AN INVESTIGATION OF SOCIAL COMPETENCE AND BEHAVIORAL
PROBLEMS OF 5- 6 YEAR - OLD CHILDREN THROUGH PEER
PREFERENCE, TEMPERAMENT AND GENDER

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ABSTRACT

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PREFERENCE, TEMPERAMENT AND GENDER

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The aim of this study is to investigate differences in peer preference, gender and temperamental characteristics of 5 and 6 year old children on their social competence and behavioral problems. More specifically, the present study examined whether being boy or girl, being more preferred peer or less preferred and different temperamental characteristics differentiates children's social competence, anger-aggression and anxiety withdrawal related behaviors.

Peer preference was determined by the "Picture Sociometry Scale" which was an implementation conducted with children. Teachers were asked to fill the "Social Competence and Behavior Evaluation Scale" for each child participated in the study in their classrooms. Moreover, parents of children participated in the study were requested to complete "Short Temperament Scale for Children".

The participants of this study consisted of 42 5- 6 year old children from one private pre- school in Ankara.

Results of this study revealed that, children with higher peer preference showed more social competence. Moreover, children with higher persistence and approach as temperamental characteristics revealed higher social competence while children with higher reactivity as a temperamental characteristic had also higher anger- aggression behavioral problems. However, gender of children did not differentiate children's social competence, anger- aggression and anxiety withdrawal related behaviors.

Keywords: Peer Preference, Social Competence, Behavioral Problems, Temperament, Gender.

ÖZ

5- 6 YAŞ ÇOCUKLARINDA SOSYAL YETKİNLİK VE DAVRANIŞ SORUNLARININ, AKRAN KABULÜ, MİZAÇ VE CİNSİYET AÇISINDAN İNCELENMESİ

ÖNEREN ŞENDİL, ÇAĞLA

Bu çalışmanın amacı, 5- 6 yaş çocuklarının akranları tarafından tercih edilip edilmeme durumlarının, cinsiyetlerinin ve mizaç özelliklerinin sosyal yetkinlik ve davranış sorunlarını (kızgınlık- saldırganlık ve anksiyete- içedönüklük) farklılaştırıp farklılaştırmadığını ortaya koymaktır.

Çocuğun akranları tarafından tercih edilip edilmediğini tespit etmek için çocuklara "Resimli Sosyometri Ölçeği" uygulanmıştır. Öğretmenlerden "Sosyal Yetkinlik ve Davranış Değerlendirme" ölçeğini araştırmaya katılan her bir çocuk için doldurmaları, ailelerden ise "Çocuklar için Kısa Mizaç Ölçeği" ile çocuklarını değerlendirmeleri istenmiştir.

Çalışmanın katılımcılarını Ankara'daki özel bir okul öncesi eğitimi kurumundan 5- 6 yaşlarındaki 42 çocuk oluşturmaktadır.

Bu çalışmanın sonucunda akranları tarafından daha çok tercih edilen, daha sebatkar ve sıcakkanlı olan çocukların daha yüksek sosyal yetkinlik becerisine sahip oldukları, tepkiselliği daha yüksek olan çocukların ise daha yüksek kızgınlık- saldırganlık içeren davranış sorunları gösterdikleri belirlenmiştir. Cinsiyetin ise

sosyal yetkinlik kızgınlık- saldırganlık veya anksiyete- içedönüklük davranış sorunlarından herhangi birini farklılaştırmadığı ortaya çıkmıştır.

Anahtar Kelimeler: Akran Kabulü, Sosyal Yetkinlik, Davranış Sorunları, Mizaç, Cinsiyet.

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CHAPTER 1

INTRODUCTION

Early childhood is the period in which fastest and tremendous changes occur in means of all developmental areas like cognitive, language, physical, social and emotional (Essa, 2003; Vasta, Miller & Ellis, 2004). As Kaplan - Sanoff and Yablans - Magid (1981) stressed, early years are so crucial in terms of intellectual growth of children. Moreover, preschool years' of education contribute to the children in means of cognitive and social enrichment opportunities (Lunenburg, 1999). Even more interesting thing is that; there is a rapid increase in the activation of synapses in the children's brains in their early years of life (Shore, 2003). In other words, it is stated that, in the first three years of life, the brain of children two and a half times more active than the brains of the adults. And this fact is shown by the pictures that are gathered from the PET scans of the children's and also adult's brains. It is very amazing to see that, six years old child's brains' synaptic density is much more active than the fourteen years old (Shore, 2003). Moreover, in the first years of life, children experience great development in means of language and sensory areas and experience increment in cognitive development in their two to three years of age as a result of the rapid increase in the brain cells (Essa, 2003). Furthermore, through longitudinal study, it was revealed that, components of brain structure change in childhood and adolescent years but only in early childhood years, brain reaches its maximum size (Gogtay et al, 2004). This shows us that, children have the great potential to learn many things, to adapt the environment, to explore, experiment, etc. in early years. In addition, as Morrison (2003) stressed, brain research made the educators aware of the significance of stimulating early years' experiences in the young children's learning. By taking the brain research as a base, it can be said that, brain research contributed to the early childhood education area by taking the attentions on the importance of early years. Therefore, by knowing all these, early

childhood professionals and families should remember that, by providing the enriched environment, the healthy developments of children would be guaranteed.

Parents' awareness and thoughts on the importance of social and emotional development and on peer relationships are crucial. When we investigate studies conducted in Turkey in means of beliefs of parents about the early childhood education, it was realized that, mothers of children who are enrolled in early childhood institutions are generally curious about some points and asks teachers to get information firstly about general well beings and secondly about peer relations of their children (Kuzu, 2006). Similarly, in another study, it was stressed that, families wonder about children's problems, daily and general well- beings of children, peer relationships and behaviors conducted in school environment (Kaya, 2002). In addition, when families were asked about the reason for enrolling their children to the early childhood education institutions, majority of them were responded as for the "socialization" purpose (Kaya, 2002; Kuzu 2006; Köksal- Eğmez, 2008). More importantly, in the study of Köksal- Eğmez (2008), most of the parents believed that (68.8%), early childhood education institutions are the places, which enable children to develop socially, emotionally and cognitively in a positive way rather than the places in which knowledge is given solely (31.2%). These findings show that, parents in Turkey have some kind of realization in means of the significance of socio- emotional development of young children as well as peer relationships in early childhood period. This realization brings the need for studying this area of research more deeply in order for supporting the overall well being of children in early childhood period.

According to Paterson and Sanson (1999), development of social behavior and factors affecting it has received less attention. This reflects the truth that, social and emotional developmental areas remained scarce and should be studied to support children's overall development. However, it is also stated that, in means of social and emotional development, early childhood is a considerably significant period (Kramer, Caldarella, Christensen, & Shatzer. 2010). It was stressed that, young children's social life is complex rather than simple one (Rose- Krasnor & Denham, 2009). More importantly, early childhood years are so crucial that, social

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competencies of young children get the chance to develop quickly although preschoolers have more scarce social competence capabilities than adults. Moreover, early learning environments are the direct influencers of the children's competencies related with social and emotional areas (Joseph & Strain, 2003). Therefore, studying social competencies of children in early childhood education is crucial. As Balat-Uyanık, Şimşek and Akman (2008) stressed, early childhood years are the times that critical experiences can be realized and observed. Therefore, planning preventive programs for early detection and prevention of the problem behaviors of children is important as well as for the recovery of the possible problematic behaviors occur in the future (Balat- Uyanık et al., 2008).

The research on children's social development provides some guidelines for examining factors that can be related with the social development. Research by Stipek, Recchia and McClintic (1992) suggested that, healthy self and social competences are the earliest foundations of the children's social development. Moreover, the biologically based behavioral style for interacting with the environment which is child's temperament is also assumed to be influenced by the social environment (Houck, 1999). In addition, there are some works, which suggest that the temperament is the predictor of social skills in children (Paterson & Sanson, 1999). Moreover, some results suggested that, some specific dimensions of temperament have the possibility to both decrease the child's exposure to risk factors in their environment and increase the child's capacity to resist peer pressure for dangerous behaviors (Wachs, 2006). Therefore, all the dimensions of temperament play also an important role in the children's various kinds of developments.

Evaluating and supporting the socio emotional developments of children is crucial for the early childhood educators (Dunsmore, Noguchi, Garner, Casey & Bhullar, 2008). In other words, early childhood educators should take the norms of peer groups of classroom into consideration in order for enabling children to be developed in social and emotional areas is so important. Moreover, children who have socially and emotionally healthy developments, are considered to be more ready for school life, have confidence in themselves, has positive peer relationships, handle with difficult tasks, have good attention and communication skills (National

Research Council and Institutes of Medicine, 2000). Moreover, it was found that, children who have higher rates of prosocial behavior can easily establish friendship and those children are rated by their parents and teachers as high on peer acceptance and social competencies (Sebanc, 2003; Zanolli, Paden, & Cox, 1997). Therefore, we can infer that, there is a great interaction between the social competence, prosocial behavior and the peer relations of children.

When we specifically look at the peer relationship, we see that, peer relations start at an early age and increase through the years (Hepler, 1997). Formation of peer relations early in life is a crucial task for young children. For example, as Hepler (1997) stressed, relationship formation with peers in early childhood period have an essential effect on the interpersonal interactions in their adolescence and adulthood years. Similarly as Johnson, Ironsmith, Snow and Poteat (2000) stressed, studying peer relations in early childhood period is crucial since psychological adjustment of children in their adulthood years has strong ties to the peer relationship that they establish in early years. In other words, peer relationships are strong predictors of later adjustment in psychological domains. Moreover, it is evident that, children in school settings spend most of their times with the ones who are in school context. As Hartup (1989) stressed, this fact is especially true for children in early childhood period. Therefore, it can be said that, social interaction of preschool children is heavily based on the friendship that is actualized in the school environment. By basing on this fact, it is more preferable to study with preschool children in the school context.

Moreover, it is stressed that, early childhood years are the first chances that enable professionals to detect children with behavioral patterns of impulsivity, reactivity and aggression which constitute primary risk for later psychological health of the individual child (Coie, 2004). Moreover, by placing families and especially peers on the center of the socialization agency, the understanding of the children's social development enriched (Parke et al., 2002). It was also stressed by Parke et al. (2002) that, the deeper understanding of the socialization components, the more efficient intervention and prevention strategies for the children's well being in social development area.

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Due to the child's gender disposition, peer relations, social development and behavioral problems can be differentiated. As Erwin (1993) stressed, children form friendship and peer relationship patterns in the direction of their sex segregations. Moreover, the behavioral patterns of the girls and boys can be different. There are some studies that will be discussed in the following chapter reflecting differences in girls and boys social competences, kind of behavioral problems they exhibit and the friendship patterns they have. Therefore, present study will also investigate patterns of social skills, behaviors and peer preferences of different genders.

In the literature, peer relations can be studied with social competence and psychopathological symptoms in children and adolescence (Gest, Sesma, Masten, and Tellegen, 2006; Bukowski & Adams, 2005). However, the position of peer relations vary in means being considered as predictor, outcome, mediator, and moderator interchangeably in many studies (Deater - Deckard, 2001; Bukowski & Adams, 2005). Therefore, by knowing the multivariate nature of the peer relations, peer preferences of children will be used preferable as a predictor to test the differences of the social competences and behavioral problems of children.

As a result of the studies reflecting the importance of social development, based on the studies done in the field, the recent study aimed to investigate group differences among 5 and 6 year old children's peer preference, social competence, behavioral problems, gender and temperamental characteristics. Peer preferences of children were determined by the "Picture Sociometry Scale" which was an implementation conducted with children. Teachers were asked to fill the "Social Competence and Behavior Evaluation Scale" for each child participated in the study in their classrooms. Children' s social competences and behaviors were evaluated by 30 questions. Moreover, parents of children participated in the study were requested to complete "Short Temperament Scale for Children". Temperament evaluations of children were conducted via 30 items questionnaire.

