



AN INVESTIGATION OF SELF-ESTEEM, SOCIO-EMOTIONAL ADAPTATION AND RELATIONAL PROBLEM SOLVING IN PRE-SCHOOLERS

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Abstract:

The purpose of the present study is to investigate the correlation between self-esteem, socio-emotional adaptation of pre-schoolers and their relational problem-solving skills. The sample of the study was composed of 228 pre-schoolers (60-65 months) and their teachers in state and private preschool classes in the province of Konya. In this study, the researchers used Purdue Self Concept Scale for Preschool Children to identify their self-esteem and Marmara Socio-Emotional Adaptation Scale to identify their socio-emotional adaptation and Relational Problem-Solving Teachers' Form to identify problem solving style. According to the findings of the study, self-esteem is a significant predictor of assertive, reserved and sociable problem-solving styles. However, it is not a predictor of passive assertive problem-solving style. Moreover, appropriately responding to a social situation as a sub-dimension of socio-emotional adaptation is a predictor of only passive-assertive, reserved-submissive and positive problem-solving approaches. Giving appropriate responses to social situations is a significant predictor of assertive, passive assertive and positive problem-solving approaches. Interaction with peers is a significant predictor of assertive and reserved-submissive problem-solving approaches, while approaching the social environment positively is not a predictor of any of the relational problem-solving styles.

Keywords: relational problem-solving, preschool education, self-esteem, socio-emotional adaptation

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1. Introduction

The child begins to establish social relations on a regular basis outside his/her family for the first time since his/her birth upon starting the preschool education. The social relations that he/she establishes with teachers and peers in the classroom are the beginning of such relations. During the process of establishing such relations, the child encounters some problems while playing games with his/her peers, sharing their toys or requesting something from the teacher. In order for their social relations to continue appropriately they have to solve such problems in proper ways.

Problem-solving is a complicated process that is formed by all efforts that are essential for eliminating potential challenges to reach a particular objective (Bingham, 2004). In real life, all people sometimes encounter problems that have to be reflected upon and solved. The ability to solve problems encountered is a significant need that has to be met to enable people to survive. The concept of problem solving was first used in education by John Dewey. Dewey emphasized the vital role of school and teacher in problem solving (Kesiciođlu & Güven, 2014).

Problem solving is a cognitive-behavioral process carried out by the individual in order to find an effective solution for the problems encountered in daily life (D' Zurilla & Nezu 2007). Relational problem solving involves approaches presented by using cognitive-affective processes individuals learn through experiences in order to solve problems encountered during their relationships with other individuals around them (Korkut, 2002). In addition, theories or models examining the impact of social, educational and familial factors that account for relational problem-solving skills have been developed. For instance, Bandura claims in the social learning theory that individuals don't need to learn everything directly, and they can also learn by observing others' experiences (Çetinkaya, 2013). Accordingly, it is reported that individuals can acquire problem-solving skills by observing and imitating others. According to Dewey, both individuals and the society are important in terms of problem solving skills (D' Zurilla & Nezu, 2007). Similar to Dewey's theories, according to Lazarus's relational problem solving model, the strategies individuals follow to solve problems are formed as a result of interaction of personal and environmental factors (Lazarus, 1999). Based on these theoretical foundations, problem solving methods individuals follow to solve problems in their relationships was selected as the subject matter of the present research considering that these methods can be affected from self-esteem personally, and social affective harmony environmentally. Additionally, developing a healthy personality and establishing positive relations with the people in the environment are dependent upon problem-solving skills (Erođlu, 2001).

