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The Effects of Interpersonal Cognitive Problem-Solving Programme on Turkish Pre-school Children

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Abstract

The high-risk behaviours of pre-schoolers, which may cause more serious problems in adolescences' period, can be prevented or reduced by well-structured educational programmes. In the light of this approach, this study describes the effectiveness of the Interpersonal Cognitive Problem-Solving Programme (ICPS), on developing cognitive problem-solving skills of Turkish pre-school children. One-group pre-test–post-test design was used to examine the problem-solving skills of 45 children. The findings show that ICPS has a significant effect on developing problem-solving skills of pre-school children. Moreover, the ICPS-trained children were significantly effective to resolve problems with peers and adults. There was no significant difference between boys and girls regarding to their interpersonal problem-solving skills.

Keywords: Interpersonal cognitive problem-solving, preschool education, social skills, high-risk behaviours.

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1. Introduction

Pre-school education is a crucial step for developing cognitive, social, emotional and physical skills of children. Acquired problem-solving skills may help youngsters to think flexible and cope with any real-life problems. Moreover, those skills prepare them for dynamic society of the 21st century. Pre-school children can improve their social skills and competences within their school environment. In this context, to develop children’s social and cognitive skills and to make them deal with real-life problems, Interpersonal Cognitive Problem Solving (ICPS) programme has been designed by Shure (1992) and adapted to Turkish by Ogulmus (2001). It aims to teach children how to think, rather than what to think and helps children to resolve typical interpersonal problems with peers and adults (Shure, 2001). Problem-solving skills can be gained and improved through well-structured educational programmes in schools. The purpose of this study is to examine the effectiveness of the Interpersonal Cognitive Problem-Solving Programme (ICPS), on developing cognitive problem-solving skills in terms of ‘alternative solution thinking and consequential thinking’ of five- and six-year-old Turkish pre-school children.

1.1. The interpersonal cognitive problem-solving programme

ICPS (so-called I Can Problem Solve) for pre-school children contains sequenced games, puppets and dialogues around three levels of language and thinking skills (Shure, 1992). The ICPS programme accomplishes three objectives such as:

- 1. teaching children how to think rather than what to think, in ways that will help them to solve real-life interpersonal problems with peers and adults;
- 2. reducing and preventing early high-risk behaviours such as aggression, inability to wait and cope with frustration and social withdrawal that predict later, more serious problems such as violence, substance abuse and depression;
- 3. helping teachers and parents to apply a problem-solving style of communication, therefore, children can associate how they think with what they do, and how they behave.

It aims to develop a problem-solving thinking ‘style’ that would guide children to produce alternative solutions for everyday problems. Table 1 shows the content of the ICPS approach (Shure, 2001).

Table 1. The content of problem-solving skills training programme

Courses	Problem-solving pre-skills
1–10	Teaching the vocabulary of the programme (is, is not, some-all, same-different)
11–18	Assisting children to know their and others’ emotions
19–22	Encouraging the children to develop skills related to listening and paying attention
23–28	Introducing the concepts of why-because, maybe-perhaps to the children
29–31	Teaching to acknowledge individual differences and learn others! choices
32–33	Helping children to figure out what is honest or fair or not...
Problem-solving skills	
34–38	Alternative solutions: helping children to understand what the problem is and to learn to produce numerous possible solutions producing ways
9–50	Possible solutions: helping children to learn sequential thinking as the pre-requisite to understand cause-effect relationships
51–59	Matching the possible solutions with the possible effects: providing children with the possibility to practice to see the linkage between a possible solution and a possible effect

2. Methods

2.1. Participants

In this study, as an experimental design, one-group pre-test–post-test design was used. The sample study consisted of 45 (21 girls and 24 boys) pre-school children (aged 5 and 6) who studied in a private pre-school in Ankara, Turkey. Since the researchers are also the teachers of this private school, convenience-sampling technique was used to select the research group.

2.2. Data collection

First, to determine the interpersonal problem-solving levels of children, researchers applied pre-test–post-test as the pre-school interpersonal problem solving test, which was developed by Shure (1990) and adapted to Turkish by Dincer (1995). After the pre-test data collection, the pre-school teachers were trained by the researchers on how to apply 59 courses of ICPS in their lessons. Teachers implemented ICPS at the beginning of their lessons for 20 minutes per two or three days of a week. In continuation, post-test data were collected by the researchers.

3. Results

In the analysis of the data, to examine the children' pre-test–post-test scores of solving peer and adult (mother-child) problems, Wilcoxon signed ranks test was used. The findings obtained as a result of the analysis are presented in Tables 2 and 3.

Table 2. Wilcoxon signed ranks test results regarding pre-test–post-test scores of solving peer problems

Post-test–pre-test	<i>n</i>	Mean rank	Sum of ranks	<i>Z</i>	<i>p</i>
Negative ranks	8	18.63	149.0	3.441	0.001
Positive ranks	31	20.35	631.0		
Ties	6				

Table 3. Wilcoxon signed ranks test results regarding pretest-posttest scores of solving mother-child problems

Post-test–pre-test	<i>n</i>	Mean rank	Sum of ranks	<i>Z</i>	<i>p</i>
Negative ranks	10	12.05	120.5	3.422	0.001
Positive ranks	26	20.98	545.5		
Ties	9				

The results of this study demonstrate that ICPS programme has a significant effect on developing problem-solving skills of pre-school children. Tables 2 and 3 show that ICPS training was significantly effective to resolve problems with peers and adults. There was no significant difference between boys and girls regarding to their interpersonal problem-solving skills.

4. Conclusion

ICPS is not a new curriculum to apply in the classroom; it can be adopted into the existing ones, therefore, it serves as a benefit for both teachers and children. According to teachers, it reinforces curriculum objectives and creates a more positive classroom atmosphere. It decreases time spent, while handling conflicts among children and enhances teachers' own problem-solving skills. On the other hand, as benefits for children, ICPS helps youngsters to build self-confidence, listening and communicating skills. It encourages them thinking about new and alternative solutions for their

problems. It facilitates positive social interaction within classroom and teaches children to be able to wait, while demanding or coping with their frustration (Shure, 1992).

In the light of this study, if children can learn to solve their real-life problems, they are less likely to become impulsive, insensitive, withdrawn, aggressive or antisocial. In addition to behaviour change, ICPS-trained children also do better in their academic curriculum. Those children can appreciate how people feel, decide what to do and evaluate whether the idea is or is not a good one (Shure & Digeronimo, 1996).

5. Implications

To examine the effectiveness of ICPS programme in Turkey, true experimental designs can be conducted with different kind of research groups. Besides, problem-solving skills can be relevant with other cognitive skills, to determine the effectiveness of the programme, it can be tested with related cognitive variables.

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