1.1. Research Questions of the Study

There are some factors like aggression, externalizing problems, social withdrawal, deficiency of social skills, etc. (Stormont, 2002; Johnson et al., 2000, Chang, 2003) that have a relationship with peer acceptance statuses of preschool children. After the detailed examination of the literature concerning socio- emotional development, peer relationships and behavioral problems; peer preference and gender were thought to contribute to mean differences on social competence and behavioral problems of children.

The present study aims to investigate the mean difference among of peer preference and gender on social competence and behavioral problems with a small sample of 5- 6 year-old children. Moreover, it is proposed in the literature that, some temperamental characteristics have association with different kinds of maladjustment (Eisenberg, Valiente, Spinrad, Cumberland, Liew, Reiser, Zhou, & Losoya, 2009). In other words; due to the differences on the temperamental characteristics of children rather than peer statuses, some kind of differences occur in the social competence and behavioral well- beings of children. In the direction of the literature review, temperament was thought to be use as another independent variable for the present study. No specific predictions were made in respect to the relation between children's specific temperamental characteristics and social competence and behavioral well- beings.

This study will attempt to address the following research questions:

Research Question 1:

Does gender differentiates children in terms of Social Competence and Behavioral Problems?

*** Do boys have higher scores than girls in terms of social competence, anxiety- withdrawal and anger- aggression?*

Research Question 2:

Does peer preference differentiate children in terms of Social Competence and Behavioral Problems?

*** Do children with higher peer preference different than children with average and lower peer preference in terms of social competence, anxiety- withdrawal and anger- aggression?*

Research Question 3

Do children with different temperamental characteristics (approach, persistence, rhythmicity, reactivity) differ in terms of Social Competence and Behavioral Problems?

1.2. Significance of the Study

This study is aimed to provide broader perspective by combining developmental psychology with the early childhood education. By taking all these into consideration, it is assumed that, predictive information from this study would be used by the early childhood professionals to change the conditions for the sake of children's development and give parents a different idea about the importance of providing necessary base for social skill development and make emphasis on the importance of peer relationships on the social competence and behavioral well being of preschool children. With the notion that peer relations are crucial and also social skill formation, children's psychological development, academic outcomes would be healthier in the long run (Gettinger, 2003). Gettinger (2003) added that, social competence is beneficial for foundation of the organization and structure of the peer relationship. The studies related with social competence revealed the power of social competence in a way that, in the school setting, children with social competence have the integrative thinking ability; can use emotions and behavior in the accomplishment of the social and academic jobs and outcomes (Gettinger, 2003). Moreover, it is also stated that, early interventions and preventions should be applied to focus on the developments in social competence and examine the ways to assess developing these characteristics. As Semrud- Clikeman (2007) stressed, in order for building a strong base for social skills, parent- child and peer relationships are in utmost importance and also have the power for directing the development of

prosocial behaviors in future life. Therefore, it is evident that, studying social competence, peer relationships and behavioral well- beings in early childhood education is critical.

By taking all the finding related with the importance of the social competence, peer relations and behavioral well- being of young children into account, the present study is aimed to describe the existing situation in means of those factors with a small sample in one kindergarten in Ankara. After the determination of the current situation in means of peer statuses, social competence and behavioral well being; psychological evaluation of each children's statuses related with factors stated above will be reported. In other words, the present study is aimed to give information to teachers, administrators and parents about levels of children in means of developmental well being, informing parents to take prevention and also inform teachers about the current status of children in means of behavioral and social well being in order to improve their practice and to be more able to be efficient for their children. The present study is thought to hold a great advantage in means of improving educational practice of teachers by intending to detect problems related with peer relations, behaviors and social competences of children and even make effort to correct them. It is expected that, families will get the benefit of such evaluation and can have the chance to take precautions if necessary for their children's healthy development in the long- run. Having the implementation side by reporting the recent status of children in means of peer status, social skills and competence, behavioral well- beings and temperamental characteristics, is thought to strengthen the recent study. Not only recent situation of children will be reported to their families but also necessary suggestions for the intervention will also be given for each individual child. Therefore, this study holds also implementation value.

Moreover, when the literature was considered related with the peer relations, social competence and behavioral problems, it can be seen that, there are limited studies conducted specifically for the early childhood period in Turkey. Moreover, although there are many studies related with behavior problems in children, social competence aspect and peer relations in early childhood period remained almost uncover and also combination of related issues were not studied. Therefore, due to

the critical role of early childhood period on the young children's psychological well being (Stormont, 2002; Joseph& Strain, 2003), this area of study deserves great attention.

1.3. Definition of the Terms

The following terms need to be described for the clarification of this study:

Mutual friendship: As Cohen et al. (2006) indicated, mutual friendship could be stated as "reciprocal nominations for friendship". In other words, it can be defined as the two- sided determination of the friendship. In order for the friendship to be mutual, both individual should choose each other as a friend. Similarly Dunsmore et al. (2008) used the same criteria for the evaluation of reciprocal friendship. They evaluated children's mutual relations only when both children nominated the other one as the most liked.

Peer Nomination: According to Bukowski and Hoza (1989), nomination of the each child by basing on the given interpersonal criteria is called peer nomination. For example, asking children to list the most and least liked peers that they like to play as a way of nomination of liked and disliked peers can be considered a peer nomination.

Peer acceptance/ Peer rejection: They depend on the quality of a child's peer relationships in a group context. Peer acceptance can be explained through the analysis of degree that the child is liked by the members of his/ her peer group (Ladd & Kochenderfer, 1996). Peer acceptance based on the qualifications that the peer relationships have within a group but do not base on the relationship between the child and an individual peer. Peer acceptance can also be named as popularity and can be used interchangeably. For example, children can be designated as accepted or popular when an individual child is liked by the majority of the peers in the social group. Lindsey (2002) defined acceptance in a different way. Acceptance is not only defined as the involvement in a mutual relationship but rather can be considered as the level of liking by the peer groups.

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On the contrary to the peer acceptance, when the child is disliked predominantly by his/ her peer group members, that child can be defined as low-accepted, rejected or unpopular within the peer group. As Barton and Cohen (2004) indicated, if the child is determined as disliked by most of the classmates, the child can be identified as rejected.

Friendship: It refers to the reciprocal relationship between the child and an individual peer (Ladd & Kochenderfer, 1996). It is differentiated from the peer acceptance in a way that, peer acceptance or popularity refers to the relationship within members of a social group whereas friendship implies to the dyadic relationship between individual child and individual peer. Similarly, Lindsey (2002) pointed that, friendship is different from acceptance by referring to the mutual relationship between two individuals whereas acceptance requires one step further like being liked by the peer group.

Temperament: As Wicks- Nelson and Israel (2003) stated, "Temperament refers to the basic disposition or makeup" (p. 35). Similarly, as Sanson, Hemphill and Smart (2002) defined, temperament is a kind of behavioral style that change in different individuals and can be apparent since early childhood years. Moreover, as Thomas, Chess and Birch (1968) stated, the way individuals' style of behaving occur on the bases of "how" rather than stressing on the abilities or motivations like what and why.

Sociometry Assessment: It refers to the perceptions of the individuals in the eyes of others in means of like and dislike and also the perception of the others by the individual himself or herself (Hartup, 2009). Sociometry assessments reveal the desires for the associations, desire for engagements in certain activities, likes, dislikes, social networks which all expressed by the other members of the groups based on wide range of information. It is the most widely used technique in determining the relation patterns of peers (Bukowski & Hoza, 1989). Sociometry ratings are important in means of dealing with children who have potential to be at

risk for developing maladjustments and who have difficulties in their social competences.

Social Skills/ Social Competence: As Sheridan, Hungelman and Poppenga-Maughan (1999) analyzed, there is a distinction among the social competence and social skill concepts. Some authors tended to use those terms interchangeably but a distinction should be done between them. As Erwin (1993) stated, social skills show some abilities that are essential in performing those skills competently. Moreover, social skills are specific, distinct and noticeable behavioral cumulatives that enable individual to carry out behaviors in social contexts whereas social competence is based on judgments of others that also includes social skills. As Erwin (1993) pointed, "competence is a function of both specific behavioral skills and situational or task demands" (p. 82). Moreover, as Howes and James (2002) stressed, social competence can be defined as the ability of being successful in social functioning by being able to achieve both their own social relationships with others and able to be engaged in relationship demands coming from the social world.

Internalizing Behavior Problems: Internalizing syndromes can be described for individuals who display shy, anxious, withdrawn, depressed or related problematic patterns (Wicks- Nelson & Israel, 2003). Children with internalizing symptoms may seem fearful and anxious, may cry excessively, prefer to be alone and even complain about somatic symptoms.

Externalizing Behavior Problems: Externalizing syndromes can be described for individuals who display fighting, aggressive, disruptive, over control related problematic patterns (Wicks- Nelson & Israel, 2003). Children with externalizing symptoms may seem as exhibiting rule breaking behaviors like stealing, destroying and engaging in fights.

CHAPTER 2

REVIEW OF THE LITERATURE

2.1. Depth Look on Friendship and Friendship Relations

Adult's friendship formation is thought to be learned in their childhood years and it is appeared as a result of the relationship formed with family members, peers, specific characteristics like temperament, environment of the individual like social and cultural (Irving, 1998). In other words, friendship formation is a process in which various agents have some roles.

Identification of the beginning of the friendship is actually difficult. As Hartup (1989) stressed, detecting the age that friendship appear is really tough. For example, some mothers claim that, their child have their best friends in their infancy or toddlerhood in the form of regularly playing with another child in a harmonious way. With the infant's awareness about existence of the other infants, they start to respond other infants cries and this is believed as the beginning of the peer relations which proposed to be started in the first weeks of life (Hay, Caplan, & Nash, 2009). In addition, after the first year of life, infants become able to interact with peers, share and even engage in some conflicts. As Hay et al. (2009) stressed, the capabilities that appear in the first years of life like sharing, turn taking, problem solving, aggression and conflict which are all needed for the development of dyadic and group relationship. Moreover, the word "friend" is started to be used by children when they are 4 years old in the early years of preschools (Hartup, 1989, Bukowski et al., 1996). Furthermore, as sociometry methods proposed, by the year 3 or 4, children become able to make evaluations on like and dislikes toward peers (Denham, McKinley, Couchoud, & Holt, 1990). Similarly, as Howes (1983) stated, as early as toddlerhood, children start to differentiate among the peers and they can select specific companions as a friend among their peer groups. Although

accompanies of cognitive and linguistic domains are not apparent in early years, mutually agreed friendship term can be differentiated by infants and toddlers (Bukowski et al., 1996). It was found that, in order for children to develop liking toward another peer is tied to the behaviors of that peer toward him/her individually (Masters & Furman, 1981). More importantly, considerable stability in children's social behaviors can be observed from early childhood years to school age (Howes, 1983). Therefore, social interactions and practices held in early childhood years form the bases of the both positive and negative developments which have the great potential to last over time.

However, the underlying meaning while using friend concept is not same with the adult's friendship understanding. In other words, some main and essential elements of friendship like mutuality and commitment is not mainly the main concern of young children. Moreover, as Erwin (1993) stressed, children in their four or five years, exhibit more positive behaviors and generally display those positive behaviors towards their friends than non-friends. When asked children about the reason why they like specific peer, generally a response like "we play" is gathered from the children when they are 4- year old (Hartup, 1989). Similarly, as Howes (2009) stated, in early childhood period or in toddlerhood, children call themselves as "friend" with whom they play. In other words, play and friend concepts are considered as synonymous in a way that if they play together they are friends anymore (Howes, 2009). Therefore, we can say that, children's understanding of friendship concept is different in their early childhood years. More importantly, as Howes (2009) added, parents behave in some ways that reinforces children's understanding of "friend" and "play" phenomenon. For example, parents reinforce it by saying "Play together nicely with your friends", "play like friends" and "go and play with your friends" (p. 180). However, friendship is not solely based on play action, rather it sense more than play.