Therefore, this issue is handled in quite a few studies. These studies have been on not generally on pre-school children, but on older age groups (generally teacher candidates and adolescents) and there have been researches on the relationships between problem solving skills and aggression (Şahan, 2007; Kurtyılmaz, 2005), emotional intelligence and academic achievement (Arlı, Altunay, & Yalçınkaya, 2011), and life satisfaction (Kabasakal & Uz Bař, 2013). The present research, on the other

hand, was conducted on pre-school children. 0-6 years, often referred to as the preschool period, is one of the stages that have significant impacts on children's prospective lives. Research findings suggest that the behaviours acquired during childhood largely shape an individual's character, habits and value judgments during adulthood (Yavuzer, 1997). This period might make prospective years in a person's life easier or might form the basis of some problems (Oktay, 2000). The development of problem-solving skills in this period is crucial in terms of the individual's future experiences. Therefore, the identification of the factors that play a significant role on these skills is significant in terms of precautions and interferences. Previous researches conducted on pre-school children have studied the relationship between problem solving and peer relations (Özmen, 2013), the effects of various programs (interpersonal cognitive problem solving education program and problem solving education program) on problem solving skills (Dinçer, 1995; Dinçer & Güneysu, 1997), the permanence of problem solving education (Dinçer & Güneysu, 2001), social problem solving skills in terms of various variables (Oğuz & Köksal Akyol, 2014), the effect of different educational approaches on problem solving skills (Anlıak & Dinçer, 2005), and the relationship between conceptual development and problem solving skills (Yoleri, 2014). On the other hand, the present research studies relational problem solving skills of pre-school children, and takes self-esteem and social-emotional adaptation as the indicators of relational problem solving skills. Therefore, it is considered to be differed from other studies conducted on pre-school sample, and to contribute to researchers and educators studying in the field.

1.1 Relational problem solving and self-esteem relation

The notion of self can be defined as how a person perceives or understands his/her own self. Whether being fond of the self or not forms self-esteem (Aksoy and Maden, 1993). The development of the self is a dynamic process that comes into being according to how the individual perceives his/her experiences with the environment (Güngör, 1993; Aksoy and Maden, 1993).

When the related literature is examined, it is observed that the self continuously looks for experiences that provides him/her with solutions and tries to find or create such experiences in the outer world (Schultz & Schultz, 1996). The Californian Committee For Developing Self-Esteem and Individual Social Responsibility defines self-esteem as *"a person's viewing him/herself as precious and important, assuming responsibility over him/herself and behaving responsibly towards others"* (Öğülmüş, 2001). According to another definition, the level of self-esteem is expressed by the difference between how a person perceives the features that he/she possesses and those that he/she thinks he/she has to possess (Pişkin, 2003). Self-esteem begins to develop in the initial years of life. Children begin to assess themselves in terms of their physical properties, abilities and what they learn (Cevher and Buluş, 2007). The notion of self in preschool children is superficial; they are interested in such issues as their names, outer appearances and what they have. They particularly mention what they do in their daily

lives. They began to talk about their own behaviors, emotions or the things that they believe after three years and a half from birth (Bal, 2004).

Heppner and Krauskoph (1987) concluded that children with higher self-esteem levels were able to solve conflicts faster and develop friendships more easily. In the same study, those with lower self-esteem levels, on the other hand, experienced difficulties against problems, stayed more passive and responded defensively (D’Zurilla, Chang, & Sanna, 2003; Arslan, Hamarta & Uslu, 2010). Such people have negative evaluations of themselves, easily get disappointed and abstain from trying new things out (Owens, 2003; Moorman, 2003). Individuals with higher self-esteem levels approach to problems more wisely, and they make positive and objective evaluations (Santrock, 2012). Furthermore, such people tend to perceive themselves as important and useful people who are worth being accepted and respected. On the other hand, those people who evaluate themselves negatively or who have lower levels of self-esteem tend to view themselves as unimportant individuals who lack loveable characteristics or as individuals who do not have confidence in themselves and their abilities (Temel and Aksoy, 2001).

Though there are quite a few studies on self-esteem, it is seen that most of these studies had been carried out on elementary school children or adolescents (Marsh, 1990; Marsh & MacDonald-Holmes, 1990). The present study is important because there is a gap in the literature about self-esteem in preschool children especially in the Turkish context.

