

# **A Study of Interpersonal Problem Solving Skills of Preschool Teacher Candidates**

By

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## **Abstract**

*The goal of this study was to examine the interpersonal problem solving approaches and skills of preschool teacher candidates. The data was gathered from 385 participants studying at a Turkish state University. For data collection, together with "Personal Information Form" which was developed by the researchers, "Interpersonal Problem Solving Scale" developed by Çam and Tümkaya (2007) were used. While employing the study the voluntariness of participants was taken into consideration. For the analysis of data, variance analysis and LSD Test were used. The significance level was determined to be as  $p < 0.05$ . The study revealed that the interpersonal problem solving approaches and skills of the participants were found to be statistically significant in relation to their grades. Also, the problem solving skills were found to be developed when the grade increased.*

**Keywords:** Preschool, Teacher, Interpersonal Problem Solving

## **1. Introduction**

Human being is a creature who is continually in a struggle to adapt himself to his environment. This struggle starts with his birth and shows a continuity. On the other hand, being in continuous communication with other people sometimes causes some interpersonal problems. According to D'Zurilla, Nezu and Maydeu-Olivera(2004) an inter-personal problem is defined as being unable to solve a problem that a person encounters himself and not knowing how to handle the problem. The ability to solve an inter-personal problem is establishing a social and emotional adaptation by solving the problems caused by differences between people's thoughts, beliefs, values or needs ( Pellegrini and Urbain, 1986).

The one who is aware of the interpersonal problem wishes to get rid of the distress caused by the difference between what happens and what must be and resorts to several ways. The cognitive and behavioral process where the gap between the current situation and the desired goal is perceived and effort is made in order to clear away caused by the gap is called interpersonal problem solving process (Öğülmüş, 2001: 10).

In personal relationships, which are essential parts of life, it is quite important to decide which points to put emphasis on and what ways to follow to solve the interpersonal problems. People have a wide range of responses such as ignoring the problem and escaping, resorting to violence, behaving aggressively or to showing a reasonable approach or finding peaceful solutions contributing their improvements (Terzi 2000).

Problem solving is one of the most important skills that people need to have in order to exist. The way a person solves the problem he encounters is influenced by inborn characteristics, the environment, parental attitudes and pre-childhood experiences (Temizyürek, 2003). When children are given opportunities to solve their own problems, their positive attitudes and manners towards solving a problem also improve as well as their cognitive skills such as observation, comparison, information reorganization and evaluation (Goffin and Tull, 1993). Solving interpersonal problems has a positive effect on children's empathetic thinking abilities, perceptions of social relationships and showing responsible behaviors in relationships of the same age (Temizyürek 2003; Özcan and Öğülmüş,2010).

There are individual differences in terms of reactions displayed by people in solving interpersonal problems, which are a natural part of daily life. People resort to various methods to solve problems. These methods depend on the environment, personal features, education, discipline, model adults, teachers, all the people and factors that affect his life. People's search for easy and quick solution, restricting approach that a problem has one single solution inhibit evaluation of problems from a correct point of view (Özcan ve Ögülmüş, 2010).

A child has his first experience of problem solving in his family environment. His parents are a model for him in organizing his relations with the family members, his friends and some close relatives and in solving problems that he encounters. Some researches emphasize that parents' attitudes in problem solving process affect their children's problem solving skills (Forgatch, 1989; Arı and Seçer, 2003) Thus, parents should be a model for their children by their problem solving strategies. Their problem solving strategies should be in a democratic way, showing love and respect mutually (Arı and Seçer, 2003).

The second most important factor, after family, that provides a proper improvement of the children's problem solving skills is school (Genç and Kalafat 2007). Improving the children's problem solving skills at school properly requires teachers who have highly developed problem solving skills. In modern world, education has shown a rapid change depending on technology and so the qualifications expected from the educated person have increased (Piji-Küçük 2012). Thus the tasks that are expected from the teachers whose duty is to shape the future have also changed. The teachers are expected to be a team member and the leader of their group, have the ability to plan educational programmes, have the skills to use both technology and human resources effectively and efficiently, and be strong decision-makers.