Friendship of children and adolescents includes "reciprocity" meaning that cooperation, effective conflict management and correspondence of the benefits in the social exchanges between the individuals, "liking" enthusiasm to spend great amount of time with another individual and "affection and having fun" (Bukowski et al.,

1996). Emergence of the cooperation and reciprocity concepts correspond to with the early childhood period. Children start to know that those concepts are relevant for the being friends and also protecting the friendship relationship (Hartup, 1989). Besides those positive components, friendship among preschoolers tends to be stable over time (Howes, 1996). In other words, early peer selections and established friendship among young children within child care settings are remained consistent and lasts for several years (Howes & Phillipsen, 1992). If the child have been gathered a kind of reputation among the classmates, the reputation of the child is hard to change even though the behavior of the child has changed (Johnson et al., 2000). In other words, the acquisition of the reputation is actualized early in life and sticks on children. As Johnson et al. (2000) added, children have some opinions about their classmates by basing on the behaviors of children in the first year, those form the bases of first impressions and those impressions become stable over time. Furthermore, as longitudinal analysis showed that, status of a friendship at a point of time, promote children's peer acceptance in the following year (Lindsey, 2002). As a support to this notion, Johnson et al. (2000) pointed that, behavioral problems of children early in life have an effect on the perceptions of both classmates and teachers. Therefore, acquired or formed peer status in one time has an effect on the acceptance or status of children in the next time. Similar with those researches, as Price and Dodge (1989) stressed, perceptions about peers enable children to form a kind of social reputation. A theory of self- fulfilling prophecy can successfully explain the rationale behind this idea. Children's perceptions about a child may form the behaviors toward that child. This can form the bases of cycle in which the child act on a behavior which is consistent with the perceptions about and expectations from that child. Therefore, the target behavior become reinforcing the child's real perceptions and expectations. In other words, if the attitudes toward one child are developed, those formed attitudes function as an influencer of the behaviors exhibited toward that child (Price & Dodge, 1989). It is important in that point that, children's behaviors toward that child influence the behavior of target child and in turn reinforces the original behaviors of that child. It can be said that, the mechanism function as a justification of both negative and positive perceptions of the child.

2.2. Importance of Peer Relationships

Throughout the development, positive social interactions are essential for the healthy growth and adaptation of individuals (Hepler, 1997). This situation is also valid for the young children's development. As Walker (2009) stressed, positive peer relationships have crucial value for young children's overall development. As it is indicated in human development through the years, "peers are necessities, not luxuries" (Hartup, 2009, p.3). Preschool children have a crucial developmental task that, they should direct and regulate their emotion especially with peers to correspond the needs of the society (Semrud - Clikeman, 2007). Therefore, social interactions particularly with peers have utmost significance. At this point, parents, family members, daycare staff and peers have great job for supporting overall well being of preschoolers (Semrud - Clikeman, 2007). Moreover, it was revealed that, children who can not form positive social interactions with peers tended to be engaged in more delinquency, lower academic performance, and experience school drop out by having low social status (Hepler, 1997). In addition, in order for children to develop positive peer interaction, having social skills is crucial as indicated by teachers (Moon, 2001). Social skills include prosocial behaviors, negotiation, interaction and problem solving strategies which are crucial for teacher to identify problematic children who in need of intervention in the form of social skills intervention (Moon, 2001). Moreover, as Johnson et al. (2000) stressed, in order for learning positive social skills that are required for the social adjustment and adaptation of young children, early childhood years can be considered as "developmentally appropriate" times. Some social skills like listening, sharing, turn-taking, expression of emotions, ability of control, etc. can be learnt in preschool years. Since the basis of friendship formation is lie on the strong foundation of social skills, learning social skills in early childhood years hold great importance. Therefore, as Johnson et al. (2000) proposed, teachers should teach social skills through some methods like modeling, role- playing in order for facilitating experience for young children to try new social skills and get appropriate feedback. More importantly, it was crucial that, perceptions of teachers about the peer relationship problems are significantly connected to their classroom intervention

strategies (Moon, 2001). Therefore, teachers' role in detecting peer relationship and improvement or intervention aspects of it is undisputable.

The importance of peer relationship have been increased today when compared to past since there is an increment in working mothers and single- parent families. This situation makes children to enter childcare settings, which include organized peer groups earlier (Asher, 1990). Moreover, it was added by Asher that, children have to remain in schools much more times than in the past as well as engaging in afterschool activities like summer schools with peer groups. This fact shows the reality that; children have to experience remarkable time with peers in their developmental pathways.

Children's peer relationships make great contributions to their healthy developments. It is well known fact that, forming those healthy relationships early in life are more beneficial for children's development. As Moon (2001) stated, researchers studies peer relations point out that, peer relation problems are experienced when children face with difficulties in getting acceptance among their peers. Moreover, as Erwin (1993) stressed, beginnings of the preschool years are critical times for young children as well as parents'. Moreover, as Johnson et al. (2000) stressed, for the social development of children, preschool years hold great importance and this importance should not be ignored by both teachers and parents. Since the socialization of young children start with the development of social skills and building first friendships, preschool years should be paid attention (Johnson et al., 2000). Similarly, early childhood years are so important and also crucial for young children since they have the first chance to build relationships with classmates other than their family relations (Ortega, Romera, & Monks, 2009). This counterpart group has the power for affecting the children's development of sense of sociability, sense of competence, personality, cognitive and emotional developments. As Vandell, Nenide and Winkle (2006) stressed, individual differences in means of cognitive and language domains have also affect on the formation of friendship among children. In other words, skills, developments and competences in cognitive and language domains in early childhood period are important predictors of the interactions with peers since those developmental areas determine some mechanisms

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related with interpretation of the social cues, understanding of the social behaviors coming from peers. Similarly as Newcomb and Bagwell (1996) stressed, for the children's social developmental well being, building a positive relationship with peers has a significant facilitator role. As Johnson et al. (2000) pointed; peer relationship and skills in social domain in preschool years have permanent effect on children's social development when they start to grade school. Moreover, Johnson et al. (2000) added that, there are some determinants of the child's success in school years like; social competence, healthy peer relations, support coming from both teacher, parent and classmates. Moreover, as Hartup (2009) stressed, early relationships foster competence in communication, regulation of impulses, getting along with others. Early peer relationships are not only important for the recent developmental stages of the children but also crucial for the long- term social, behavioral, cognitive and academic outcomes (Gettinger, 2003). As Johnson et al. (2000) stressed, early peer relationships have a great impact on the both academic performance and social competence of young children. Having powerful social skills and healthy friendship will definitely contribute to the expectation of success of children in their school years. More importantly, as Johnson et al. (2000) proposed, while for the development of social skills and peer relationships preschool years are the optimum times, elementary school years can be ideal for maintaining and improving those skills.

Due to the prevalent disposition of friendship and the effects of it bring friendship concept to the focal point of interest for a multiple disciplines like child psychology, clinical psychology, social psychology, sociology, communications, anthropology, education and sociolinguistics (Bukowski, Newcomb, & Hartup, 1996). Beginning from the Aristotle times, philosophers, sociologists and psychologists worked on the friendship issue and stressed the significance of friendship formation on the successful adaptation of individuals throughout the life (Bagwell, 2004).

Children face with a large number of peers other than their family and neighborhood for the first time when they start preschool (Hartup, 2009). Those times are also important for children in means of establishing first connections with a

large group of peers other than the home- related connections. As Fabes, Gaertner and Popp (2006) pointed; early childhood is the period that the environment of the young children grows dramatically other than the family interactions. In the preschool years, children engage in multiple forms of social organizations (Martin, Fabes, Hanish, & Hollenstein, 2006). It is the period in which children pass through the playing alone days to the interactive play era as a sign for advanced social dynamics (Hartup, 2009). Those interactions in preschool years other than the family interactions can be considered as much more qualitative than the interactions with family members, chosen on a freebase rather than a compulsory interaction (Fabes et al., 2006). Parallel with those findings, Martin et al. (2006) named the preschool years as a crucial period in means of establishing and improving significant behaviors, attitudes and preferences related with the peer social networks and groups. For example, Howes, Hamilton, and Philipsen (1998) conducted a longitudinal study and found that, children that have a close friend at the age of 4 in preschool years, have also more positive friendship ratings at the age of 9 when compared to the children who had no chance to have best friend in preschool years by basing on the teachers ratings. Similarly, as Walker (2009) stated, preschool program and some aspects of preschool education environment have an important effect on the quality of the children's peer relationship. Therefore, we can say that, early childhood years are so vital for the formation of the peer groups and for the early childhood educators, preschool years are so important for supporting the early social interactions among peers. Importantly, as Fabes et al. (2006) stressed, early childhood years holds critical tasks fulfillment and therefore play a momentous role in the formation of the social relationship and the consequences related with them.

As Newcomb and Bagwell (1996) indicated, social interactions among the children foster development and adaptation in means of social commitment, collaboration, problem solving, emotion expression and task orientation. For example, in Walker's (2009) study, it was found that, children who were evaluated as popular in the peer group tend to express more positive affect like smiling, laughing, etc. On the other hand, children who were considered as rejected or neglected through the use of sociometry assessment can be considered as expressing either

negative or neutral emotions. According to Erwin (1993), non verbal behaviors have great importance in means of children's peer relationships. For example, some facial and body movements, familiarity, etc. all has an effect on the peer relationships of children. Besides the words, non- verbal communication can be considered as the powerful way of communication (Erwin, 1993). As Fabes et al. (2006) stressed, emotion understanding is a crucial task for the accomplishment of the social competence in early childhood period. For example, comprehending the cues coming from the environment and interpreting and reacting them in appropriate ways are the critical identifier of the socially competent behavior (Fabes et al., 2006). In addition, As Semrud- Clikeman (2007) stressed, children's ability to comprehend social interactions, make the meaning of the cues coming from the environment related with social environment determines the level of social competencies young children. Moreover, as Thompson and Laguttuta (2006) also stressed, emotional development in young children has a great influence on their social competences since they start to differentiate different psychological situations. In addition, for the psychological well being of the child, emotional development can be considered as a key. As Bierman and Erath (2006) pointed, knowing about emotions in means of ability to identify emotional expressions constitute the concept of emotional understanding. Comprehension and understanding of emotions in young children exhibits the improving mind and social relations (Thompson & Laguttuta, 2006). In addition, as Denham, Blair, DeMulder, Levitas, Sawyer, Auerbach - Major, and Queenan (2002) found, emotional competence of preschoolers like emotion understanding, comprehension, expression and regulation enable children to be rated by their teachers as well as their peers as more socially competent. In addition, again as Denham et al. (2004) stressed, children with healthy emotion regulation also become able to have the ability of social competence. Not only social competence but also peer and behavioral statuses of children can be affected from positive affect that children experience. In other words, it was revealed that, children with positive affect have the chance of being selected more by their peers and get more positive teacher ratings on friendliness and lower in behavioral disturbances (Denham et al., 2004). Similarly, as Rose - Krasnor and Denham (2009) stressed, coping with the

difficulties in social contexts and abilities to manage social interactions is a kind of management in means of self regulation which in turn promote preschooler's social competences. Therefore, it can be said that, emotion expression and consequently understanding emotional cues comes from others are important determinants of social relations of children and though have an effect not only the social competences of young children but also overall psychological well being of young children. It was stressed that, as children move through preschool years, their abilities on self-regulation significantly increase. These abilities like emotion understanding, comprehension and self- regulation are crucial since enable young child to be successful in initiating and maintaining positive relationship not only with peers but also with adults by giving children a gift in improvement of the self control and control over the environment. By considering all these supports for the relationship between ability in social interactions, emotional development and social competence, it is significant to use an assessment that measures all the related areas which enable it to become ecologically valid and useful (Semrud - Clikeman, 2007).