1.2 Relational Problem-Solving and Socio-emotional Adaptation Relation

It is essential that individuals acquire and develop various social skills during the socialization process that enables them to lead a happy life and the society to maintain its life in a healthy way. Social skills encompass a child’s behaviours towards others in the environment and his/her adaptation to the environment. Children with social skills are good at establishing good relations with others in the environment, sharing, obeying the rules, being sensitive to others and controlling their negative emotions whenever necessary (Ceylan, 2009; Gülay & Akman, 2009). Thanks to social skills, the individual socially adapts to his/her environment, and socializes as he/she adapts to the environment in terms of social and emotional aspects. Socialization involves a person’s adapting to the society in which he/she lives and learns to get along well with the people he/she lives with (Çimen, 2000; Kandır & Orçan, 2011). During the preschool period, the emotional and social adaptation of the child entails his/her establishing positive relations with adults and peers and regulating such relations according to the conditions of the environment whenever necessary (Bigrass & Dessen, 2002).

Supporting the social and emotional development of children in the preschool period is crucial in terms of children’s successfully interacting with other individuals and establishing relations and maintaining them (Koruklu & Yılmaz, 2010). The present study examines the impact of children’s socio- emotional adaptation on their problem-solving skills.

The purpose of the present study is to identify the predictive power of self-esteem and socio-emotional adaptation of preschoolers (60-65 months old) in problem-solving skills. Within the framework of this main purpose, the answers for the following research questions were sought:

1. Is self-esteem in preschoolers a significant predictor of their relational problem-solving skills?
2. Is socio-emotional adaptation in preschoolers a significant predictor of their relational problem-solving skills?

2. Method

2.1 Research Design

This is a correlational research study. This type of research determines whether or not the relation between two or more variables without any intervention. Correlational studies are very beneficial to reveal the relations between variables. The correlation doesn't imply causation. But, they provide hints for researchers to make further more complex studies (Büyükoztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2009).

2.2 Participants

The universe of the present research is formed with 60-65 months old children who attend in pre-schools which teach within the body of public or private primary schools in the province of Konya in 2012-2013 academic year, and their teachers. Work group of the research was selected through random clustering method. The number of schools to be included in the present research was determined in accordance with necessary sample size. The size of the sample was determined in accordance with some criteria. First of these is that, at least 10-15 data is required for each predictor variable to enter in the model for regression analyses (Field, 2005). In addition, sample size estimation was calculated using the Java Applets for power and sample size software developed by Iowa University, department of statistics (Lenth, 2006). In this calculation, influence quantity was taken as 0.08, the power of the research was taken as 90%, significance level was taken as 0.05, and considering that five predictor variables would enter the multiple regression model, the minimum sample size was calculated as 211. During sampling, first the researchers reached at the list of pre-schools in the provincial centre of Konya. Of this list, 23 preschools, with the total number of children were selected through random sampling method. The teachers working in these preschools were informed about the purpose of the present research. With the volunteering teachers, and their 250 students who were 60-65 months old were included in the work group. However, 22 participants were excluded from the study due to absenteeism or being careless when they were responding to the scale. As a consequence, the study was carried out on 228 children that took part in the study. 111 of these children were males, while 117 of them were females. The age of children in the study ranged between 60-65 months ($X=63.2$; $Sd=1.4$). 33% of the children taking part in the study were from lower

socioeconomic backgrounds; 39% of them were from middle socioeconomic backgrounds, while 28% of them came from families with higher socioeconomic levels.

