

ISSN: 2357-1330

http://dx.doi.org/10.15405/epsbs.2017.09.15

3rd icH&Hpsy 2017

3rd International Conference on Health and Health Psychology

LONG-TERM EFFECT OF SOCIAL SKILLS TRAINING PROGRAM FOR SECOND GRADERS

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Abstract

Middle childhood is an important period for reducing social and behavioural difficulties, though existing social skills training programs in Lithuania are not effective to help solving these problems. The aim of this study was to create and evaluate the short-term and long-term effects of a social skills training program based on an integrated theoretical model for second grade schoolchildren. The purpose of the program was to teach children non-verbal language, empathy, conflict resolution, and problem-solving skills. Social skills were measured using the Primary School Social Competence Scale (Magelinskaitė, 2010) and Strengths and Difficulties Questionnaire (Gintilienė, Girdzijauskienė, Černiauskaitė, Lesinskienė, Povilaitis, 2004). The sample for this study was taken from one of the Catholic schools in Lithuania. From 42 second grade students, 24 were chosen and divided into two equal groups (experimental and control). The first screening was carried out before the social skills training, the second - one week after the training, the third - 3 months after the training. The results showed that self-control and conflict resolution skills significantly improved in the experimental group after the program, while interpersonal skills, ability to solve casual problems did not change significantly. Also, self-control skills improved significantly in three months after social skills training than before participating. In the control group, these skills did not change significantly directly after the program and there were no differences after three months from participation. This study has shown that the social skills training program can contribute significantly to the development of the second graders' conflict resolution skills and can have long-term effect on self-regulation skills. However, future studies should evaluate the social skills training program using a larger sample size and more focused statistical tests.

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Keywords: Social skills training, primary school age.



1. Introduction

The middle childhood (6-11 years) period is an important period for the development of children's social skills. These skills are important for children in their daily activities, such as greetings, apologies, and ability to follow the rules. They also help to build healthy relationships and adapt to the society. Thus, it is important to teach these skills at an early age when they are most needed (Seçer, Gülay, Önder, Kara, 2012). Further, children who have communication related difficulties at primary school are more likely to be rejected by classmates and they get less positive feedback from teachers (Webster-Stratton, Reid, 2004). Moreover, children who fail to develop social skills in the early elementary years become more resistant to social skills interventions over time. Therefore, social skills interventions at an early age help to deal with existing behavioural and learning difficulties and can prevent difficulties in the future (Hall, Jones, Claxton, 2008).

There are various social skills training programs for pupils in Lithuania (e.g. *Zippy friends, Second step, Olweus, Life skills education program*), however social and behavioural difficulties still remain at a high level in our children's population. The research shows that two out of three Lithuanian schoolchildren face bullying (Skruibis, & Povilaitis, 2015) and according to Health Behaviour in Schoolaged Children study in 2013/2014 Lithuania had the largest percentage of children who experienced bullying from 42 participating countries (Inchley, & Currie, 2013). Moreover, number of cyber-bullying cases are also increasing in Lithuania children population (Zaborskis, 2014). It can be assumed that existing social skills training programs in Lithuania are not effective enough to teach children social skills. Therefore, it is important to create and evaluate effectiveness of the social skills training program for the primary schoolchildren in short and long perspective in order to combat aforementioned difficulties in Lithuanian primary schools.

2. Problem Statement

The social skills training program was created based on theoretical models, social skills and learning methods that were used in other programs in Lithuania and abroad (Dracinschi, 2012, Lions Life Skills, 2015; Bulotaitė, Gudžinskienė, 2004; Child Trends, 2015; NREPP, 2014). Therefore, analysis of the theoretical models of the programs shows, that usually more than one psychological theory is used, for instance, attachment, emotional intelligence and cognitive-behavioural (O'Leary, 2012; Allen Kronenberg, 2014). This suggest that, the usage of the multiple theoretical model may help to achieve higher effectiveness of the social skills training program. Studies also suggest that social skills training programs for primary school children should be targeted to strengthening skills oriented to communication with other people (e.g. empathy, conflict management, responsibility) and also to the self-regulation needs (e.g. casual problem-solving, behaviour management, understanding of own feelings) (Bakan, 1966; as cited in Rose-Krasnor, 1997; Perren, Forrester-Knauss, Alsaker 2012). Moreover, meta-analysis and guidelines on effective education practice suggest that experiential approaches and modelling are the most effective methods of teaching children new skills (Berkowitz, 2007; January, Casey, Paulson, 2011).

to not evaluating long-term effect (Neil, Christensen, 2009).

