of a public primary school in the European side of Istanbul.

- Social problem solving education was shaped with four outcomes selected from the 3rd grade life science lesson.

- The education provided is limited to a total of 16 class hours.

- The study is limited to the experimental group only.

- The time it takes to monitor the status of social problem solving skills after implementation is limited to four months.

Suggestions

Further studies can be focus on applications similar to the social problem-solving education program presented in this study within courses included in the primary school curriculum, considering that most studies in the literature targeted the preschool period.

It is important to ensure that teachers can apply social problem-solving education in their classrooms in a qualified manner and integrate them into various courses. For this purpose, in-service training can be provided for teachers to increase the quality of such education programs.

Considering the importance of the family in social problem-solving education, future studies in this area can be conducted with students and their families.

The current study had a mixed-methods design, in which both quantitative and qualitative methods were utilized. In future studies, the use of qualitative methods, such as action research may provide additional data. The detailed examination of students and teachers over a longer period regarding the social problem-solving process related to a selected course can offer a better understanding through the use of different data collection tools.

In this study, social problem-solving education was applied to only one group. The pre-test, post-test and follow-up test were administered to this group to examine the effect of the education program on the students' social problem-solving skills and the follow-up of these skills after four months. It is suggested that further studies should include experimental-control groups and utilize an interrupted time series design.

References

Aksu, M. H., Yığman, F., Ünver, H., & Özdel, K. (2019). The relationship between social problem solving, cognitive factors and social media addiction in young adults: A pilot study. *Journal of Cognitive Behavioral Psychotherapy and Research, 8*(3), 164-169.

Altuntaş, O., & Altınova, H. H. (2015). The effect of the creative drama method on the social problem solving skills. *Turkish Studies, 10*(4), 49-62.

Arı, M., & Yaban, E. H. (2012). Age and gender differences in social problem solving skills of 9-11 year-old children. *Education and Science, 37*(164), 188-203.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology, 2*, 21-41. doi:10.1111/1467-839X.00024

Beckisheva, T., Gasparyan, G. A., & Kovalenko, N. A. (2015). Case study as an active method of teaching business English. *Procedia Social and Behavioral Sciences, 166,* 292-295.

Bozkurt Yükçü, Ş., & Demircioğlu, H. (2017). Examination of the social problem solving skills of preschool children in terms of various variables. *Journal of Early Childhood Studies, 1*(2), 216-238.

Bozkurt Yükçü, Ş., & Demircioğlu, H. (2020). Examining the predictor effect of parents' emotional literacy level on the emotion regulation and social problem-solving skills of children. *Early Child Development and Care.* doi:10.1080/03004430.2020.1720671

Canter, A. (2004). A problem-solving model for improving students' achievement. *Principal Leadership Magazine, 5*(4), 101-107.

Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science, 11*(4), 302-306.

Cartıllı, K., & Bedel, A. (2015). The effect of social problem solving skills training on the mothers' social problem-solving and child relation. *Turkish Psychological Counseling and Guidance Journal, 5*(43), 95-105.

Chang, E. C., & D'Zurilla, T. J. (1996). Relations between problem orientation and optimism, pessimism, and trait affectivity: A construct validation study. *Behaviour Research & Therapy, 34*, 185-194.

Christensen, L. B., Johnson, R. B., & Turner, L. A. (2015). *Research methods design and analysis* (A. Aypay, Ed. & Trans.). Ankara: Anı Yayıncılık.

Creswell, J. W. (2015). *Qualitative inquiry & research design: Choosing among five approaches* (M. Bütün & S. B. Demir, Ed. & Trans.). Ankara: Siyasal Publishing.

Creswell, J. W. (2016). *Research design qualitative, quantitative, and mixed methods approaches* (S. B. Demir, Ed. & Trans.). Ankara: Educating Book.

Dember, W. N. (1974). Motivation and the cognitive revolution. *American Psychologist, 29*, 161-168. doi:10.1037/h0035907

Dereli, E. (2017). Investigation of the effects of the montessori educational program on children's psychosocial development and the social problem solving skills. *Ahi Evran University Journal of Kırşehir Education Faculty, 18*(2), 135-153.

Dereli, E. (2019). The prediction of parents' social problem solving on chidrens' social problem solving. *Cumhuriyet International Journal of Education, 8*(1), 113-134.

Dereli-İman, E. (2013). Adaptation of social problem solving for children questionnaire in 6 age groups and its relationships with preschool behavior problem. *Educational Sciences: Theory & Practice, 13*(1), 491-498.

George, D., & Mallery, P. (2010). *Spss for windows step by step: A simple guide and reference.* Boston: Allyn & Bacaon Pearson.