In addition to those skills, self- awareness and self- esteem are developed in children who involved in social interaction (Ladd & Kochenderfer, 1996). As Bukowski et al. (1996) indicated, "the company they keep is an aspect of the developmental niche that has consequences for children's long- term development and adaptation" (p.14). Therefore, it is evident that, peer relationships are in a great importance for supporting the overall development of children.

Peer relationships and the possible benefits based on the friendship is a two-sided process. In other words, as Vandell et al. (2006) stressed, peer relations can be seen both as a dependent variable and independent variable. If it is seen a dependent variable, studies consider it as outcome of interest. In those studies, child factors like gender, temperament can be considered as the predictors of the child's peer relationships in means of quality and quantity (Vandell et al., 2006). Moreover, parent- child relationship can also be seen as a factor that has an affect on peer relations as a developmental outcome. On the other hand, if it is seen as independent variable, it is treated as the predictor of interests. Those studies consider the peer relationship in means of contribution to the children's development. For example, the

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focus in those studies is on the peer relationship and the possible affects that enable for the child's developmental outcomes like affects of peer relationship on children's adjustment to school, problem solving abilities, empathy, etc. (Vandell et al., 2006). Parallel with the Vandell et al.'s point, Irving (1988) stressed that, as the age of the children increases, their repertoires in social cognition also increase. This development enables children to easily understand and respond to the social world around them (Irving, 1988). By the development in social cognition, children start to use more prosocial ways in initiation and the maintenance of the friendship and produce more problem solving strategies. This ability enable children to feel more control for their friendship, take an active role in relationship and encourage children to use more advanced strategies for the healthy peer relationship. Advances experienced in relationship certainly will contribute to children's well- beings. Therefore, as some developmental improvements contribute to the peer relationships of children, positively formed peer relationships will also contribute to some developments in children.

Friendship is viewed as a developmental necessity. It is reflected in a way that, peer relations are considerably important for the acquisition of the competencies needed for the social, cognitive and emotional development of young children (Newcomb & Bagwell, 1996). Moreover, it is revealed that, peer relationships have a great power on the children's adaptation. In other words, children who have healthy peer relationships experience less adjustment and adaptation difficulties in early school transition (Ladd & Kochenderfer, 1996). This fact reflected to the literature as, peer relationships in childhood period have great contribution to the adjustment of children in various contexts (Laird, Jordan, Dodge, Pettit, & Bates, 2001). In addition, as Johnson et al. (2000) pointed, children who have more friends by having social skills in preschool years, experience more smooth transition in entering to kindergarten. Moreover, as Ladd and Kochenderfer (1996) added, when children enter the school and can form relationship with other children within the classroom, their adjustments to school setting became easier. In other words, relationship that the child established plays a preparatory role for children to experience less adaptation problems. For example, as Ladd and Price (1987) indicated, when

children go through kindergarten years to the preschool, they can face with the some difficulties related with the different and unknown school setting, personnel, peers and difficult academic works. At that point, the importance of peer relationships takes part in a way that, children who have formed relationships became in an advantageous status in means of dealing with the adjustment difficulties.

There are some assumptions related with the effects of peer relations on the children's school adjustments. It is assumed that, depending on the quality of the peer relations; peer relations can serve as a stressor or supporter (Ladd & Kochenderfer, 1996). Peer relations have the power in a way that can encourage the security feeling, worth, belongingness, competence and coping strategies. Therefore, peer relations have a direct connection with the adjustment to school concerns.

In addition to the acquisitions of the competences related with the significant developmental levels of the children, the presence of the peer relation is also important for the forming healthy and rich peer social relationships. In other words, if the child has poor social relationship or have low acceptance from peers, children tend to create an imaginary companions (Gleason, 2004). Similarly as Mauro (1991) stressed, creation of the imaginary friendship is based on the lack of social relationship and this is caused by the inability to form socially healthy relationships with real friends. Moreover, Gleason (2004) stated that, imaginary friends are formed due to the peer rejection experienced by the socially incompetent children. It can be inferred that, pretend friends are created in order for the compensation of the rejection and unhealthy peer relationship. Contrary to the belief that, children with pretend friends have poorer social relations, some research indicated that, children who created imaginary friends are tend to be more sociable than others (Gleason, 2004). Moreover, as Mauro (1991) stated, in preschool years, children who created pretend friends are less shy than their peers interestingly. There is also some notion that, companionship that based on imaginary may contribute to the children's peer relations since pretend friends enable them to practicing peer interactions (Gleason, 2004). Those findings bring the idea that, formation of the imaginary friendship develops the social competence and peer acceptance of children but this notion took little support (Gleason, 2004).

Through the centuries, some philosophers mentioned about the nature of the friendship. In early studies, the friendship concept, called as "chum" meaning that a constant companionship (Bonser, 1902). Moreover, Erasmus (as cited in Newcomb and Bagwell, 1996) described the friendship as "the most desirable of all things; more necessary than either air, fire, or water" (p. 290). Similarly, William Blake (as cited in Newcomb & Bagwell, 1996) reflected friendship as vital component for human being like nest for the bird and a web for the spider. As it can be inferred, friendship formation is a necessity, developmental advantage and a significant component of the development of the young children.

Having more friends evoke social competence in children when compared with children with less friends (Bukowski et al., 1996). As Bukowski et al. (1996) stated, having friends is generally associated with desirable social attributes. For example, according to Newcomb and Bagwell (1996), some desired properties like companionship, collobarativeness, altruism, empathy and self-esteem exist in children who have friends. Moreover, as Hartup (1996) stressed, children having friends are more talkative, offer more solutions to problems, introduce more explanations and smile more while performing tasks. Similarly as Fabes et al. (2006) stressed, in early childhood years, social repertoire of children enlarge and their social behaviors differentiate into more complex. The increase in young children's abilities in means of socio- cognitive skills enables children to understand other's feelings, understand and control their own behaviors and meet the wants of the different contexts. In other words, as Fabes et al. (2006) pointed, theory of mind, emotional understanding and social information processing are essential areas that require specific socio- cognitive skills that enable them to perform socially competent behaviors.

2.3. Sociometry: A Way of Evaluating Children's Peer Preferences

In order to learn about children's friendship, early researchers gather information from children by basing on verbal reports (Hartup, 2009). This way of data collection discussed by the researchers during the early 1930s. For example,

Green (1933) stressed that, information about children's friendship was based on the data gathered from the children themselves rather than examining the social interaction happen in the relationship. Therewith, Wellman (1926, as cited in Hartup, 2009) suggested a method for objectively determining the social exchanges between the children in a way that pointing who were friends in the school setting. Through the years more advanced forms of observational studies of friendship was discovered (Hartup, 2009). Moreno was among the ones that contributed identification of the friendship concept. As Moreno (1934) indicated, in order to test the organization of the social groups in means of social preferences called as sociometry. Moreover, Cillessen (2009) defined sociometry methods as cluster of methods, which aimed to evaluate positive and negative relation between individuals in a group. More specifically, sociometry methods can be used in the peer relationship studies in order to evaluate the likes and dislikes between children (Cillessen, 2009). Research shows that sociometry investigations have a long history as more than 50 years (Coie, 1990). Those advances contribute the friendship assessment in a great extend. In addition, sociometry assessment contributes to the studies with social competence (Cillessen, 2009). In other words, sociometry status like rejection or acceptance determines whether children will experience competence or incompetence in means of social areas. Moreover, it was claimed that, some variables related with behavioral, social- cognitive and emotional aspects have correlation with the sociometry status of children. Therefore, it can be claimed that, determination of the peer relationship would guide us to make inference about the presence of social skills and behavioral problems.

As Hartup (2009) stressed, with the adaptation of sociometry to the children's peer relations research, children are started to be asked to determine the classmates they liked and they preferred for certain activities. For example, in Keisner's study (2002), children were asked to nominate their classmates by determining how much they were liked or disliked by their classmates. Similarly, in the study of Dunsmore et al. (2008), peer liking ratings and nominations were used as a sociometry measure. According to this peer rating measure, children are requested to evaluate and determine one peer that are liked most and one are liked least. Standardization of the

liked most and liked least scores was used for the interpretation of the findings. Furthermore, some variables related with the peer literature like peer acceptance, prosocial leadership are studied mostly with the help of peer nominations whereas social competence can be determined through self- reports (Chang, 2003). As Semrud - Clikeman (2007) stressed, also some kind of measures like observation, self- report rating scales, and behavioral rating scales can be considered beneficial for understanding the level of social competence in children and adolescents. Moreover, in order to determine the level of social functioning of children, peer liking can be used as a measure (Cohen et al., 2006).

In the form of rating scale, Asher, Singleton, Tinsley, and Hymel (1979) adapted a kind of sociometry measurement for the usage in early childhood period. When we look at the procedure, children are required to decide on the peer's statuses as liking or disliking by putting the photographs of each child in to the boxes on which happy, neutral and sad face were present. The average point gathered from peers constitutes an indicator of popularity or unpopularity in the form of acceptance or rejection. Similar with the literature, by combining positive nominations and rating scale, Walker (2009), collected data for determining the social statuses of preschoolers through the use of sociometry assessment. Children's photographs were taken from the ones whom permission from parents was given in order to be a part in the research. Three boxes on which happy, sad and neutral expressions were indicated were used in the research. Children were asked to rate all children in the photos by thinking how much they liked to play with those children and want them to put the related child's photo into on of three boxes. Children were told that, happy face referred to the fact that, they like to play a lot with the child on the related photo, neutral face referred they sometimes prefer or like to play with that child and sad face refers to they did no like to play with. Evaluation of this research was based on the 3 point Likert- type scale meaning that, if the photo was put on to the happy face box, the child on the photo took 3 point whereas if the photo was placed by the participant children to the sad face box, that child received 1 point rating (Walker, 2009). All these show that, peer ratings gathered from the sociometry assessment tools can be vitally used for evaluating the social functioning of children. Moreover,

Bukowski and Hoza (1989) claimed that, nomination of the peers is the reliable and a valid way of testing the real interaction of the classmates.

According to Johnson et al. (2000), sociometry assessment mentioned above can reliably and accurately measure the four year old children's social functioning among peers. When three year old children were the participant of sociometry assessment, they again can rate their classmates but when the assessment done second time in order to test consistency; their ratings were found inconsistent from one time to the other (Johnson et al., 2000). Moreover it was found that, three years olds exhibited a tendency to select smiling and frowning face more often compared to the neutral one. In other words, three-year-old children generally tended to like or dislike their classmates. This fact was revealed in Johnson et al.'s study (2000) in a way that, three year old children are considered as having a primitive aspect of friendship since they basically determine their liking or disliking by the expression of aggression behavior. In other words, three year olds evaluate their classmates as disliked when their peer display aggressive behavior like hitting (Johnson et al., 2000). When the analyses of four-year-old children's ratings were made, their peer preferences seem more advanced and complex than three year olds (Johnson et al., 2000). On the other hand, it was also found that, four year olds tended to select more the smiling face meaning of giving more positive ratings to their classmates and gave more neutral rating compared to negative rating (Ironsmith et al., as cited in Johnson et al., 2000). Therefore, it is preferable to study 5 and 6 year old rather than 4 or 3 year olds in terms of detecting the social status among preschoolers.