The social skills training programs in Lithuania and abroad emphasize that interventions have a positive impact on children's social skills, for example, communication with peers, managing own behaviour, ability to calm self, and to take responsibility of own actions (Demanchick Johnson, 2004; Hallam, 2009; Humphrei, Lendrum, Wlgelsworth, 2010; Chhadva, Kacker, 2013); however, these researches have methodological issues, which might be important for misrepresentation of the results. Usually effectiveness of the programs is evaluated by measuring changes in experimental group without comparing it to control group (Demanchick Johnson, 2004; Hallam, 2009; Humphrei, Lendrum, Wlgelsworth, 2010; Chhadva, Kacker, 2013). In addition, most of the analysed studies do not present the effect sizes of the intervention, which are important for the evaluation of the effectiveness of the programs (Demanchick Johnson, 2004; Hallam, 2009; Humphrei, Lendrum, Wlgelsworth, 2010; Chhadva, Kacker, 2013). Finally, effects of the social skills training programs might be overestimated due

Comparison of the social skills programs for primary school children indicates that most of the programs lack of methods that influence changes in behaviour and misses on developing some important social skills in primary school age. Also, analysed studies do not evaluate effect size and long-term effectiveness of the programs and that can misrepresent results. To summarise, it is important to create social skills program for second grade students in which experiential methods (modelling, praise for appropriate behaviour), self- and other-oriented social skills, integrated theoretical model (social learning, cognitive-behavioural, behavioural theory's) are used. Effect size analysis and long-term evaluation of the created program might be valuable in order to measure effectiveness of the social skills program.

3. Research Questions

- 3.1 Is the social skills training program effective to improve second graders' interpersonal, self-control skills, ability to solve problems and conflicts?
- 3.2 Does the effect of the social skills training program remain after three months from the implementation?

4. Purpose of the Study

The purpose of this study is to create and evaluate the social skills training program effectiveness to improve second graders' social skills and the long-term effect of the program.

5. Research Methods

5.1. Participants

From 42 2nd grade students 24 were chosen using PSSCS questionnaire for teachers and SDQ-Lit questionnaire with informed consent for parents. According to these results, 24 research participants were divided in two equal groups, in each group–12 students: 6 boys and 6 girls, their age ranged from 7 to 8 years, with a mean of 7.90 (SD = 0.297). The sample for this study was taken from one of the Catholic schools in Lithuania.

5.2.Measures

Social skills of the children were measured using Primary School Social Competence Scale (PSSCS) for teachers and Strengths and Difficulties Questionnaire for parents (SDQ-Lit). PSSCS was created by Janus, Brinkman, Duku, Hertzman, Santos, Sayers, Walsh (2007) and Bustin (2007) and was adapted to Lithuanian language by Magelinskaitė (2010). Questionnaire consists from 4 scales (self-control, social relationship behaviour, ability to solve casual problems, conflict resolution skills scales). The participants were asked to rate questions from 1 to 6, when 1 is "Very low" and 6 "Very often". The higher score indicates better child's social skills. Cronbach's alphas of all scales of the questionnaire were sufficient (ranged from .89 to .92). SDQ-Lit was adapted to Lithuanian language in 2004 by Gintilienė, Girdzijauskienė, Černiauskaitė, Lesinskienė, Povilaitis (2004), based on Goodman (1997) (Strengths and Difficulties Questionnaire). Questionnaire consists of 7 constructs, however, only two scales (emotional problems and problems with peers) were used for the purpose of this study. For the data analysis values of the scales were transformed so that the greater the score indicated lower levels of problems. These scales have appropriate reliability (emotional problems scale $\alpha = 0.73$; trouble with peers $\alpha = 0.60$).