Teachers' having a high level of problem solving skills, that is understanding the reason of the problems that they encounter both during their school environment and daily life, and solving them, is extremely important as those teachers educate pupils who can think, criticize, be productive, have the ability to overcome the problems that they will encounter during their future professional lives and make efficient decisions on those issues. Identifying the problem, developing suitable strategies for solution, managing the decision making process depend on the teachers' choosing the profession willingly, having a professional satisfaction and loving children. Only then a teacher can continuously improve himself in his profession, use his resources and technology in an effective and efficient way. Çelik and Çağdaş (2010) indicated that teachers who choose their occupation willingly show interest acceptance about their occupations and therefore show the ability and attitude to meet the requirements of their profession. Murat, Özgan and Arslantaş (2005) stated that the academic success of the teacher candidates changes depending on the attitudes of their instructors.

University education which is the highest level in education system is the period when the character of the person is formed. The university life forces the students to adapt themselves to a new city and a new environment, to be a member of new groups. While having these experiences students could live some problems. If only students can have the opportunity to find solutions to their problems in a democratic way, showing mutual respect and tolerance to each other and get a creative and analytic perspective during this process, they will get over the problems in their future professional lives, will make efficient decisions on this subject and educate new generations. Thus, the goal of this study is to observe the interpersonal problem solving tendencies and skills of the pre-school teacher candidates.

## **2. Method**

### ***Research Model***

In this study, descriptive survey methodology aiming to identify the availability and level of change between two or more variables was used ( Karasar, 2009).

### **Participants**

The participants comprised 385 pre-school teacher candidates studying at a Turkish state university. They were enrolled in day and night programs. All volunteered to respond to data collection tools. Additionally, 85.9 % of them were females, while 14.03 % were males. 86.23 % of them were between the ages of 18-22; 12.99 % were between 23 and 27. However 0.78 % of them did not report their ages.

Besides their age, 58.7 % were enrolled in day- program, while 41.3 % were in night program. 15.84 % of them had memberships to clubs, 83.90 % did not, while 0.26 % did not respond. 7.5 % were in lower, 89.1 % were in middle, and 3.4 % were in upper socio-economic status. 3.1 % of them reported that they had 1 or 2 friends, 9.9 % reported they had 3-4 friends, 7.5 % reported 5-6 friends, 7.8 % reported they had 7-8 friends, and 71.7 % reported they had 9 and more friends.

### **Instruments**

To be able to receive socio-demographic information of the participants, “Personal Information Form” developed by the researchers was used. Together with this, Interpersonal Problem Solving Scale were used.

#### ***Interpersonal Problem Solving Scale (IPSS):***

The validity and reliability checks of the *Interpersonal problem solving scale* (Çam ve Tümkaya, 2007) which was developed to assess problem solving skills and approaches of university students, was also conducted by (Çam ve Tümkaya, 2008) with a group of high school students. The instrument which is a five-point lichert scale comprised five sub-scales and 50 items in total. The items range from 1 (Completely inappropriate) to 5 (Completely appropriate). The high score received for each sub-scale indicates that the quality of solving interpersonal problem is also high. The five sub-scales are; *negative approach to the problem (NA)*, *constructive problem solving (CPS)*, *lack of self-confidence (LSC)*, *Irresponsiveness (I)*, and *persistent-steadfast approach (PA)*. The number of items included in each sub-scale is respectively; 16, 16, 7, 5, and 6. For each sub-scale, the cronbach alpha co-efficiencies of internal consistency are; NA=.89, CPS=.87, LSC=.67, I=.68 and PA=.70. The test-re-test correlation measures of the scale were found to be between .67 and .84 (Çam and Tümkaya, 2008).

### **Data Collection**

After the permissions were granted, the participants were informed about the purpose of the study, forms and scales to be used. Before the data collection tools were administered, their consents were sought. The ones who consented were asked to respond to data collection tools. First, they were given personal information form, followed by interpersonal problem solving scale.

### **Data Analysis**

For data analysis, standard deviation, mean values, percentages, Pearson moment correlation, stepwise regression analysis, t-test, ANOVA and post hoc LSD were conducted. The level of significance was adopted as .05.

The findings were tabulated and presented in the following sections.

## **3. Results and Discussion**

In this section, descriptive statistics and distributions regarding the data are presented.

The participants' score on interpersonal problem solving scale were 141.82+20.804. The scores that the participants took from the sub-scales of the interpersonal problem solving scale were found to be as follows; NA:38.21+12.386; CPS:57.07+9.299, LSA:12.00+3.766; I:12.21+4.256; and PA:22.34+4.168.