When we look at the relationship between the sociometry choices and the actual behaviors of children, it was found that, there was a consistency between the preferred playmates of children that was determined through observations and the results of the picture sociometry test (Biehler, 1954). According to Hartup, Larsen, Steward, and Eastenson (1988), this fact shows that, the children's spending time together were valid measure of peer relationship among young children. Moreover, it was revealed that, children play together and be together with peers that they determine as "friend" when compared to other children in the classroom environment. Therefore, we can infer that, children like more to spend time with

children who they consider as more preferable than the ones do not as preferable as others.

Sociometry assessment is best conducted in school and classroom setting due to the fact that, the first signs of socialization process during the periods of childhood can be seen in classrooms (Hymel, Vaillancourt, McDougall, & Renshaw, 2002). On the contrary, classrooms are not the only places that social interaction occurs. It remains scarce in giving information about the social interactions in different contexts like neighborhood, extracurricular groups, etc. (Hymel et al., 2002). Similarly, although the sociometry assessments have great predictive value in detecting the peer relationships of children, it neglects the possible friendship occur out of the school environment (Sanson, Finch, Matjacic, & Kennedy, 1998). Similarly, it was stressed that, sociometry picture techniques or teacher's identification is a good source of detection methods that reveal reciprocated friendship among young children. However, all those methods are only useful for the identification of the classroom- based friendship although child may involve in neighborhood or familial friendship (Howes, 2009). Therefore, those methods ignore the friendships out of school environment. In other words, sociometry assessment is limited to the detection of the peer relationship only in the classroom setting. In addition, some researcher also studied the relationship outside the school environment. It was stated that, if the child have necessary social engagement other than the school, the tendency to experience depression is lessened even if that child experience rejection inside the school (Kiesner, 2002). Therefore, some factors related with children's life could have the power for mediating the behavioral and social difficulties that cause some problems in children (Semrud- Clikeman, 2007). By basing on this fact, temperament can also be considered as having a mediator role between the peer status, social and behavioral statuses of young children.

2.4. Multiple Sources of Informants in Detection of Peer Preferences, Social Skills and Behavioral Problems

In order to detect the friendship features, there are some sources of informants. Children themselves, parents, teachers or trained observers or clinicians can identify the social exchanges that occur among the children (Bukowski et al., 1996, Howes, 1996, Kupersmidt, Coie, & Dodge, 1990). Each source of informant has different advantages and disadvantages (Deater - Deckard, 2001). Therefore, in order for measuring children's friendship statuses, multi- informant assessment is necessary (Sebanc, 2003; Deater - Deckard, 2001). Neither informant are adequate merely, rather some assessment tools should be applied all together for the assessment of friendship features. For example, teacher reports should be supported with the observations, parent reports, and self- reports in order to prevent biases in defining children's friendship characteristics. However, teachers can be a great source of informant since they have chance to witness and categorize some kind of behavioral, emotional and learning problems and can compare between children in the school context. As Coie, Dodge, and Kupersmidth (1990) stressed, teachers are the unique group that can give information about the social statuses of children basing on behavioral correlates. Moreover, since teachers have much time with children, they may be a good source for detecting the peer statuses of the child in the peer group (Rubin, LeMare, & Lollis 1990). Using teachers as assessor of children's behavior seem advantageous since assessment would be more efficient, faster and economical than selecting children as source of informant (Rubin et al., 1990). Therefore, selecting teacher as a rater is a good idea when detecting friendship features, relations and statuses of children. Besides the assessment of friendship, social competence assessment also requires to select teachers as rater. Semrud-Clikeman (2007) justified this view in a way that, parents may be seen as having more limited view of their children's level of social competence and skills whereas teachers have the chance of comparing children with a larger comparison group. Therefore, also for the present study, teacher will be the rater of the children's level of social competences and behavioral problem statuses.

Not only for detection of the peer relationship but also for improving quality of peer interaction is tied on the early childhood teachers. In other words, early childhood teachers have the power that enable children to develop their peer relationship in a great extend (Moon, 2001). The ability to perceive, understand and comprehend problems of children with peers and also understand needs of children facilitates teachers' capacity to improve peer relationships. Therefore, teachers are the unique source that can give clue about peer relationship. It was also added that, as long as teachers have capacity to understand children's problems with peers, attempting to understand children's viewpoints, they easily decide on the necessary strategies for facilitating healthier peer relationship (Moon, 2001). Actually the relationship occur between young children is difficult to analyze since young children are unable to give self- reports unlike the older ones (Howes, 1996). However, still, children have the most powerful control while deciding on whom their friend is, though children's capacities for deciding on and detecting these relationships scarce (Bukowski et al., 1996).

Not only in friendship assessment, but also in the assessment of the behavioral problems multi- informant assessment is crucial. As Cai, Kaiser, and Hancock (2004) stressed, parent and teacher ratings are the possible sources of informants in determining the young children's behavioral problems. Parents and teachers are preferred over the children since young children are thought to exhibit unreliable information about their behaviors. As Cai et al. (2004) added, direct observations and clinical psychiatric assessments are thought to be costly. Therefore, in the assessment of the children's behavioral functioning parents and the teachers can be considered as reliable sources. Similarly, Balat - Uyanık et al. (2008) stressed, behavioral problems of children cannot be assessed through only one source. As indicated in their studies, a problematic behavior that is seen as a problem by mother do not necessarily seen as a problem by educators or vice versa. Therefore, applying multi-informant assessment is crucial in early childhood period as well as supporting them with related observations in order for detection of the problematic behaviors and the treatment of them (Balat - Uyanık et al., 2008). As Snyder et al. (2004) stressed teacher ratings can give healthier results than parent rating when information

based on conduct problems have been issued. In other words, since teachers are the direct observers of the children's peer relationships especially in school context, they are more able to point out processes related with peer relationship that predict conduct problems in young children (Snyder et al., 2004). Similarly as Scourfield, John, Martin and McGuffin (2004) stressed, while assessing the prosocial levels of children, parents may rate their children different than their actual level of prosocial behavior. Therefore, teachers seem as more reliable sources of informants.

Assessment of the social competence ability is crucial as well as gaining an understanding about it (Semrud- Clikeman, 2007). As friendship assessment and behavioral problems detection, assessment of social competence also needs multi-informants. As Semrud- Clikeman (2007) stressed, interviewing with both parent and teacher as well as the child if possible, observation in various contexts, assessment through rating scales or using role plays can be beneficial for gaining a wide picture about the child's social behaviors in different environments. Therefore, it is important to use different and various sources as much as possible in the assessment of peer relationship, social development and behavioral well being of young children.

2.5. Functions of Friendship:

In general, it is believed that, having a supportive friendship is beneficial for the developmental well being of children. According to Sebanc (2003), children who have a positive supportive friendship with prosocial children are able to move on the normative developmental pathway whereas children who have negative friendship including conflict components with overtly aggressive children may experience disruption in their developments. As it can be seen, friendship can function both in a positive and a negative ways.

As Ladd and Kochenderfer (1996) stated, friendship has some functions that can be considered as benefits for young children. The friendship process can have an effect on the children's school adjustments by affecting children's skill development, sense of security or emotional support and affect regulation. For example, as Ladd (1990) stated, friends have a great function in means of enabling children to make

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smooth transition from preschool years to kindergarten. It is believed that, children feel confusion and fearfulness when they face with some primary tasks of childhood like separation from the parents and adaptation to the new school and environment (Ladd & Kochenderfer, 1996). In those dilemmas, children really need someone who seem familiar classmate and try to create a friendship in order to compensate for those insecure feelings. By forming friendship, children an able to feel more secure and can get the benefits of the learning atmosphere. Moreover, it was found that, children who do not experience difficulties related with the school adaptation like school avoidance in the kindergarten years are the ones who started kindergarten with familiar peers (Ladd & Price, 1987). In addition, as Ladd (1990) found, when entering kindergarten, children with high levels of acceptance in preschool years and with more familiar peers were found to be less anxious at the beginning of the school year and have higher levels of liking school in following years. By taking all those findings into account, we can infer that, familiar friends enable children to form more positive attitudes toward school by eliminating the feeling of insecurity and strangeness of the school at the beginning. In addition to the school adaptation function, Ladd (1990) added that, friendship possession promotes "positive social adaptation". Moreover, as Sebanc (2003) stated, friendship enables children to form a kind of emotional bond between them. Moreover, as Howes (1996) stated, preschool children's friendship bases on the intimacy, affection, mutuality and companionship. Therefore, we can say that, children make an investment for their social and emotional developments through the use of mutual friendship.

According to Howes (1983), some social interactions are categorized as complex social interactions and require complex skills and those skills can be improved within friendship relations. In the friendship context, friends create an atmosphere in which an interaction occur which has a function of improvement of children's social skills (Ladd & Kochenderfer, 1996). For example, as Sebanc (2003) found, there is a positive link between the friendship support and prosocial behavior. In addition to this finding, it is stated that, positive social behaviors are associated with having friendship. As Sebanc (2003) stressed, children who possess friendship are more accepted, prosocial and less rejected when compared to children without

friend. As Sebanc (2003) pointed, the reason for this finding can be the development of understanding in children about being prosocial and likable. Beside this possibility, the reason can be in a way that, children may be required to have some positive social skills to form friendship. As it can be inferred, both potential explanations can be possible since the direction of the causation can be true for both explanations. Similarly, as Hay et al. (2009) stressed, prosocial behaviors generated from early peer experiences, which displayed toward peers enable children to get peer acceptance in the preschool setting. Moreover, as Howes (1983) indicated, children who have a stable mutual friendship are more likely to get acquirements in social interactions and play behaviors. Similarly as Lindsey (2002) stressed, forming mutual friendship requires social skills that can have a great contribution for preschoolers' social relationship formation and development. In other words, through the friendship formation, children make vital contribution to their social skills, which in turn affect their level of social competence.

Besides gaining in means of social skill, friendship functions positively for the improvement of emotional support or security sense of children. It is known that, for young children, attachment is very important for their psychologically healthy development. The quality of the attachment that is formed early in life constitutes the bases of the competence experience later in life (Erwin, 1993). When children's attachment figures like parents or primary caregivers are absent in child care setting or school context, friends serve as an attachment figure for young children (Howes, 1983). Therefore, both agents hold great importance. Moreover, social functioning of children like the parents, through the relationship delivers some social skills with the child and this formed pattern of attachment forms the bases of peer relationship. As Erwin (1993) stressed, parents can serve as a social skills coach in children's first years of life and can function as a supporter of the children's social competence and peer popularity. Therefore, it can be said that, parents are in a great importance in affecting children's both peer relations and social functioning.

Moreover, besides the functions of general friendship concept, familiar or acquaintance peers contribute in a great extend to the overall development of children. It is considered that, familiarity with peer facilitate the social- emotional

competence and adjustment of the young children (Ladd & Kochenderfer, 1996). Moreover, it is stated that, if the child's friend is socially competent one, the social competence level of that child is also increased (Hartup & Abecassis, 2002). In other words, the social status of the friend is crucial in means of affecting the social outcome that the child gets. For example, if the child's friend is antisocial or rejected one, the probability of experiencing a negative social outcome will increase (Hartup & Abecassis, 2002).