Güven, Y., Ayvaz, E., & Göktaş, İ. (2019). Investigation of the relationship between theory of mind and social problem solving skills of preschool children. *Journal of Early Childhood Studies, 3*(1), 76-97.

Jones, K. A. (2003). Making the case for the case method in graduate social work education. *Journal of Teaching in Social Work, 23*(1/2), 183-200.

Kabapınar, Y., & Baysal, Z. N. (2004). Reflecting life itself to social studies teaching in primary schools: Design and evaluation of a teaching-learning sequence based on newspapers. *Educational Administration in Theory & Practice, 39*(39), 385-419.

Kasik, L., & Gál, Z. (2016). Parents' and teachers' opinions of preschool children's social problem-solving and behavioural problems. *Early Child Development and Care, 186*(10), 1632-1648. doi:10.1080/03004430.2015.1120297

Koruklu, N. (2015). Personality and social problem-solving: The mediating role of self-esteem. *Educational Sciences: Theory & Practice, 15*(2), 481-487.

Lillard, A. S. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology, 50*(3), 379-401.

Mağden, D., & Yaban, E. H. (2016). Social problem solving training for environmentally deprived 8-12 aged children. *Journal of Society & Social Work, 27*(1), 25-40.

Merrill, K. L., Smith, S. W., Cumming, M. M., & Daunic, A. P. (2017). A review of social problem-solving interventions: Past findings, current status, and future directions. *Review of Educational Research, 87*(1), 71-102. doi:10.3102/0034654316652943

Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook qualitative data analysis.* London: Sage Publications.

Ministry of National Education. (2018). *Life studies course curriculum: 1st, 2nd and 3rd grades.* Ankara: Ministry of National Education Publishing.

Mostert, M. P. (2007). Challenges of case-based teaching. *The Behavior Analyst Today, 8*(4), 434-442.

Nezu, A. M. (2004). Problem solving and behaviour therapy revisited. *Behavior Therapy, 35,* 1-33.

Ogoemeka, O. H. (2011). Correlate of social problem-solving and adjustment among secondary school students in Ondo State. *Nigeria. Procedia-Social and Behavioral Sciences, 30,* 1598-1602.

Patton, M. Q. (2014). *Qualitative research & evaluation methods* (M. Bütün & S. B. Demir, Ed. & Trans.). Ankara: Pegem Publishing.

Pringle, K. C. (2017). *An exploratory investigation of the effects of power-solving, a social problem solving method, on students with communication impairments* (Unpublished master's thesis). Rowan University, New Jersey, USA.

Ranjbar, M., Bayani, A. A., & Bayani, A. (2013). Social problem solving ability predicts mental health among undergraduate students. *International Journal of Preventive Medicine, 4*(11), 1337-1341.

Rausch, J. R., Maxwell, S. E. & Kelley, K. (2003). Analytic methods for questions pertaining to a randomized pretest, posttest, follow-up design. *Journal of Clinical Child and Adolescent Psychology, 32*(3), 467-486.

Ridley, C. A., & Vaughn, S. R. (1982). Interpersonal problem solving: An intervention program for preschool children. *Journal of Applied Developmental Psychology, 3*(3), 177-190.

Rowe, D., & Newton, J. (1994). *You, me, us: Social and moral responbility for primary schools*. London: Citizenship Foundation & The Home Office.

Smith, S. W., & Daunic, A. P. (2006). *Managing difficult behaviors through problem-solving instruction: Strategies for the elementary classroom*. Boston, MA: Pearson Allyn and Bacon.

Storm, B. C., & Angello, G. (2010). Overcoming fixation: Creative problem solving and retrieval-induced forgetting. *Psychological Science, 21*(9) 1263-1265.

Şahin, D. (2011). Pre-schoolers, pre-school teachers, and interpersonal problem-solving skills: A comparative study in Turkey and Belgium. *Education 3-13, 39*(3), 305-316. doi:10.1080/03004270903514338

Topu, F. B., Baydaş, Ö., Turan, Z., & Göktaş, Y. (2013). Common reliability and validity strategies in instructional technology research. *Çukurova University Faculty of Education Journal, 42*(1), 110-126.

Urbain, E. S., & Kendall, P. C. (1980). Review of social-cognitive problem-solving interventions with children. *Psychological Bulletin, 88*, 109-143. doi:10.1037/0033-2909.88.1.109

Uzunkol, E., & Yel, S. (2016). Effect of value education program applied in life studies lesson on self-esteem, social problem-solving skills and empathy levels of students. *Education and Science, 41*(183), 267-292.

