



AN INVESTIGATION OF THE EFFECTS OF LIFE SAFETY BASIC TRAINING PROGRAM ON THE KNOWLEDGE OF SAFETY OF SIX-YEAR OLD CHILDREN

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ABSTRACT: The objective of this research is to investigate the effects of Basic Life Safety Training Program developed by the researchers on the children's "life safety" knowledge. The program was developed for six to seven-year-old children and composed of twelve different lectures. The survey took place at two preschool educational facility in Agri region and it was applied to a total of 30 children, i.e., 18 girls and 12 boys, studying in a six-year-old learning group. The final intent of the program is to raise awareness among the children for the possible dangers, to train them for alerting danger and getting out of any dangerous situation and to build some skills for how to act in danger. The program was developed to fit the development characteristics of six-year-old children. Individual interviews, ahead of and following the program, were conducted with the children participating in the survey. "Life Safety Training Program for Children" is composed of five sub-sections. Those are; child alone at home, child alone in the garden, child alone on the traffic, child abuse, child and fire. One can see the total efficiency of the program by considering the difference in the scores before and after the program. Putting the life safety training program in place to National Education Curriculum and thus providing a safety awareness in a systematic way in the early stages of childhood can be proposed.

Keywords: Basic Life Safety Training Program, Child, Education

1. INTRODUCTION

To provide life safety for human is the common goal and the biggest problem of all countries in the World. In the Human Development Report of United Nations back in 1994, the threats against human life safety were put on the table. The said report focused on whom the safety procedures are applicable to and how to put it in place and the report made it obvious that the most important factors in terms of safety are the individuals. To put it in a different way, the individuals were made to come forward with respect to the state, which is the basic reference for the safety, and it was underscored that the main item was the human factor. In the report of United Nations, the threats against human life safety were defined in seven categories. One of those threats is the threat against personal safety. Threats like suicide, drug usage, abuse, violence and assault to woman and children are acknowledged as the threats against personal safety (Aksu and Turhan, 2012).

Although each country is responsible for assuring its citizens safety, individual safety is a personal responsibility. Being cautious and using his/her common sense in daily life, an individual is going to reduce the risks for threats that he or she can encounter. Each individual is effective on achieving his own safety. One should try to take necessary precautions to prevent any danger. The individuals are needed to have some knowledge on basic preventive actions against personal safety threats. Although the issue of personal safety is frequently called out by

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mass media in Turkey, scientific research and studies are not sufficient to make the issue known for everyone. When taken a deeper look into the research activities regarding children safety, it was seen that dangers are underlined mostly, but the steps to get rid of those dangers are not mentioned enough.

Yıldız (2012) has conducted a study to define the applications and the corrective actions taken by the families regarding the accidents at home. The results have shown that 73.6% of the children exposed to any accident is the first child in the family and 55.1% of those are boys. 61.5% of the children are spending their time mostly in the sitting room. It was seen that 14.4% of those were using the garden. The windows of 58.9% of their houses are nested. 26.4% of the accidents are nearly in the mid of the day and they are mostly in the month of March (20.5%). While 70.4% of the mothers are generally not leaving their children alone at home, 66.3% of the mothers are leaving them at home in some urgent cases. 85.3 % of the mothers are picking the toys carefully. 67.2% of the mothers are keeping the house cleaning agents in the bathroom. Most of the accidents (72.6%) are of falling down or crushing type. 42% of those are taken to a hospital after exposing to an accident at home. 64.3% of the mothers have stated that the accidents at home can be prevented. Mothers those getting assistance in preventing accidents have got higher scores in terms of safety precaution against accidents. In the light of those results, it has been thought that there is a necessity of educating the mothers in some areas like knowledge and applications to prevent the accidents at home. It was suggested that the studies should be set out to provide the required training and educations of the mothers by the nurses and other health professionals.