2.3 Data Collection

A. Purdue Self Concept Scale for Preschool Children (PSCS)

PSCS was developed by Cicirelli (1974) to identify the determining factors for preschool children's notion of self. The scale is composed of a total of 40 items. In each item there are two pictures explaining a situation about a child. Positive options are placed randomly without putting more than two instances of such items one after the other. After the directions related to the pictures are given, the respondent is asked to specify which child resembles him/her. For each item the picture with positive characteristics is given one point, while the one with negative characteristics is given 0 points, and the total score is taken as the self-concept score. This procedure is carried out individually by an expert. Within the framework of reliability study of the scale with 312 children, the internal reliability coefficient of the scale was calculated using KR-20, and it was found to be .86. In addition, the reliability coefficient calculated using test re-test method was .70. In the validation studies carried out by Sarıca (2010) to adapt the scale into Turkish, according to item-total test correlations calculated using Pearson product moment correlation; it was found that the correlation coefficients ranged between .18 and .58, and all items significantly correlated with the total score at $p < .05$. The Cronbach alpha coefficient calculated to test the overall reliability of *Self Concept Scale for Preschool Children* showed that it was high; that is, it was found to be .78. In the present study, the internal reliability coefficient of the scale was recalculated and was found to be .86.

B. Marmara Socio-Emotional Adaptation Scale

Marmara Socio-Emotional Adaptation Scale developed by a team of experts that consisted of nine members at Marmara University in 2002-2003, aims to test the socio-emotional adaptation of 6,0-6,11 month old children. The original form of the scale is composed of 36 items and five sub-dimensions, and it includes teacher assessment (Önder et al., 2004). In the present study, the version of the scale with four sub-dimensions and 19 items as validated by Işık (2006) for 60 to 72-month old children was used. The sub-dimensions that make up the scale were as follows: The first sub-dimension of the scale titled "acting in accordance with the requirements of social life" with 9 items, the second sub-dimension titled "responding appropriately to social situations" with four items, the third sub-dimension titled "interaction with peers" with four items and the fourth sub-dimension titled "approaching positively to the social environment" with 3 items. The scale is composed of 3-point Likert items; the lowest score to get in the scale was 19, while the highest one was 57. Higher scores indicate higher levels of socio-emotional adaptation in children. In the present study, the reliability coefficients of the scale were recalculated, and were found to be .93 for the sub-dimension of acting in accordance with the requirements of social life, .76 for

responding appropriately to social situations, .84 for interaction with peers and .84 for approaching positively to the social environment.

C. Relational Problem-Solving Teacher's Form

This tool was developed by Türköz (2007) to identify the solutions used by 60 to 72-month old children when they faced problems in their relations with adults or their peers and it includes teacher assessment. The scale consists of five-point Likert items. It is composed of four sub-dimensions; that is, aggressive attitude, passive-aggressive attitude, assertive-positive attitude and reserved-submissive attitude. To test the internal reliability of the scale, the reliability coefficient was calculated, and it was found to be Cronbach $\alpha=.81$. The internal reliability coefficients of the four sub-dimensions were $\alpha=.81$, .78, .73 and .74, respectively. In the present study, the reliability coefficients of the scale were recalculated; they were found to be .80 for aggressive attitude dimension, .79 for passive-aggressive attitude dimension, .76 for assertive-positive attitude dimension and .71 for reserved-submissive attitude dimension.

2.4 Procedure

First, a permission to carry out the study was obtained from the Provincial Directorate of National Education in Konya. Then, the researchers came in contact with 23 randomly selected preschool teachers from the schools in Konya, and these teachers were informed about the research study. 250 preschool children (60-65 months old) by volunteer teachers were included in the study sample. In their first visit to the schools, the researchers were introduced to the children by the teachers. On that day the researchers spent some time with the children and took part in an activity. Later, the teachers were asked to respond to the problem-solving and socio-emotional adaptation scales on behalf of their students. After that, appointments were made with the teacher for the next day for individual administration of the scales. On the next day, the researchers went to the schools and they administered the self-esteem scale to children individually in an appropriate place near the classroom. It took nearly 20 minutes to administer the scale to each child.

2.5 Data Analysis

Cronbach alpha coefficients were calculated for each tool, in order to determine the reliability of the data collection tools used in the present research for the work group of the present research. Later, Pearson conduct moment correlation was calculated between self-esteem, socio-emotional adaptation and relational problem-solving skills. After that, multiple hierarchical regression analysis was carried out between the predictor and predicted variables to find an answer for first and second sub-problem of the study. SPSS 15.0 was used to analyse the data. The statistical significance level was accepted as .05 in the study.