**Table 1. t-Test results of the points of the pre-school teacher candidates in interpersonal problem solving scale (IPSS) depending on whether they chose the occupation willingly or not**

Sub dimension	choosing the occupation willingly or not	n	$\bar{X}$	s	Sd	t	p
NA	yes	341	38,34	12,491	383	,560	,576
	no	44	37,23	11,626			
CPS	yes	341	57,13	9,247	383	,328	,743
	no	44	56,64	9,793			
LSC	yes	341	12,00	3,632	383	,038	,970
	no	44	11,98	4,727			
I	yes	341	12,23	4,200	383	,302	,763
	no	44	12,02	4,713			
PA	yes	341	22,50	4,088	383	2,196	,029*
	no	44	21,05	4,590			
IPSS	yes	341	142,20	21,008	383	,569	,324
	no	44	138,91	19,122			

\*p< .05, \*\*p<.001

Table 1. shows that while there is no significant difference in between the average points of the total points of Interpersonal Problem Solving Scale of the pre-school teacher candidates depending on choosing the occupation willingly or not t (IPSS) ( $t_{(383)}=,569$ ;  $p>.05$ ) and its sub dimensions Negative Approach (NA) ( $t_{(383)}= ,560$ ;  $p>.05$ ), Constructive Problem Solving (CPS) ( $t_{(383)}=,328$ ;  $p>.05$ ), Lack of Self-confidence (LSC) ( $t_{(383)}= ,038$ ;  $p>.05$ ), Irresponsibility (I) ( $t_{(383)}=,302$ ;  $p>.05$ ), there is a significant difference in the sub dimension Insistent-Patient Approach ( $t_{(383)}=1,638$ ;  $p>.05$ ).

In the Interpersonal Problem Solving Scale, teacher candidates who choose the occupation willingly have a higher point ( $X=22.50$ ) than the teacher candidates who choose the occupation unwillingly ( $X=21.05$ ) depending on whether they choose the occupation willingly or not. Insistent –Patient Approach presents the insistent effort that a person makes to get a solution to his interpersonal problems (Çam and Tümkaya, 2007).

According to Dökmen (2002), tending to the subject that one has interest enables him to be successful in that subject. Çelik and Çağdaş (2010) indicated that teachers choosing their occupation willingly show interest acceptance about their occupations and therefore show the ability and attitude to meet the requirements of their profession. In the research aiming to find the correlation between the problem solving skills, academic success and attitudes of the students by Serin (2001), there is a significant difference between the problem solving skills of the students and whether they love the field they study while there is no significant difference between the problem solving skills of the students and their sex, grade and motive to their preference.

**Table 2. Results of The Analysis of Variance of The Pre-School Teacher Candidates' interpersonal Problem Solving Scale Points Depending on Their Grade Level**

Sub dimension	Grade levels	n	$\bar{X}$	S	Sd	F	P
NA	1.grade	86	41,52	12,576	3-384	5,506	,001**
	2.grade	108	35,82	11,628			
	3.grade	142	39,34	13,394			
	4.grade	49	34,41	8,233			
CPS	1.grade	86	58,08	8,688	3-384	,436	,727
	2.grade	108	56,82	9,295			
	3.grade	142	56,75	9,646			
	4.grade	49	56,76	9,481			
LSC	1.grade	86	13,80	4,563	3-384	12,353	,000**
	2.grade	108	10,92	3,464			
	3.grade	142	12,15	3,371			
	4.grade	49	10,78	2,527			
I	1.grade	86	13,93	4,750	3-384	8,157	,000**
	2. grade	108	11,05	3,870			
	3.grade	142	12,25	4,008			
	4.grade	49	11,59	3,952			
PA	1.grade	86	23,05	4,253	3-384	1,602	,189
	2.grade	108	22,03	4,217			
	3.grade	142	21,98	3,944			
	4.grade	49	22,82	4,461			
IPSS	1.grade	86	150,38	22,061	3-384	8,769	,000**
	2.grade	108	136,64	18,327			
	3.grade	142	142,47	21,394			
	4.grade	49	136,35	16,842			