In his study to define the knowledge and behaviors of the mothers having children within zero to six age group and their attitudes against the mostly seen accidents, Karakus (1988) has mentioned that carelessness and attentiveness are the main reasons stated by the mothers for the accidents. It has been observed that mothers generally adhere to the old methods in preventing accidents at home like nose bleeding, swelling in the head, broken arm or leg, bleeding, foreign object damage on the body, getting poisoned by drinking etc. It has been also mentioned that in most of the accidents at home, the approach and education level of the mother, the number of her children and how long she has been living in Istanbul are the factors which are closely related with home accidents.

Altundag (2005) has studied on the effect of training for mothers having children of one to three years old, of the safety precautions and of the frequency of accidents at home. A training was given to the mothers within the scope of accident prevention. As a result, a significant diversity was detected between the mean score of mothers' attitude to before and after training and to the frequency of accidents.

Ucar (2014) has studied the effect of a sexual abuse preventive program, which is prepared on the basis of cognitive process approach and in order for the mentally deficient individuals to get ability to prevent sexual abuse and to generalize it. In his research, three female students those meeting the criteria of the subject study, having slightly deficient in mentality and studying in the elementary school have been assigned as participants. In teaching of preventing the sexual abuse, narrations and some descriptive paintings for those narratives were used. To be able to say "NO", to get away from occasions and to tell someone trusted are the main terms that were taught. As a result, the program prepared on the basis of cognitive

process approach was seen to be effective for all attendees in gaining ability to prevent sexual abuse.

In his research, Kirca (2006) has investigated the approach of parents towards the sexual abuse prevention programs, what the feedbacks of parents are and the variability of those feedbacks on being a mother or father, the age of the parents, the sex and age of the child. The result of the investigation was that those approaches can be either positive or negative.

1.1. Scope of the study

The scope of the study is to investigate the effects of the program called “Basic Life Safety Training Program for Children” on the knowledge of children regarding life safety. The subject program was developed for six to seven-year old children and composed of 12 different classes.

1.2. Importance of the Study

It is known that the experience gained in one’s childhood can deeply affect his life thereafter. Some proverbs like “You can’t teach an old dog a new trick” and “The child is father to the man” nicely describe it. In the early stages of the childhood, human mind is sufficiently fresh for uploading for new information. In this stage, not only the knowledge associated with early childhood, but also the knowledge related with future life should be documented. The common argument is that knowledge adopted in the childhood is more permanent. The personality is again adopted in this stage. The earlier the knowledge and skills are gained, the more permanent they are (Alisinanoglu, 2009).

It is a fact that there is an increase in violence against children recently. It is frequently presented in mass and media that there are child deaths due to accidents or oversight. When the subject is deeply analyzed, it can be seen that those killings could have been prevented. Children are today subjected to dangers as never before. Certain social changes like the increase in the rate of urbanization, an increase in core family life and increase in the number of working mothers result in the children being alone at home in their early childhood and this gives rise to an increase in deaths and injuries during the accidents at home. When the attitudes of parents towards growing their children are analyzed, it has been mostly seen that the academic achievements of the children were made to come forward. On the other hand, it is a fact that their personal achievements in their life were not given much importance. Most of the parents have been focused only on the academic studies of their children and the expectations of the parents are dependent on the achievements of their children in the school.

On the other hand, the reduction in the number of children in the family and certain cultural values such as mothers being too defensive, self-sacrificing or too helpful for their kids, are among the factors negatively affecting the social skills of the children. In order to find a solution, some initiatives are conducted with the initiatives of non-governmental organizations or the state. When the studies on the life safety of the children are analyzed, it has been seen that the life safety issue was not sufficiently elevated and it focused only on certain areas. For instance, the most common subjects for the life safety are traffic education being held yearly for a week and the children sexual abuse. Some non-governmental organizations, educational organizations and some of the universities are generally studying on sexual abuse and those

studies are mainly for the adults and teachers to provide an awareness. Nonetheless, it is seen that child sexual abuse is the least likely occasion that a child can face with. Whereas dangerous cases such as getting poisoned, burns, drowning, falling down, smuggling, missing and injuries, are mostly encountered by the children. It is not possible for the parents to be with their children all the time. Likewise, none of the educational facilities can fully keep an eye on them. In spite of all those dangers, children have to be able to stay alone at home, at school, in the street and even in the nature.