3. Results

Before analysing the data collected in the present research, they were checked for whether they met linearity and normality hypotheses (Büyüköztürk, 2007). Kolmogrov Smirnov test was conducted in order to control whether data presented normal distribution. Test showed that obtained data presented normal distribution for all variables of the research (Kolmogrov Smirnov test values ranged between .111 and .323). Additionally, skewness and kurtosis values for the obtained data showed that all variables fit normal distribution (Skewness values ranged between .711 and -.991; kurtosis values ranged between .724 and -.944). Scatter plot was used to determine whether data provided linearity hypotheses. Besides, data were evaluated in terms of multiple linearity problem. Based on the information that values over .80 for independent variables can cause multi-collinearity problem (Büyüköztürk, 2007), the correlations between independent variables were evaluated first. The analysis of the correlations between independent variables showed that there were no independent variable pairs that showed correlations over .69. Additionally, VIF value over 10, CI value over 30, and tolerance values below 20 are considered as the indicators of multi-collinearity problem (Cohen, Cohen, West, & Aiken, 2003). For the independent variables of the present research, VIF (between 1,681 and 3,348), CI (between 14,379 and 26,934), and tolerance (between .299 and .595) values showed that data were suitable for regression analysis. After finding that regression hypotheses were confirmed, and there were no multi-collinearity problems for the data, the analyses were conducted.

First of all, correlation analyses were carried out to identify the relationship between the variables in the study, and the results are presented in Table 1. Moreover, descriptive statistics on the variables in the study and reliability coefficients of the scales are given in Table 1 as well.

Table 1: The Correlation between Self-Esteem, Relational Problem-Solving Skills and Socio-Emotional Adaptation; Means, Standard Deviations and Cronbach Alpha Coefficients

Variable	1	2	3	4	5	6	7	8	9
1. Self-esteem	-								
Social-emotional adaptation									
2. Behaving appropriately in social life	.55**	-							
3. Appropriate responses to social situations	.49**	.66**	-						
4. Interaction with peers	.59**	.69**	.72**	-					
5. Positive approach to social environment	.57**	.68**	.57**	.75**	-				
Relational Problem Solving									
6. Aggressive attitude	-.25**	-.56**	-.20**	-.24**	-.31**	-			
7. Passive aggressive attitude	-.12	-.30**	-.20**	-.26**	-.20**	.44**	-		
8. Assertive-positive attitude	.39**	.63**	.57**	.52**	.41**	-.49**	-.40**	-	
9. Reserved-submissive attitude	-.14*	-.13	-.30**	-.25**	-.10	.05	.16*	-.48**	-
Mean	33.23	22.67	9.67	7.58	7.99	8.70	8.08	13.53	4.67
Standard deviation	4.33	4.29	1.99	1.66	1.45	3.46	3.21	3.63	2.08
Cronbach alpha	.86	.93	.76	.84	.85	.80	.79	.76	.71

An examination of Table 1 reveals that there is a negative significant correlation between self-esteem and aggressiveness ($-.25, p<.01$) and reserved-submissive attitude ($-.14, p<.01$), whereas there is a significant positive correlation between self-esteem and positive attitude ($.39, p<.01$). It was also found that there is a significant negative correlation between behaving appropriately in social life and aggressive attitude ($-.56, p<.01$) and passive aggressive attitude ($-.30, p<.01$), while there is a significant positive correlation between behaving appropriately in social life and assertive- positive attitude. ($.63, p<.01$). The findings of the study indicate that there is a significant negative correlation between responding appropriately to social situations and aggressive attitude ($-.20, p<.01$), passive-aggressive attitude ($-.20, p<.01$) and reserved-submissive attitude ($-.30, p<.01$), yet there is a significant positive correlation between responding appropriately to social situations and assertive- positive attitude ($.57, p<.01$). In addition, there is a significant negative correlation between interaction with peers and aggressive attitude ($-.24, p<.01$), passive aggressive attitude ($-.26, p<.01$) and reserved- submissive attitude ($-.25, p<.01$), but there is a significant positive correlation between interaction with peers and assertive- positive attitude ($.52, p<.01$). Another finding of the study was that there is a significant negative correlation between positive approach to the social environment and aggressive attitude ($-.31, p<.01$), passive-aggressive attitude ($-.20, p<.01$), while there is a significant positive correlation between interaction with peers and assertive- positive attitude ($.41, p<.01$).