\*p&lt; .05, \*\*p&lt;.001

According to Table 2, while there is no significant difference between the average points of the sub dimensions of the Interpersonal Problem Solving Scale of the pre-school teacher candidates depending on their grade levels, Creative Problem Solving (CPS) ( $F_{(3-384)}=.436;p>0.05$ ) and Insistent-Patient Approach (SPA) ( $F_{(3-384)}=1,602;p>0.05$ ), there is a significant difference between the total points of the Interpersonal Problem Solving Scale (IPSS) ( $F_{(3-384)}=8.157;p<0.01$ ), and the sub-dimensions of Negative Approach (NA) ( $F_{(3-384)}=5.506;p<0.01$ ), Lack of Self-confidence (LSC) ( $F_{(3-384)}=12.353;p<0.01$ ) and Irresponsibility (I) ( $F_{(3-384)}=8.157;p<0.01$ ).

According to the LSD test in the sub-dimension of Negative Approach to the Problem, 1<sup>st</sup> Grade students' average point is higher than the average points of the students' in the 2<sup>nd</sup> and 4<sup>th</sup> grades and 3<sup>rd</sup> Grade students' average point is higher than the average points of the students' in the 2<sup>nd</sup> and 4<sup>th</sup> grades. It is also found that the total points of Interpersonal Problem Solving and sub dimensions of Lack of Self-confidence and Irresponsibility 1<sup>st</sup> Grade students' average point is higher than the average point of the students in other grades. According to the data obtained, it can be said that 1<sup>st</sup> Grade students are pessimistic while approaching to the problem as a general tendency, show lack of self-confidence to their problem solving skills, and avoid taking responsibility in problem solving. Problems that those students have to deal with, such as having just started to the university, adaptation process to a new city and a new environment and being part of a new group could be the reasons of this situation. All these factors enrich the experience of self-recognition and interpersonal relationships. In a way, they learn the nature of interpersonal relationships, to be more constructive against problems and realize and assume

responsibility related to the problem. From a different point of view it can be said that 4<sup>th</sup> Grade students are more successful in overcoming problems than 1<sup>st</sup>, 2<sup>nd</sup> and the 3<sup>rd</sup> grades.

Altunçekiç, Yaman and Koray (2005) indicated that the contents of the lessons taken in the bachelor's level have problem solving skills improving features, during those lessons students learn problem solving process and use the problem solving skills more efficiently. Thus, Çam (1997) said that teacher training program has a positive effect on teacher candidates' perception of problem solving skills.

As a result of literature review, one can see that many studies on the issue of problem solving skills yield similar results. In a study where Çam and Tümkaya (2006) compared problem solving tendency and skills of university students according to their gender, age and departments, they found that students from the older age group (23-30 years) have higher mean score than those from the younger age group (28-20 years) in Constructive Problem Solving.

Genç and Kalafat (2007), in their research performed on the 3<sup>rd</sup> and the 4<sup>th</sup> grade students found out that 4<sup>th</sup> Grade students have a higher degree of problem solving skills than the 3<sup>rd</sup> Grade students. Gültekin (2006) found out that 4<sup>th</sup> Grade students have higher points of problem solving skills than the 1<sup>st</sup> Grade students. Likewise, Katkat (2001) found that as the students' problem solving skills increase with their grade. In their research on the teacher candidates Kuzu and Ersözlü (2008) found out that every teacher candidate who has just started university has low level of problem solving skills. Dündar (2009) in his research aiming to find out the differences between the students' problem solving skills according to the students' grades, concluded that the 4<sup>th</sup> Grade students had a higher level of problem solving skills than the lower graders.

#### **4. Conclusion and Recommendations**

According to the data obtained from the research aiming to observe the pre-school teacher candidates' problem solving tendency and skills, they show an Insistent-Patient approach in their Interpersonal Problem Solving Skills depending on whether they choose the occupation willingly or not, senior level teacher candidates have more self-confidence in Interpersonal Problem Solving depending on their ages and are able to take responsibility and have a positive approach to the solution of the problem compared to the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> graders.

In consideration of these data obtained from the research; during the pre-service training of the future teachers, opportunities of suitable educational environments to provide obtaining problem solving skills should be given. Trying to find solutions to the problems in a respectful, loving and communicative basis, under democratic rules, without violence, and inheriting these to the next generations will improve the welfare of the society. For this reason, through lessons in the teacher training institutions and the seminars given as in-service training, teachers who have the abilities of understanding the problem correctly, identifying it and creating solutions and applying them to the problem should be educated.

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