When the studies conducted in Turkey were analyzed, it is seen that accidents at home, sexual abuse and traffic education are separately evaluated. In those studies, it was brought into attention that the training for prevention is generally for the parents. It is of course possible to prevent some of the dangers by training the parents. However, it is thought that making the children more active on some of the preventive accidents is possible via training them with life safety procedures. It is thought that most of the child killings can be prevented with the help of providing awareness in the early childhood and building some skills to get away from the dangers. The importance of life safety training becomes more pronounced if one considers the fact that it is not possible for the parents to be always with their children.

During the development of the program, the progress of life safety training on preschool children in Russia is studied. Courses for "life safety and taking action for children" were given to preschool teachers for the first time in 1991. The program called "The Principles of Life Safety Training on Preschool Children" was developed in 1995 and started to be applied in some areas in the same year. Trainings for the proper conduct in the traffic and at home environment and general dangers were given to children with some playing and drama (Kirillova, 2004).

The program called "School without Danger" and developed by the organization "Russia Children and Adult Movement" and supported by the state was become prevalent over the country. The number of scientists making research for children life safety is increasing and B.Anayev, L. Bojovich, A.Leontev, S.Proskurin, V.Solomin, I.Shegolov are the best known scientists for this subject. Many of good academic research were made till 2015 and many training programs were developed for the preschool students. "Childhood", "Rainbow" and "The Principles of Life Safety Training for Preschool Children" are among the mostly used programs (Andreeva, 1997; Dmitrenko, 2012; Gatkin, 2005; Kirilova, 2004; Kozlova, 2003; Stepanov, 2007; Suslov, 2010).

1.3. Limitations and Assumptions

It was assumed in this research that the sources used are valid and reliable and the answers given by the children to the questionnaire were reflecting the truths. The research was limited to six-year old children studying in two preschool organizations in the center of Agri County.

2. METHOD

The survey is composed of 18 girls and 12 boys, totally 30 children studying in the six-year old group of two preschools in Agri County.

2.1.Data Collection Tool

In this research, a questionnaire prepared to identify the knowledge of children on safety was used. The questionnaire consisting of 25 questions was prepared in a way to find out how the children act on answering the phone or meeting with someone at the door when they are alone at home, communication with strangers, and knowledge on cutting and electrical tools, for proper conduct in the street, traffic and for child abuse.

2.2.Data Collection

The study was carried on formerly defined and two different preschools serving for National Education Ministry. 2 individual interviews were made with the children; before and after the program. The program called “Basic Life Safety Training Program for Children” are composed of five sub-sections. Each sub-section was evaluated with the preparation of five questions, making the total number of questions 25 for the complete questionnaire. Each child was individually evaluated in order not to make the child be distracted by the other children. The data obtained from the initial interview was recorded as the preliminary test result. Then, the program called “Basic Life Safety Training Program for Children” was applied to the participants as a group training. Following the subject program, the questionnaire was re-applied and the data obtained was recorded as the last test data.

The study was conducted in the spring semester of 2014-2015. The theoretical part of the training was given as a group work. In the practical part of the study, some topics are studied individually. One hour is set aside for each topic. The whole subject takes 20 hours. The study was conducted as an hourly work at two different days of the week for the same group of the participants.

2.2.1. Basic Life Safety Training Program for Children

The program was developed by the own studies of the researchers and by searching the similar programs used in Russia. The final objective of the program is to provide an awareness on the possible dangers, to build skills for estimating/getting away from any dangerous occasion and to teach to show the proper conduct in those occasions. The program was developed by considering the developments of six-year old children.

Table 1. Training Chart of Basic Life Safety Program for Children

Number	Title	Hour		
		Total	Theoretical Part	Practical Part
1	Child alone at home			
1.1	What is the danger?			
1.2	What to do when doorbell rings?			
1.3	What to do when phone rings?			
1.4	Introduction to cutting tools and correct use			
1.5	Introduction to the electrical tools and correct use			
2	Child alone at garden			
2.1	Who is the stranger?			