Correlation findings showed that, the highest correlation between all sub-scales of relational problem solving (aggressive attitude, passive aggressive attitude, assertive positive attitude, reserved-submissive attitude) and independent variables was between social emotional adaptation and behaving appropriately in social life sub-scale.

Table 2: Multiple Hierarchical Regression Analysis on Aggressive Attitude

Model	Predictor	R	R ²	R ² _{CH}	F	DF	BETA	β	p
	(Stable)	.25	.06	.06	14.52	1/226			
1	Self-Esteem						-.25	-.20	.00**
	Stable	.62	.38	.37	27.61	5/222			.00**
2	Self-Esteem						.00	-.7	.99
	Behaving Appropriately In Social Life						-.82	.67	.00**
	Appropriate Responses To Social Situations						.22	.39	.00**
	Interaction With Peers						.18	.39	.05*
	Positive Approach To The Social Environment						-.02	-.45	.81

* $p<.05$, ** $p<.01$

Self-esteem entered into the regression model developed to explain aggressive attitude from relational problem-solving approach was significant in the model ($R^2=.06, F_{(1/226)}=14.52, p<.01$). Socio-emotional adaptation entered at stage one of the regression one was significant ($R^2=.38, F_{(5/222)}=27.61, p<.01$). As sub-dimensions of socio-emotional adaptation, behaving appropriately in social life ($r=.67, p<.01$), responding

appropriately to social situations ($\beta = .39, p < .01$) and interaction with peers ($\beta = .39, p < .05$) were significant in the regression model.

Table 3: Multiple Hierarchical Regression Analysis On Passive Aggressive Attitude

Model	Predictor	R	R ²	R ² _{ch}	F	Df	Beta	β	p
	(Stable)	.12	.01	.01	3.28	1/226			.
1	Self-esteem						-.12	-.09	.07
	Stable	.31	.10	.08	5.11	5/222			.00**
2	Self-esteem						.10	.07	.24
	Behaving appropriately in social life						-.29	-.21	.00**
	Appropriate responses to social situations						.05	.08	.60
	Interaction with peers						-.20	-.38	.09
	Positive approach to the social environment						.05	.12	.60

**p<.01

It is seen that self-esteem entered at stage one in the model to control for passive aggressive attitude from relational problem solving was not significant in the model, ($R^2 = .01, F_{(1/226)} = 3.28, p > .05$). Socio-emotional adaptation entered at stage two of the regression model was found to be significant in the model ($R^2 = .10, F_{(5/222)} = 5.11, p < .01$). It was also observed that as a sub-dimension of socio-emotional adaptation, behaving appropriately in social life ($\beta = -.21, p < .01$) was significant in the regression model.