Besides all positive functions of friendship, there can be some potential for negative influence. In other words, negative friendship can be harmful in some instances. As Sebanc (2003) stated, due to the negative friendship, some detrimental or useless skills, potentially harmful information, information that lack emotional and cognitive sources and negative modeling can be gathered by the friends and this really disrupt the positive development of individuals. Moreover, as Vitaro, Boivin and Bukowski (2009) stressed, negative friendship like friends with deviant behaviors, adjustment difficulties, conflict and low quality may disturb the development of children. Friendship can have the power for affecting psychological and behavioral adjustment of children and adolescents either in a positive and negative ways (Vitaro et al., 2009). This evidence shows us that, friends can both serve for positive and negative functions and friendship have vitally important function in means of supporting the social and emotional development of children but as well as it can also potentially be harmful in case of negative friendship. According to social- learning theorist, peers have influencer mechanisms that can influence the children's behaviors by either reinforcing or punishing certain behaviors (Berndt, 1989). However, reinforced behaviors may not necessarily be the ones that are acceptable. In other words, peers may reward some undesirable behaviors and this creates the negative influence of friendship.

2.6. Friendship and Gender

In the children's friendship and peer relations, there is some kind of pattern in means of sex segregation (Erwin, 1993). As Fabes et al. (2006) proposed, approximately at the age of 3, children start to make sex segregation and this continues through childhood years. According to Erwin (1993), there are two kinds of sources that sex differences in children's social behaviors originated from. First one is the difference in the patterns of the both sexes' behaviors and the second one is the different treatments that both genders get from other people in their environment. In other words, the socialization process that boys and girls are encountered has an effect on their future friendship formation and consequently behavioral patterns they have.

According to Barton and Cohen (2004), one of the essential components of the children's social development is the gender of the peers. It is believed that, children from both genders generally tend to become friends with same- sex children (Barten & Cohen, 2004). Not only children but also parents also prefer same sex play partners for their toddlers before entering nursery school and also parents support the play activities, which can be considered as sex appropriate (Erwin, 1993). Moreover, children who have friends both from their sex and opposite sex were found to have more friends and be more helpful and accepted by peers of the both sexes when compared to children with only friends from same- sex (Kovacs, Parker, & Hoffman, 1996).

It is believed that, girls and boys prefer interactions with different number of peers. For example, in Benenson's study (1993), it is revealed that, girls tend to engaged in dyadic interactions more than boys do. Beside the number of friends, the quality of the rejected children's friendship is also important. For example, as Lansford, Putallaz, Grimes, Schiro- Osman, Kupersmidt, and Coie (2006) revealed, girls who rated as rejected have more problematic behavioral patterns than the other girls. In other words, the behavioral patterns of the girls and boys are also different. For example, as Lansford et al. (2006) found, girls who are rated as rejected by their peers and friends of rejected girls have poorer behavioral maturity and they lack in skills for conflict resolution. However, it is also said that, friends of rejected girls can

have the ability to strengthen the dyadic interaction of those girls (Lansford et al., 2006). In other words, friends can be a good source for compensation of rejection.

In Balat - Uyanık et al.'s (2008) study differences of the behavioral patterns of the girls and boys were revealed. It was found that, girls took more ratings in internalizing behavior problems whereas boys got higher scores in externalizing behavioral problems in teachers' ratings. Specifically, as Snyder, Prichard, Schrepferman, Patrick, and Stoolmiller (2004) stressed, impulsivity or inattention is prevalently seen in boys compared with girls. This impulsivity factor has the potential to cause conduct problems by the entry to kindergarten in boys.

The expression of emotions and effects on the peer statuses of the girls and boys are also different. As Walter and LaFreniere (2000) stated, anger expression is linked with peer rejection in boys whereas is not linked with neither rejection nor more acceptance in girls. This finding show that, due to the difference in the nature of affective expressions of boys and girls, peers' behaviors can be differential toward genders in the form of either rejection or acceptance. In other words, peers notice different aspects of the girls and boys affective expressions and comprehend them accordingly.

In Guzman, Carlo, Ontai, Koller, and Knight's (2004) study, it was found that, girls displayed more negative nomination of their classmates than boys. This finding suggests that, exclusivity among girls population is more than the boys' population. Therefore, it can be said that, there can be differences in means of peer relations, social development and behavioral outcomes of children due to their gender dispositions.

2.7. Peer Acceptance /Rejection and Social Status

There is a general idea that, both social acceptance and rejection are correlated with different but consistent patterned behaviors (Coie et al., 1990). For example, while aggressive behaviors associated with rejection; helpfulness, friendly behaviors, and social interaction with peers correlated with acceptance as stated in peer reports. Moreover, as Gest et al., (2006) stressed, peers have great capacity to

observe each other's experiences and due to this capacity they may point out the skills and competencies that are different among peers. In other words, since children are good at monitoring each other's behaviors, they had the ability to make distinction among children have social skills and competencies. This arouses the fact that, children can make differentiation, can accept or reject peers by basing on the observation of the social skills of the peers.

It is well known that, having friends or no friends, being liked by those friends or not affect the children's social statuses in a great extend. It is evident that, the social skills, which develop earlier in life, promote children's friendship constructions in preschool years and according to Lindsey (2002), this issue needs greater consideration. As Cohen et al. (2006) stressed, for an individual's self development and social functioning in the social situations, peer relations have a vital role and being liked or not by the peers form the frame of peer relation. Moreover, determination of peer relations in means of acceptance and rejection is more prevalent in early childhood period when compared to friendship relations most probably due to the difficulty in measuring friendship features in early childhood (Dunsmore et al., 2008).

As Kaye (1991) indicated, children who are low- accepted and friendless took low peer ratings of sociability- leadership and likability when compared with rejected and neglected children who have friends. In addition, as Parker and Asher (1993) stressed, friendship characteristics of the accepted peers can be considered as more positive and includes less conflict than less accepted ones. Moreover, children rated as unpopular and friendless are found to be higher on sensitive- isolated and aggressive - disruptive behavior when compared with the children who are rated as popular and having no friends or either popular or unpopular friend (Hoza, 1989). As indicated in the children's ratings, teachers' ratings also showed the same direction. As Hoza (1989) found, teachers evaluated unpopular and friendless children having more externalizing behaviors and rated them as low on adaptive functioning. Furthermore, children who have no friends as well as rated as unpopular have low self- worth and cognitive self- competence compared to children having friends (Hoza, 1989). As it can be inferred, having friends or being friendless makes the

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distinction in means of social correlates. On the contrary to the researches held on the peer literature, Parker and Asher (1993) stated that, individuals who have low acceptance could also have friends. In other words, the level of acceptance may not be the only evidence for the social failure. In order to decide on the individual's social status, some other measures rather than the existence of the friends can be used such as existence of the reciprocated friendship (Kiesner, 2002).

According to Erwin (1993), popular children can be named with generally positive names like enthusiastic, kind, outgoing, helpful, attractive, etc. On the other hand, rejected children are named generally by negative words. As Erwin (1993) stressed, perceptions of neglected children are totally different from the popular ones in a way that, neglected children see themselves less socially competent, they even take little feedbacks from their peers on their helpfulness or kindness. Rejected children can generally be considered as disruptive, aggressive, rude, immature and short- tempered (Erwin, 1993). Therefore, attributions made for the popular and unpopular children differ by basing on the characteristics they display.

As Newcomb and Bagwell (1996) indicated, with the analysis of peers interactions, it is evident that, friendless children show less adaptive strategies related with social competence and social skills especially while interacting with their peers. Similarly, as Smith (2001) revealed, social and emotional competence in preschool children are tied to the level of acceptance in a way that, children with higher acceptance by peers have more emotional and social competence in the kindergarten environment. For example, according to Bierman, Smooth, and Aumiller (1993), compared to rejected children, non- rejected ones possess more social skills and competence. Moreover, it is pointed that, children with no friends, less likely to reveal altruism and trust for their peers, their conceptualization about the friendship is immature, their play with peers is negative and uncoordinated (Newcomb & Bagwell, 1996). For example, as Walker (2009) found, children who were rated as popular by the use of sociometry assessment, tend to engage in more cooperative play behaviors, engage more in positive social interactions and communication behaviors when compared with the rejected and also neglected children. On the contrary, children whose social statuses determined as rejected tend to be engaged in

solitary play and display less positive social interactions when compared with accepted ones. In addition, when we look at the social reputation of the children who named as friendless, their peers label them as less sociable, negative, isolated and disruptive. In other words, their peers characterize their social reputation as negative. As Newcomb and Bagwell (1996) stressed, children who are both friendless and unpopular are considered at a certain disadvantage. In addition to that fact, friendship concept has a protective function against the negative effects related with the low peer acceptance and rejection.

According to Cillessen and Bellmore (2002), peer status can be used as a determinant of the social competence levels of children due to constitutive role of the peer status on the social skills and competence formation by basing on the common views of the individuals around the person. Similar with this notion, Lindsey (2002) found that, children who are parts of a friendship were perceived by their both peers and teachers as more competent than children who cannot form a friendship. Moreover, as the number of friends that children have increased, children's teacher rated competencies also increased and those children were more liked by peers when compared to the children who had fewer friends or no friends (Lindsey, 2002). Therefore it is suggested by the Lindsey (2002) that, children should gain friendship formation skills as early as possible in order for children for benefiting from the competency skills. Moreover, as Fabes et al. (2006) stressed, children who can be considered as socially competent have greater positive interactions with peers and positive interactions with peers have great contribution to the social competence of young children through the means of enabling and keeping the social contact and abilities. This reflects the reciprocity between social competence and peer interactions. In some studies even, peer acceptance or statuses is used as an indicator of children's level of social competence (Cillesen & Bellmore, 2002). Therefore, peer relations should be paid attention in order for having socially competent children as well as supporting social competence of children for enabling children to have healthy peer relations. At that point, teachers and parents should be guide for their young children to enable them to learn social skills necessary for healthy social and emotional development (Johnson et al., 2000). Moreover, it was also stressed

that, teachers are in a great position in a way that they can see interaction of preschool children more often than parents see. Therefore, parents should be aware of the capacity of the preschool teachers' ability to identify both peer relationship of children and problematic behaviors tied to them.

2.8. Social Competence, Peer Relations and Children's Psychological Health

Children's well- being and their healthy development are strongly tied to their social competence (Cohen et al., 2006). There are some evidences that, socio-emotional competencies provide protective factors for the development of mental health problems (Kelly, Longbottom, Potts, & Williamson, 2005; Webster- Stratton & Reid, 2003). It is evident that, children's successful social interaction is strongly tied to their emotional functioning (Hubbard & Dearing, 2004). Similarly, children who lack socio- emotional competencies can be at risk for developing early onset behavioral problems and 50% of the children who show those behavioral problems in preschool will later develop a type of behavioral disorder (Webster- Stratton & Taylor, 2001). Therefore, by considering all these prosocial and social behaviors, we can say that, social competence is crucial for the healthy psychological development of the children and it should be supported as early as possible especially in the early childhood period.

Between the years 2 to 5 children go through some developmental changes and they start to have control over their emotions and also over language, start to communicate with others, explore and investigate the world around them (Campbell, 2006). In their four years of age, they start to be involved in plays that require competence, perspective taking, sharing, making reciprocal conversation and resolving conflicts. Major developmental change occurs between the toddlerhood and five years of age in means of the emergence of the behavioral problems (Campbell, 2006). If some kinds of variation occur in the development of social competence like collaboration with peers, in the self- regulation like control of aggression, and in the emotional expression, some problematic behavioral patterns may emerge in the preschool period. However, in order for saying normal or

abnormal to the specific behavioral problem, not only the existence of the problem is needed but also the frequency, intensity, chronicity, social context and implication should all be considered (Campbell, 2006).