2.2	How to communicate with the strangers?			
2.3	Stranger and his car			
2.4	How to behave to cats and dogs			
3	Child alone on the traffic			
3.1	What is the importance of knowing where to go			
3.2	Proper conduct on the traffic			
3.3	Introduction to traffic signs and proper conduct			
4	Child and abuse			
4.1	Introduction to our body			
4.2	Special areas on our bodies			
4.3	Screaming. How to scream correctly			
5	Child and fire			
5.1	Fire			
5.2	Good fire, bad fire			
5.3	How to act during fire			
	Total	20	10	10

3. FINDINGS

Data obtained from the questionnaires were evaluated in two stages. In the first stage, level of knowledge on “basic life safety” before and after the program is determined for each child. In this regard, answers of the children given in evaluation questionnaire are rated at 3 levels.

3 points (High) - correct answers given without hesitation to asked questions

2 points (Medium)- correct answers with a little while for thinking to asked questions

1 point (Low)- incorrect answers given to asked questions

Once every question is answered correctly, it is evaluated as highest score 75 ($25 \times 3 = 75$), once every question is answered wrong, it is evaluated as 25 ($25 \times 1 = 25$). After points are evaluated, it is accepted as;

- Knowledge level of children who get 65-75 points are considered “high”
- Knowledge level of children who get 55-64 points are considered “medium”
- Knowledge level of children who get 54 and lower points are considered “high”

On the other hand, in the second stage, if answers of the students enrolling the research are correct, it is marked with plus (+) sign, if not, it is marked with minus (-) sign. For example, if child answers the question “What would you do in case of fire at home” as “I hide in cabinet”, it is marked with minus (-); or as “I leave the home promptly”, it is marked with plus (+). Evaluating the scores, “plus” points are considered and their percentages are calculated. In this way, each plus is considered to be child’s level of knowledge on the subject.

Program was implemented on 2014-2015 education year spring semester. After 20 hours of Basic Life Safety Training program, it is observed that children’s knowledge on lifesafety has increased. Table 1 shows the children’s grade percentages attained before the training program and after the training program.

Table 1. Comparison of correct answer percentages of the children participated in the research to asked questions before and after the program

	Subjects of Basic Lifesafety Program for	Before	After
1	Child alone at home		
1.1	What is danger?	%74	%93
1.2	What to do if door bell rings when alone at home?	%68	%96
1.3	What to do if phone rings when alone at home?	%43	%95
1.4	Learning sharp hand tools and using them correctly	%79	%100
1.5	Learning household electrical appliances and using them correctly	%71	%98
2	Child alone in garden		
2.1	Who is stranger?	%40	%100
2.2	How to talk with strangers?	%72	%100
2.3	Stranger and relative	%65	%100
2.4	How to behave to cats and dogs?	%38	%95
3	Child alone in the traffic		
3.1	The importance of children knowing route to follow	%28	%80
3.2	Act safely in traffic	%60	%98
3.3	Recognizing traffic signs and acting right	%75	%100
4	Child and abuse		
4.1	Recognize our body	%80	%100
4.2	Our special parts	%54	%100
4.3	Screaming. How to utter a scream in right way?	%70	%100
5	Child and Fire		
5.1	Fire	%38	%89
5.2	Good fire, bad fire	%43	%92
5.2	How child should behave in case of fire?	%25	%94

It is observed that there is a significant difference before and after the program when table 1 is investigated. It is determined that knowledge level of the children participating in the research is insufficient before the study. Children answered at most 80% of the questions correctly about the subject aimed to be taught. After the program, it is seen that knowledge level of the children increased up to 100% after the program.

Grades gained were evaluated regarding gender of the children participating in the study in Table 2.