The social skills training program consisted of 6 sessions which were organized once a week and lasted 45 minutes. Children from the experimental groups participated in this program, while the control group had no training. This program was based on social learning, cognitive-behavioural and behavioural theories, which highlight environment impact for schoolchildren social skills (Bandura, 1969; Sugai et al., 1999; Carr et al., 2002; Lochman et al., 1981). The purpose of this program was to teach children non-verbal language, empathy, conflict resolution, and problem-solving skills. Full description and methods used in the program is presented else there (Motiejūnaitė, Žardeckaitė-Matulaitienė, under review).

6. Findings

In the first part, experimental and control groups comparison before implementation of the social skills training program is presented, in the second part–short-term evaluation of the social skills training program, and in the last part–long-term evaluation of the social skills training program.

6.1. Comparison of experimental and control groups before implementation of the social skills training program

First of all, in order to find out if there are not any differences between experimental and control groups, nonparametric Mann-Whitney test was used for two-independent samples.

Table 01. Comparison of schoolchildren's social skills and academic achievement in experimental and control group before the social skills training program.

Variables	Experimental group (n=12)	Control group (n=12)	U			
Primary School Social Competence Scale						
Self-control	3.26	3.66	87.5			
Social relationship behaviour	3.88	3.53	68.0			
Ability to solve casual problems	3.26	3.65	83.5			

eISSN: 2357-1330

Conflict resolution skills	2.87	3.18	86.0
Academic achievement			
Parents evaluation	7.44	7.82	58.0
Teacher evaluation	6.09	7.00	85.0
Strengths and Difficulties Questionnaire			
Emotional problems	2.92	3.58	84.0
Problems with peers	2.75	1.83	56.5

^{*}p < .05.

The results showed that there were no statistical significant differences in social skills and academic achievement between these groups before social skills training program, p > 0.05.

6.2. Short-term evaluation of the social skills training program for changes in social skills in the experimental and control groups

In order to assess effectiveness of the training program for improvement of second grade students' social skills, the comparison of the social skills before and after the program implementation was made separately in the experimental and control groups using Wilcoxon signed-rank test (Table 2).

Table 02. Short-term evaluation of changes in social skills in the experimental and control groups after social skills training program.

Variables	Exp	Experimental group (n=12)			Control group (n=12)		
	Time 1	Time 2	p	Time 1	Time 2	p	
Primary School Social Competence Scale							
Self-control	3.26	3.74	.01*	3.66	3.73	.34	
Social relationship behaviour	3.88	3.88	.85	3.53	3.54	.95	
Ability to solve casual problems	3.26	3.46	.34	3.65	3.73	.57	
Conflict resolution skills	2.87	3.37	<.001*	3.18	3.14	.75	
Strengths and Difficulties Questionnaire							
Emotional problems	2.92	2.64	.80	3.58	2.70	.13	
Problems with peers	2.75	2.45	.72	1.83	1.50	.10	

Means are presented in columns.

The results, presented in Table 2, show that according to the teachers' evaluations children in experimental group have reached better capacity to manage their own behaviour (Z = -2.45; p =.01) and solve conflicts (Z = -2.684; p =.00); however, their social relationship behaviour and ability to solve casual problems do not increase significantly. No changes in experiment group's children social skills were found according to the parents' evaluations. Still there were no statistically significant changes in none of the scales in the control group either (Table 2).

Additionally, effect size analysis of the significant changes in social skills was done using Cohen' d criteria. The results showed that the impact of social skills training program had small effect to second grade children's self-control (d = -.471) and constructive conflict resolution (d = -.479) skills.

^{*}p<.05

6.3. Long-term evaluation of the social skills training program for changes in social skills in the experimental and control groups

In order to evaluate long-term effect of social skills training program children in experimental and control groups were tested third time, after three months from participating in social skills training program using Primary School Social Competence Scale.

Table 03. Long-term evaluation of changes in social skills in the experimental and control groups after social skills training program

Variables	-	Experimental group (n=12)			Control group (n=12)		
	Time 1	Time 3	p	Time 1	Time 3	p	
Primary School Social Competence Scale							
Self-control	3.26	3.85	.02*	3.66	3.74	.72	
Social relationship behaviour	3.88	4.08	.38	3.53	4.04	.09	
Ability to solve casual problems	3.26	3.40	.56	3.65	3.68	.41	
Conflict resolution skills	2.87	3.08	.42	3.18	3.35	.45	

Means are presented in columns

Evaluation of the long-term effectiveness of the social skills training program showed that children in the experimental group self-control skills had improved after three months from participating in the social skills program comparing to the initial screening (Z = -2.18; p = .02). Their social relationship behaviour (Z = -0.86; p = .38), ability to solve casual problems (Z = -0.58; p = .56) and conflict resolution skills (Z = -0.80; p = .42) were higher after three months from participating in program comparing to the initial screening, however, these differences were not statistically significant (Table 3). Social skills in the control group did not change significantly in the period of three months from the first evaluation (Table 3).