In addition, for children's healthy social functioning, peer relations have an essential value since they contribute to the psychosocial adjustment of children (Ladd, 1990). In the beginning of the 1970's, psychologists paid attention to the point that rejection experienced in the context of peer relations have connection with the various forms of maladjustment (Kupersmidt & DeRosier, 2004). Parallel with the early claims, according to Coie (1990), there is a relationship between peer rejection and adjustment difficulties in the long run. For example, experienced rejection can cause adjustment problems early in life and those problems can possibly cause future disorders in adolescents as well as in adulthood. As Rubin Bukowski, and Parker (2006) indicated children who experience peer rejection are exposed to negative outcomes like depression, loneliness, conduct disorders (CD), lower academic performance, school dropout, substance abuse, delinquency and adult psychopathology. Children who face with difficulties with peers show some behavioral patterns that can be classified as internalizing and externalizing (Rose-Krasnor, 1997). Externalizing behaviors can include exhibiting overt action, aggression, and disruption in engaging in relationship with others and having high activity level (Semrud- Clikeman, 2007). According to DSM IV- TR (APA, 2000), conduct (CD), oppositional defiant (ODD) and attention deficit hyperactivity (ADHD) disorders can be considered under the classification of disruptive behavior disorders. On the other side, as Houck (1999) pointed, internalizing behavior patterns can be classified as internally experienced, internally directed to oneself and can be seen in the form of social anxiety and withdrawal. Internalizing behavior patterns can be seen in the form of watching other children, becoming sad in the case of no attention, sadness about not having enough and all these show the real or possible internalizing problems (Houck, 1999). Moreover, symptoms related with internalizing behaviors can be related with mood, anxiety, depression and etc. (Prinstein et al., 2009). According to Semrud - Clikeman (2007), there is a

relationship between both internalizing and externalizing behavioral patterns and the problems in social competence.

CD was defined in Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) (APA, 2000) as the tendency for the violation of the societal norms or rights of the other individuals by exhibiting consistent and repetitive behavioral patterns. Children with this disorder tend to display aggressive behavior, react aggressively, threaten, bully and even display more severe forms of deviant behavior in their adolescence years like fire setting, deliberately causing damage, theft, rape, homicide, etc. Moreover, the age of onset is crucial in the diagnosis of the CD. As DSM stated (APA, 2000), individuals with the childhood onset type of CD are generally diagnosed prior to the age of 10, high proportionately are male, exhibit aggression thematic behaviors, and have disturbed peer relations. In addition, children with this childhood onset type can also experience attention- deficit/ hyperactivity disorder and have the potential to experience persistent CD and transfer it to experience Antisocial Personality Disorders in their adulthood years. In other words, onset time is crucial for the severity of the disruption, variation of the disorders that potentially would be experienced. Therefore, early childhood years are critical for the diagnosis and the intervention of the behavioral problems in order to prevent them to be transferred to the future life of children.

Similar with the Conduct Disorder, Oppositional Defiant Disorder (ODD) is the behavioral problem that is critical in the social and emotional development in early childhood period. According to DSM IV- TR (APA, 2000), ODD can be defined as the "recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures" (p. 100). Some kind of behaviors like losing temper, being stubborn, frequent argument with adults, refusing to adapt the rules or demands, refusing to negotiate, doing things intentionally to annoy others, blaming others, etc. As in the diagnosis of other disorders, it should occur frequently, different than the typical according to the developmental age and comparable age and it should disturb the some functions of individuals in social, academic and other areas (APA, 2000). ODD's onset generally occurs before the age 8 years. Therefore, as in CD, early childhood period is crucial for both the diagnosis and intervention of

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the behavioral disorders in children. Beside CD and ODD, there is also another category named "Disruptive Behavior Disorder Not Otherwise Specified". This category includes the category in which the behaviors of children do not meet any criteria for CD or ODD (APA, 2000).

In the present study, angry and aggressive behavioral patterns that are mentioned will not be used to decide on or infer any kind of behavioral disorder. The disorders are mentioned due to drawing the general picture about the behavioral problems, their severity and diagnostical criteria.

Moreover, as Laird et al. (2001) found, externalizing behavioral problems combined with peer rejection experienced in childhood period can contribute to the antisocial tendencies in adolescence. In other words, early behavioral patterns in childhood have the potentials to be carried into the later years like adolescence and adulthood. Specifically, as Semrud- Clikeman (2007) stated, CD have potential for becoming more chronic than depression. It was added that, CD may cause more negative effects on the child's social competence due to the fact that, children with CD have been considered to be more hostile in their peer relationships and this fact contributes negatively to the advancement of prosocial skills in children.

Rubin et al. (1990) used the term social isolates in order for describing socially withdrawn children. Social isolates refer to the children who make less connection with their peers when compared with the same age norm group. They added that, children who are anxious and inhibited have the possibility of facing with rejection by the peer groups. This rejection may lead another withdrawals and rejections from the social environment. As a result of the rejection got from the environment, children start to develop a kind of distress and this lead child to develop internalizing problems. In other words, children with social failure have a tendency to develop negative self- perceptions or incompetence about their social skills (Rubin et al., 1990). Consequently, factors related with isolation and rejection in early childhood, more or less predict the onset of internalizing behavior problems in childhood and adolescence years. Parallel with this notion, Kupersmidt and DeRosier (2004) stressed that; peer rejection can cause various negative outcomes and problems related with adjustment. Through studies of multifinality, it was

stressed in a way that, effects of rejection on a specific child can differ as a result of exposure to some other factors like personal characteristics or some other risk factors. In other words, many factors may affect the influence of the peer rejection on the adjustment of the young children.

On the contrary to internalizing patterns, externalizing behaviors cover aggression and disruption components, which can be classified as "acting out" behaviors. Displayed aggression in childhood period can be considered as expressions that cause oppositional or conduct disorder symptoms in their adolescence years (Prinstein, Rancourt, Guerry, & Browne, 2009). As Semrud - Clikeman (2007) stressed, children with CD or ODD can experience problems engaging in social relationships in early years and those children have the risk for developing negative and hostile behaviors in adolescence and even in adulthood years. In other words, due to the fact that, children with CD have greatest risk for engaging in negative behaviors, an intervention especially for the improvement of social competence should be delivered for those as early as possible in preschool or elementary school years (Semrud - Clikeman, 2007). Moreover, it was added that, the aggressive behavioral patterns observed in childhood period could also have correlation with the peer rejection. For example, as Semrud - Clikeman (2007) stressed, children who exhibit CD and ODD tendencies can experience peer rejection. Due to that rejection, child may evaluate the other's perceptions, intents more negatively and evoke more aggressive behaviors in other children. Basing on this aggression, may became estranged from peers and prevent child to improve prosocial behaviors (Semrud - Clikeman, 2007). Therefore, peer status cannot be the only reason for developing behavioral problems rather a third variable like aggression may produce those symptoms. In addition, when we look at the forms of externalizing behaviors, we see that, children in their toddlerhood, exhibit externalizing behavior patterns in the form of noncompliance, defiance, conflicting with other children, annoying other children and create provocation, interrupting other children's activities, opposed to the rules in activities and in social contexts (Houck, 1999). Similarly as Campbell (2006) stressed, externalizing behaviors are expressed in the form of tantrums, aggression, impulsivity, fighting, etc. When we

look at the relationship between behavioral problems and peer relations, it is stated that, aggressive behaviors may harm the children's peer relationships (Ladd & Burgess, 1999). In other words, it can be considered that, children who display aggressive behaviors tend to be rated by their peers as rejected. As Snyder et al. (2004) stressed, children who are less socially preferred by their peers and exhibited aggression in a great extend in preschool years have potential to develop conduct problems equally both in boys and in girls. In other words, conduct problems can be anticipated by the negative peer relationship and externalizing kind of behaviors. Similarly, as Johnson et al. (2000) stressed, children who face with social rejection tend to display more negative behavior especially aggression. Similarly, Smith (2001) found that, children who are rated as liked tended to exhibit less aggressive behavior and rated by their teachers as having less social problems. However, in this issue, there is a controversy that, aggressive children may both be liked or disliked by their peers and therefore they can be both rated as rejected and accepted (Dubow, 1988). Similarly, as Gettinger (2003) stressed, aggression may have relationship with both peer rejection and also with peer reputation. In other words, aggression behavioral patterns may cause rejection as well as enabling the child to become focus in the peer group as a sign of peer liking. In other words, aggressive children seem a heterogonous group in terms of the social statuses.

When the problematic behavioral patterns are studied longitudinally, it was revealed that, internalizing problems increased whereas externalizing ones decreased with age (Williams, Degnan, Perez- Edgar, Henderson, Rubin, Pine, Steinberg, & Fox, 2009). Moreover, it is also revealed that, children who showed higher level of behavioral inhibition patterns tend to form more internalizing problems in the preschool years and their internalizing problems continue through childhood and also adolescence. In other words, problematic behavioral patterns in early years can affect the parenting style and also affect the behaviors in middle childhood years and this may cause behavioral problems in subsequent years like in adolescence (Williams et al., 2009). Therefore, we can infer that, early childhood years are so crucial in means of evaluation, detection and intervention for the behavioral problems in children. Since the development of social behaviors of children remain somehow stable from

the early childhood years through childhood and adolescent years, examination of the both positive and negative behaviors of young children and correspondingly support the positive processes and intervene the aversive and maladaptive patterns as quick as possible should be the crucial task of the early childhood years (Fabes et al., 2006). Parallel with Fabes et al., as Balat- Uyanık et al. (2008) stressed, early detection and intervention programs are so crucial to implement early in life in order for preventing the possible problematic behaviors occur in preschool children. Otherwise, irrevocable results can occur and this may disturb children's well- being and overall development. Campbell (2006) pointed that, intervention programs seem to be more successful with children who are younger. Therefore, early detection and intervention appear to be significant.

In Walter and LaFreniere's (2000) study, it was found that affective expressions of young children have an effect on the peer relations and social correlates of children's behaviors. It was predicted that, children who can express positive affective expressions would have competent behaviors, get positive sociometry ratings and acceptance scores. On the contrary to the positive affect, children who display anger expressions will have more externalizing behaviors, negative sociometry ratings and face with more rejection- based behaviors from their peers. Beside positive and anger based expressions, in the case of distress affect, it is expected that, more internalizing behaviors and negative sociometry ratings will appear (Walter & LaFreniere, 2000). Results gathered from the Walter and LaFreniere's (2000) study happened in the direction of the expectations. It was found that, children who displayed positive affect had more accepted by their peers and their social competence levels are relatively high as teacher ratings revealed. Moreover as it is expected, children with anger affect tented to show more externalizing behavior and expressed less internalizing behavior problems. Moreover, those children who exhibit distress expressions were evaluated by their teachers as depressive, anxious, angry and oppositional and those children tended to display more internalizing behavior problems and rated by their teachers as having lower social competence (Walter & LaFreniere, 2000). Moreover, it was stated that, depressive and aggressive symptoms can be seen simultaneously and that condition

can cause child to experience higher rejection from peers and face with more challenge in social interactions when compared to children with only depressive symptoms (Kiesner, 2002). Similarly, it was found by Hymel, Rubin, Rowden and LeMare's (1990) that, children who were rated as unpopular tended to be perceived as more aggressive by their peers and also evaluated as displaying externalizing behavioral problems by teachers. In addition, as Semrud - Clikeman, (2007) stressed, if a child is experiencing depressive symptoms with experiencing peer rejection may be at risk for experiencing more isolation in social relationships. As a chain, the more they isolated, the less opportunity they get for interactions with others and this situation intensify the level of isolation they would experience. As Semrud - Clikeman, (2007) added, experiencing isolation and withdrawal at an early age have an adverse effect on the perception of children about the world. Therefore, psychological functioning of children is crucial in means of contributing the formation of their perceptions about the world either in a positive or negative ways.