Table 2. Comparison table regarding gender

Basic Safety Program Subject for Children	Girls		Boys	
	Before	After	Before	After
1 Child is alone at home	%78	%100	%71	%94
2 Child is alone at garden	%80	%100	%68	%92
3 Child is alone in the traffic	%79	%100	%70	%97
4 Child and abuse	%65	%100	%70	%100
5 Child and fire	%80	%100	%75	%100

18 girls, 12 boys, total of 30 children participated in the study, who were at 6 age group and being trained. When table is investigated, it is seen that girls generally have higher level of knowledge on “life safety”. In the assessment being made after implementation of the program, it is seen that all of the schoolgirls answered the questions correctly. Considering this result, it is seen that program is more effective in schoolgirls. This situation can be explained with the fact that schoolgirls are more careful and generally more sensitive to dangers.

Grading questionnaire results applied before and after the program, knowledge level of 30 students on life safety has been determined. Student's level of knowledge on the subject before and after the program has been given in Table 3.

Table 3. Comparing children's score before and after the program

Subject	Distribution of children's score before and after the program					
	High score (65-75)		Middle score (55-64)		Low score (55 and lower)	
	Before	After	Before	After	Before	After
Child is alone at home	3	20	9	8	18	2
Child is alone at garden	5	25	9	4	16	1
Child is alone in the traffic	4	23	14	5	12	2
Child and abuse	3	23	22	7	5	0
Child and fire	9	27	20	3	1	0

Considering Table 3, it is seen that implemented program has positive impacts towards student's safety knowledge. 3 students got high score, 9 students got middle score and 19 students score low grades before the program for the knowledge on the subject titled "child is alone at home" including recognizing sharp tools and household electrical appliances and using them correctly, acting in right when door rings or telephone rings. After receiving the training program, number of students having high scores increased from 3 to 20.

When the subject titled "Child is alone in the garden" including subjects such as communicating with familiar people and strangers, protection from dog attacks is examined, 5 students got high score, 9 students got middle score and 16 students got low score. After receiving the training program, number of students having high scores increased from 5 to 25. At the end of the program, 4 students got medium score and 1 student got low score.

When the subject titled "Child is alone in the traffic" including subjects such as crossing the road, recognizing traffic lights is examined, 4 students got high score, 14 students got medium score and 12 students got low score. After receiving the training program, number of students having high scores increased from 4 to 23. Before the program, 12 students got low score; however, this decreased to 2 after the program.

When the subject titled "Recognizing our body" including subject such as knowing special parts of our body is examined, 3 students got high score before the program, and 23 students got very high score after it. Before the program, 22 students got medium score while 7 students got medium score after the program. For the aforementioned subject, no student got very low score.

When the subject titled "child and fire" including subjects such as acting right in case of fire, preventing fire is examined, 9 students got high score before the program. After the program, number of students getting high score increased to 27. Before the program, 1 student got low score; however no student got low score after the program.

4. DISCUSSION AND CONCLUSION

The subject safety always remains on the agenda. In this study, effects of the Basic Life Safety Training Program for Children developed by researchers on children's knowledge on "life safety" is investigated. When general conditions of the children regarding the subject is investigated (*Table 3*), it is seen that children are more aware of the fire. 9 students got high scores from the questions asking subjects of "Child and fire". 20 students got medium score while 1 student got low score. Lowest scores before the program are attained in the subject titled "Child is alone at home". Total of 18 students got low scores in the subject titled "How to behave when alone at home". It is seen that the program is the most effective in "child and abuse" and "child and fire" subjects. After the program, there is no student getting low score from the questions covering these two subjects.

It can be said from the difference between the scores gained before and after the program, the program is effective. However, 5 students getting low scores after the program shows that program is not effective at "hundred percent". This points out that a better program can be prepared. It may be advised to develop more effective programs, to choose the most effective program and to teach "safety" training to students at early ages in a systematic way by adding this program into National Education curriculum. Social media can be used more effectively to raise basic life safety awareness for kids. It can be suggested that child programs, cartoons may be made for teaching children safety subjects and publishing these via social media. Safety trainings for parents, teachers and school personnel as well as students may be extended. This program may be implemented in different regions of Turkey so as to investigate effects of the program in terms of cultural and geographical respects.

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