Additional analysis of the effect size of the long-term changes showed that program managed to reach medium effect size in self-control (d = -.61).

7. Conclusion

Studies show that social and behavioural difficulties in Lithuania children's population are high and it can be assumed that social skills training programs in Lithuania schools are not effective enough to help to solve these problems. Therefore, the aim of this study was to create and evaluate the social skills training program based on an integrated theoretical model and evidence-based programs applied in Lithuania and abroad schools. This program was based on social learning, cognitive-behavioural, behavioural theories and it was aimed at training children on problem-solving, empathy, conflict resolution, responsibility, control of owns behaviour and feelings.

The results indicate that social skills training program can contribute significantly to the development of the second-grade students' conflict resolution skills and can have long-term effect on self-regulation skills. These results go along with other studies confirming that social learning and cognitive behavioural theories can be useful for the development of children' ability to manage their emotions, and to follow the instructions and rules (Garrard, Lipsey, 2007; Webster-Stratton, Jamila Reid, Stoolmillerb, 2008; Benner, Beaudoin, Chen, Davis, Ralston, 2010). Also, research shows that methods like positive behaviour support and modelling reduce behaviour problems, improve self-regulation and conflict resolution skills (Benner et al., 2010; Little et al., 2010; Garrard, Lipsey, 2007).

^{*}p<.05

However, it is also important to note that, second grade students' ability to solve problems did not change during the program. It can be assumed that in order to implement this program, more time is needed for teaching problem-solving skills (e.g. two sessions instead of one dedicated for problem-solving).

Moreover, second grade students' ability to maintain social relationships with peers did not change significantly during the social skills program. One of the possible explanations of these results might be related to the differences in teachers' evaluations. There is evidence that teachers are more aware of children's behaviour that directly affects their performance in the classroom, such as ability to follow rules or to manage emotions (Rimm-Kaufman, Pianta, Cox, 2000; Lane, Wehbe, Cooleyv, 2006). However, children's social relationships usually display itself not during the academic activities, but outside the classroom, so it is more difficult for teachers to notice changes in these skills. On the other hand, methods, that were used to teach how to maintain social relationships, were less experiential and changed only knowledge about relationships and did not make significant changes in children's behaviour.

In addition, no significant changes in difficulties to communicate with peers and managing emotions were found in children behaviour after participating in the social skills training program based on parents' opinion. Two possible reasons of these results might be meaningful. First of all, it is possible that parents may not have noticed changes in child's behaviour, because unlike teachers, they do not have direct possibility to compare their own child's behaviour while communicating with other children in the classroom; so, their evaluations are more generalized (Achenbach, McConaughy, Howell, 1987; Quinn, Kavale, Mathur, Rutherford, Forness, 1999), (Coie, 1990; as cited in Webster-Stratton, Lindsay, 1999). Not enough time for visible changes in children's behaviour might be another possible explanation of these results.

Several methodological limitations should be considered in this study. Firstly, the results could be affected by the small sample size. Because of the limited number of participants in the study and significant differences from a normal distribution of the data the non-parametric tests were used, which are not as accurate as parametric and has less power, which means that differences that actually exist in the population often are not detected (Field, 2009). Secondly, statistical power of the study could also have decreased because of not randomizing experimental and control groups (Field, 2009). As study was conducted in one school, it was not possible to randomize classes. Replication of the created social skills training program in the bigger sample of the second graders using randomized sampling might help to draw more grounded conclusions about effectiveness of this program. Despite these limitations, this study showed that social skills training program can contribute significantly to the development of the second graders' conflict resolution skills and can have long-term effect on self-regulation skills.

Acknowledgments

No funding was received for this research.

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