Table 4: Multiple Hierarchical Regression Analysis on Assertive-Positive Attitude

Model	Predictor	R	R ²	R ² _{ch}	F	Df	Beta	β	P
	(Stable)	.39	.15	.15	39.48	1/226			
1	Self-esteem						.39	.32	.00**
	Stable	.67	.45	.44	36.09	5/222			
2	Self-esteem						.02	.02	.75
	Behaving appropriately in social life						.48	.41	.00**
	Appropriate responses to social situations						.25	.46	.00**
	Interaction with peers						.09	.21	.30
	Positive approach to the social environment						-.14	-.34	.09

**p<.01

It is seen that self-esteem entered at stage one in the model to control for assertive-positive attitude was significant, ($R^2 = .15, F_{(1/226)} = 39.48, p < .01$). Socio-emotional adaptation entered at stage two of the regression model was significant ($R^2 = .45, F_{(5/222)} = 36.09, p < .01$). It was also observed that as sub-dimensions of socio-emotional adaptation, behaving appropriately in social life ($\beta = .41, p < .01$), and responding appropriately to social situations ($\beta = .46, p < .01$) were significant in the regression model.

Table 5: Multiple Hierarchical Regression Analysis on Reserved Submissive Attitude

Model	Predictor	R	R ²	R ² _{ch}	F	Df	Beta	β	P
	(Stable)	.14	.02	.02	4.37	1/226			
1	Self-esteem						-.14	-.07	.04*
	Stable	.34	.12	.10	5.92	5/222			
2	Self-esteem						-.02	-.01	.80
	Behaving appropriately in social life						.13	.06	.20
	Appropriate responses to social situations						-.30	-.31	.00**
	Interaction with peers						-.24	-.30	.04*
	Positive approach to the social environment						.17	.25	.09

* $p < .05$, ** $p < .01$

It is seen that self-esteem entered at stage one in the model to control for reserved submissive attitude was significant, ($R^2=.02$, $F_{(1/226)}=4.37$, $p<.05$). Socio-emotional adaptation entered at stage two of the regression model was significant ($R^2=.12$, $F_{(5/222)}=5.92$, $p<.01$). It was also observed that as sub-dimensions of socio-emotional adaptation, responding appropriately to social situations ($\beta=-.31$, $p<.01$) and interaction with peers ($\beta=-.30$, $p<.05$) were significant in the regression model.

4. Conclusion and Discussion

According to the findings of the present study which was carried out to investigate the impact of pre-schoolers self-esteem and socio-emotional adaptations on their problem-solving skills, self-esteem is a significant predictor of aggressiveness, aggressive-positive problem-solving and reserved problem-solving approaches; it is not a significant predictor of passive aggressiveness. Individuals with low self-esteem levels might ignore their problems rather than solving them or they might wait for the disappearance of the problem or try to give the responsibility of the problem to others and want them to solve it (Korkut, 2002). Since individuals with higher self-esteem levels have a positive opinion of them and have higher levels of self-confidence, they might be less aggressive and behave less reserved in problem-solving. In a study by Holdaway and Jensen (1983), it was found that mean aggressiveness score of children with lower self-perception levels was higher than that of children with average or high levels of self-perception (Cited in Gültekin, 2003). Such findings concords with the finding of the present study that self-perception account for reserved and aggressive problem-solving approaches.

Children develop positive or negative perceptions of themselves as a result of their interaction with the environment. According to Coopersmith (1967), individuals with higher self-esteem levels are more efficient, happy, successful and confident in their interactions with the environment. Children's having a positive self-esteem indicates that they have positive perceptions and opinions of themselves and positive emotions. It is obvious that children with positive perceptions of, opinions and emotions about themselves exhibit positive behaviours (Baran, 1989). An examination of the current literature on this issue reveals that there are lots of research studies

suggesting that there is a linear relationship between development of problem-solving skills and accepting oneself or self-confidence (Bingham, 2004; Hamarta, 2009; Temel, 2008). On the one hand, children with higher levels of self-esteem are active, curious researchers and stubborn individuals. They are eager to interact, do research and ask questions. On the other hand, children with lower self-esteem levels are reserved, indecisive and aggressive. Such children rarely behave assertively; they need to be managed by others and rarely exhibit natural behaviours. Such children hardly use oral communication and they mostly react to obstructions by either behaving highly aggressively or withdrawing themselves from the relationship (Cevher and Buluş, 2007). In their study Happner et al., (1993) found that individuals who view themselves as efficient problem solvers or who are confident with their problem-solving skills have higher levels of self-esteem and can more easily focus on problems. In the present study, it was found that self-esteem is a significant predictor of problem solving, and this finding supports the findings in the literature.