Valadi, S., Gabbard, C., & Hooshyari, F. (2020). Effects of affordances in the home environment on children's personal-social, problem-solving, and communication skills. *Child: Care, Health and Development, 46*, 429-435. doi:10.1111/cch.12756

Walker, O. L., Degnan, K. A., Fox, N. A., & Henderson, H. A. (2013). Social problem solving in early childhood: Developmental change and the influence of shyness. *Journal of Applied Developmental Psychology, 34*(4), 185-193.

Welton, D. A., & Mallan, J. T. (1999). *Children and their world.* Boston: Houghton Mifflin Company.

Yaban, E. H., & Yükselen A. (2007). Social problem solving skills in a group of children in need aged seven-eleven. *Society and Social Work, 18*(1), 49-67.

Youngstorm, E., Wolpaw, J. M., Kogos, J. L. Schoff, K., Ackerman, B., & Izard, C. (2000). Interpersonal problem solving in preschool and first grade: Developmental change and ecological validity. *Journal of Clinical Child Psychology, 29*(4), 589-602.

Yurdugül, H. (2005). Use of scope validity indexes for scope validity in scale development studies. In *XIV. National Educational Sciences Congress* (pp. 1-6). Pamukkale University, Denizli.

Appendix 1. Course Plan

Course: Life Skills

Grade: 3rd grade

Unit: Safe Life

Subject: Traffic Rules

Duration: 4 class hours

Learning outcome: Gives examples of the need to obey the rules in traffic.

Method-Technique: Case study, question-answer, discussion, drama.

Process:

1) *Recognizing and defining the problem (1 class hour)*

   a) *Students are asked questions and answers about what problems they may encounter in traffic in their lives.*

   Questions:
   - What would be the problems that you may encounter in traffic?
   - What kind of traffic problems have you experienced before?
   - How did you solve these problems?
   - Who did you get help to solve these problems?
   - After resolving the problems you encountered, did you experience the same difficulties when you encounter similar problems?

   b) *Providing images and text as examples of various problems that might occur.*
   - Bringing a newspaper-based case study about traffic problems into the classroom, reading and reading to students.

Resource: (Kabapınar & Baysal, 2004)

   c) *Discussing the possible solutions to these problems.*
   - Is it right or wrong to impose a sentence on the child in the news for this behavior? Why is that?
   - Are there any such problems in traffic around you?
   - If you were the father, what kind of reaction would you show to that child?
   - What other consequences can there be to regret not obeying the rules in traffic?

2) *Solving the problem (2 class hours)*

a) *Analyzing a story that contains elements from daily life and presents a social problem.*

One day, Ümit got into the car with his mother and father to go to the zoo. However, his father did not allow him to sit in the front seat. But he persistently wanted to sit forward. Because one of his friends at school, Levent always said he was sitting in the car. But Ümit's father said that the children cannot sit in the front seat.

One day, they set out with their family. Ümit sat sadly in the back seat and set off towards the zoo. His mother was sitting in the front seat, but she was not wearing the seat belt. On the way, after a sudden brake his father had to make suddenly, his mother hit her head on the glass. It was very painful, but fortunately nothing happened. Ümit thought, if he was the one sitting ahead ...

b) *Asking various analysis questions and getting answers about the problem in the text.*

- How old do you think Ümit might have been? Why is that?
- Do you think Ümit wants to sit in the front seat? is it wrong? Why is that?
- Do you think it's true that her mother is not wearing a seat belt? is it wrong?
- Would you like to sit in the front seat if you were in Ümit's place?
- Would you let your child sit forward if you were in Ümit's father's place?
- What do you think are the rules to be followed in traffic?
- What can happen to you if these rules are not followed?

c) *Having the students solve the problem presented in the story together in groups.*

The teacher said to the students,

- "We are now forming groups of 5 people. We are working with our group friends on this problem that Meltem is experiencing. " and asks them to reflect on the questions below.
- What do you think we can do to avoid such problems?
- Have you ever experienced anything like this in your life?
- What would happen if you brought the rest of this text? Let's write and think about how to solve the problem and bring it to life in the classroom.
- What would you write if you want to find a suitable title for this text? Let's think and write creative titles. Let's consider the titles written by each other.

3) *Evaluation and reviewing (1 class hour)*

a) *Creating a product concerning the solution of the problem presented in the story.*

- If you were the state-eligible state that sets traffic rules, what would you do to ensure that these rules are followed by the whole country? Tell your thoughts with the posters and slogans you will prepare. After the students prepare their posters and slogans, they are asked to make peer reviews and evaluate each other's products.
- Write a letter to all people in the country to invite them to awareness to obey traffic rules. They are shared and discussed with their group mates, and then with all their classmates.