Another finding of the present study is that appropriately responding to social situations as one of the sub-dimensions of socio-emotional adaptation is a predictor of only aggressive, reserved and positive problem-solving approaches. Appropriately responding to social life correlates with aggressive, passive aggressive and positive problem-solving approaches, and it is a significant predictor of these problem-solving approaches. Interaction with peers is a significant predictor of only aggressive and reserved problem-solving approaches. Positive response to the environment is not a significant predictor of any of the problem-solving styles. During early childhood, children are significantly affected by their social environments. Such impacts are also seen in their problem-solving skills. Goldstein et al., (1980) stated that the social skills that children can develop as alternatives to aggressiveness are asking for permission, sharing, helping, self-control, protecting one's rights, coping with mockery, abstaining from conflicts and staying away from fights (Cited in Gülay and Akman, 2009). Appropriately responding to social situations and behaving appropriately in social life also necessitates similar skills in children. By taking this as a point of departure, we can say that the findings of the study are in line with those of the studies in the literature in that responding appropriately to social situations is a predictor of submissive and positive problem solving, and behaving appropriately in social life is a predictor of passive-aggressive and positive problem-solving. In addition, it is crucial that children establish friendships and enter into peer groups to ensure social development. Peer groups boost children's self-confidence and decrease their shyness (Hart et al., 2000). When the literature on this issue is examined, it is seen that there are studies with various findings suggesting that peer pressure is related with aggressive behaviour (Şahan, 2007; Yıldırım, 2007), and social acceptance or isolation in peer relations are related with the child's shyness (Rubin, Burgess, & Coplan, 2002). Such findings concord with our finding that interaction with peers is a predictor of submissive and aggressive problem-solving approach. Another finding of the present study is that positive approach to the social environment is not a significant predictor of problem-solving skills. When the Socio-emotional Adaptation Scale is examined, it is seen that

the items in the positive approach to the social environment dimension mostly encompass the emotional adaptation dimension, which includes feelings and ideas related with the individual's attitudes towards him/herself, others and the objects that exist in the world (Güner, 2008). If the child has adopted a positive attitude towards the social world, he/she might have expectations about a positive social world. This is because he/she lives in a family environment where his/her wishes are deemed important and he/she is at the centre. However, school environment is a place where a number of children live together, and when the child encounters a problematic situation there, he/she might not convert his/her positive attitude towards the environment into behaviour depending on the type of the problem and with whom he/she experiences a problem. However, problem-solving necessitates the use of both cognitive and behavioural skills at the same time (Temel, 2008). In this respect, the positive approach to social environment is not a predictor of problem-solving styles. This might be due to the failure to turn the child's attitudes and opinions into behaviours.

It is also necessary to indicate some of the limitations of the current study. Data about the pre-schooler's social-emotional adaptation and relational problem solving were obtained with teacher evaluation forms. Therefore, data related to the children's social emotional adaptation and relational problem solving behaviours were limited to teachers' observations and assessments at the school environment. Additionally, work group of the present research is urban country in Turkey. These result in a limitation in the generalization of the findings of the present research. It is suggested for the researchers to take these limitations into consideration while evaluating the findings of the present research.

When the findings of the present study are considered, it is observed that the self-esteem and socio-emotional adaptation have a significant place in the children's problem-solving skills. In this respect, it is significant to have educational support from educationalists and families to enable children exhibit behaviours and do activities that are supposed to support self-esteem in children. At the same time, since interaction with peers was found to be a predictor of aggressive and reserved problem-solving approaches, children exhibiting aggressive and reserved behaviours in preschool classes should be provided with educational support to facilitate peer interaction among them. In addition, it is suggested that researches carry out more studies on preschool children's self-esteem, problem-solving skills and socio-emotional adaptations.

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