Moreover, it was revealed that, stability across years was observed in the aggression and externalizing behavioral patterns of children. For example, Hymel et al. (1990) studied children's aggression and externalizing behavioral patterns both second grade and study with them three years later in their fifth grade years. They found that, there is stability across the assessments. Similarly, Ladd and Price (1987) stressed that, the level of social competence and peer statuses of young children do not change so much through the years such as through early elementary years. All these show us that, identification of low accepted peers, children with low social skills, aggressive peers and children having externalizing behavior problems early in life are essential for preventing continuation of the problematic behavioral patterns through the life span.

Moreover, as Eron (1990, as cited in Joseph & Strain, 2003) stated, after the age of 8, some behavioral and emotional problems of children like aggression, dissociative and antisocial behaviors can not be proper for the intervention. Therefore, if those problems can not be handled in early years, those antisocial behavior patterns can turn into academic problems, increase in the antisocial behaviors and after all school drop out in the following years (Snyder, 2001, as cited

in Joseph & Strain, 2003). Therefore, detection and intervention for some kind of mental health and behavioral problems should be handled in early years (Ştefan, Balaj, Porumb, Albu, & Miclea, 2009).

2.9. Temperament

According to Semrud - Clikeman (2007), individual's biological response to the environment can be defined as temperament. There are some components that form the temperament construct like soothability, rhythmicity, sociability and arousal. When we investigate them one by one, we see that, sociability greatly contribute to the social competence. Children with "sociability" construct are willing to be with others and pay more attention on being contact rather than being alone (Semrud - Clikeman, 2007). In addition, child, low in sociability construct, can show tendency to avoid social interactions and social interactions even seem negative to those children. Moreover, rhythmicity is the child's capability of adjusting the reactions to the environment (Semrud - Clikeman, 2007). Some activities like sleep, meal schedules require a kind of rhythm in them. Therefore, children who experience difficulty in sleeping or eating schedules can be considered as problematic in rhythmicity construct. When we think as a whole, it can be in a way that, characteristics related with temperament can be essential for the improvements in social competence of children especially when the sociability, emotion regulation, and attachment have been issued (Semrud - Clikeman, 2007).

It was revealed that, temperament have crucial role in children's school related well- being like performance in academic areas and adjustment (Coplan, Barber, & Lagace - Sequin, 1999). Moreover, it was stressed that, children who have specific temperamental characteristics like high emotionality with regulation ability, high attention span, and low activity level can be more successful in an early childhood environment which has structured principle (Coplan et al., 1999). In other words, some children with specific temperamental characteristics would have some skills related with readiness for preschools and also for well adjustment.

In the assessment of the temperament, different sources can make use. For example, as Rothbart and Bates (2006) stressed, observations either structured or unstructured, caregivers' reports, self reports for older ones can be used alternately with respect to different advantages they offer. Questionnaires filled by caregivers/ parents give beneficial information since caregiver can see the child in different and various settings for long periods. However, besides advantages, there are some disadvantages of caregiver reports in a way that caregiver may be biased in giving some information. Still, parent reports are the most beneficial ones since parents have the chance for observing child in various settings and since the validity of it is quite fine (Rothbart & Bates, 2006). Therefore, based on the literature, in the present study, parents were preferred to use for the assessment of the children's temperamental characteristics.

Some domains of temperament play different role both in the formation of friendship, behavioral formation and social competence. For example, as Griggs, Gagnon, Huelsman, Kidder - Ashley and Ballard (2009) stated, children with difficult temperament may tend to experience negative outcomes and contingently have poor relationships with their peers due to the role of disruptive behavioral styles. In addition, Çorapçı (2008) studied with disadvantaged preschoolers and stressed that; children can be rated as socially competent if child has low scores in domain of impulsivity of temperament. Similarly if the child has low inhibited temperament would have an effect on children's peer interactions. In other words, some domains of temperament like less inhibition and less impulsivity (Çorapçı, 2008) enable children to be rated as more socially competent by the teacher or the rater.

Different researchers approached and defined different domains of temperament differently. For example, as Rothbart and Bates (1998) stated, *reactivity* can be defined as responding to emotional situations with respect to some emotions like fear, sadness, etc. According to the study of Thomas, Chess and Birch, (1968), nine dimension of temperament can be stated and children may differ on those domains. These domains can be listed as; "activity level, rhythmicity, approach or withdrawal, adaptability, quality of mood, intensity of reaction, distractibility,

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persistence and attention span, threshold of responsiveness. Related with the present study, "rhythmicity" can be defined as the regularity in the behaviors related with the sleeping, eating, waking, activities, etc. (Thomas et al., 1968). "Quality of mood" refers to the degree in which joy, happiness, friendliness or negative, unfriendly mood occur. Warmth aspect in the present study can be explained in parallel ways as the definition of "quality of mood" dimension. In addition, persistence and attention span dimension proposed by Thomas et al. (1968) may correspond with the persistence dimension in the present study. Attention span can be defined as the sustainability of the specific activity throughout time. Parallel with attention span, persistence was defined by Thomas et al. (1968) as continuation of a specific activity despite the kind of obstacles.

Besides the Thomas and Chess's nine dimensional work, smaller dimensions are also accepted and use for representing the structure of temperament. For example, as Sanson et al. (2002) stressed, "reactivity, self- regulation, inhibition" can be classified as broad but best represent the concept of temperament. When we look deeply on each dimension, we see that, reactivity refers to the behaviors that reacting negatively to the stimulus, not being able to flexible, showing higher levels of irritation kind of behaviors. Moreover, regulation means some kind of mechanisms that control emotional processes like persistence, not being distracted. Finally, inhibition can be interchangeable used with approach/ withdrawal or sociability and used to infer dimension in which individuals unable to be engaged in new situations or people and became inhibited.

It was revealed that, some dimensions of temperament greatly contribute to the social skills or competence level of children (Sanson et al., 2002). Moreover, dimensions of temperament also have an effect on the development of friendship in children in early childhood period (Gleason, Gower, Hohmann & Gleason, 2005). Besides social skills and peer relations, it was stated that, some aspects of temperament have an effect on the maladaptive behaviors in children (Sanson et al., 2002). For example, difficulties in emotionality, reactivity aspects of temperament may lead children to experience difficulties in adjustment related issues. More importantly, as Sanson et al. (2002) stressed, "reactivity and attentional and

emotional self regulation" aspect of temperament are the most critical determinants which have great potential for contributing maladaptive behaviors especially externalizing kind of problems in children.

As Sanson et al. (2002) stressed, studying temperament is crucial in means of providing appropriate environment for the child in which the harmony exist between the environment and the child's characteristics and consequently fit the parenting and educational practices with the child's temperament and therefore enabling the child to enhance some strategies for dealing with the tendencies either negative or positive originated from the temperamental characteristics of children.

2.10. Summary

The literature related with peer relations and preferences in early childhood education settings, social competence and behavioral well being of children, gender and temperamental characteristics of 5 and 6 year olds was reviewed. In order to understand the research questions, peer relationships, social skill continuum, gender differences related with the present issue, behavioral problems mainly anger-aggression and anxiety- withdrawal related and relationship with temperamental characteristics of 5- 6 year olds were mentioned in the literature review chapter.

CHAPTER 3

METHOD

The method chapter includes the research design of the study, participants, data collection procedures, data collection instruments, data analysis procedures and assumptions.

3.1. Research Design

The research design that is appropriate for the use of the proposed issue is "Inferential" in this study. Research questions of this study led to research design that investigates group comparisons of peer statuses, temperament and gender of 5- 6 year old children on social competence and behavioral well- being in the light of literature review.

3.2. Participants

42 children whose ages 5- 6 year, 4 teachers of the 5- 6 year olds' and also their parents are participants of this study. The distribution of gender among the children in the study was 23 girls (55%) and 19 boys (45%). 14 of them were 6 years old (33%) and 28 of them were 5 years old (66%). All teachers in the study were female. Two of teachers had 2-year vocational school graduate from early childhood education, one of them had high school degree in child development and one of them had university graduation from early childhood education. Years of experience of teachers vary between 4- 10 years.

In the study, there is no intention for the generalization from the sample due to the small sample size. The selected sample was studied in detail to reveal the differences in peer, temperamental characteristics and gender on adaptive social behavior, behavioral well being of 5- 6 year old children. The study holds practical

significance in means of informing parents about their children's developmental well being and enlightened their understanding of child development. Therefore, in the present study, small sample was determined and examined. After the detailed implementation, results of the study were clearly explained to teachers to enable them to improve their practice, find ways to promote children's development and written reports was given to parents about their children and also detailed meetings were conducted in order to enable parents to contribute their children's development.

One school was conducted for implementing the study. The researcher explained the aim of the study in detail and informed the school administrator about the study. It was explained that, the study holds importance in means of detecting peer preferences of 5- 6 year old children, social abilities and behavioral problems, giving feedback to families, teachers and school, enabling them to improve their practice, being more efficient in management with behavioral problems, taking preventive steps etc. After detailed explanation, one school became volunteer to be involved in the study. Therefore, due to the nature of the study, a small sample was determined in the school from a district of "Altındağ" which though to belong to the middle Socio Economic Status (SES). As stated above, the school in which detailed implementation was conducted selected due to the school administration's voluntariness for the determining current situation, informing individuals to improve their practice and future well-beings in school, child, family and in general society levels. Therefore, due to the nature of recent issue, purposive sampling was used.

3.3. Data collection procedures

Before the study begins, in March 2010, permission was granted for the study from "METU Research Center for Applied Ethics". Related permission document were requested in December for representing it in Appendix part (Appendix A). In this study, different kinds of information were gathered from the 5- 6 year-old children, their teachers and parents. At the beginning of the implementations, a specific time was spent with children in order for enabling children to get use the presence of the researcher. Researcher firstly introduced herself to children and

explains simply the purpose of her presence and the procedure that they will be encountered. In order for enabling children to get use to the presence of the researcher and prepare them to behave naturally in the implementation procedure, researcher involved in children's activities throughout days. Approximately 3 hour per day were spent in each four classrooms by spreading the time to 5 days.

Before starting the study, the researcher conducted a meeting with four teachers of four classrooms and also the principal and explained the study in details. The rationale behind the study, the aim, significance and utility of the study were explained. Teachers and also the principal were guaranteed that, after conducting the study, they and also the parents of the children involved in the study would be informed by giving them a written report for each individual child. In that meeting, teachers were informed that, researcher will conduct some more meetings besides the written reports in order to enable them to examine the practices they conducted and also the practices they should conduct for the sake of children, their practice and also the well being of the school in general. Moreover, the principal requested researcher to satisfy the families' request on being informed about their children's evaluations if any. This request again appreciated by the researcher since the aim of the study will be achieved practically.

In the time period spend in the school, the researcher made contact with families through letters in which intend of the study was explained. Parents were informed about the study and the procedure and asked for the permission about their children's participation in the study. Children whose permission was taken from their parents were included in the study. Moreover parents were requested to bring their child's photo that was taken in a recent time. After taking the children's photos, researcher wrote the names of each child clearly at the back of photos in order to enable researcher to identify each child.

After permission gathered from the parents of children, parents were requested to fill the form related with their children's temperament. Children's temperaments were determined by using "Short Temperament Scale for Children". Scale consists of 30 items related with 4 subscales. Parents wanted to consider their child's stable characteristics and indicate whether their child is always, sometimes or

never behave in that way. Only parents who gave permission for their children's involvement were requested to fill the temperament scale.

The "Social Competence and Behavioral Evaluation" form that consists of 30 items including 3 subscales measured social competence and behavioral well being of children. The scale was administered to the teachers of 5- 6 year- old children. 4 teachers from four 5- 6 year- old classrooms were requested to fill the form for each child in their classroom. Teachers were directed to fill the forms for each child in different days in different times in order to prevent them to give response similar to each other and to prevent teacher exhaustion.

For the determination of the peer acceptance statuses, "Picture Sociometry Assessment" was implemented to the children. A special and wide room was arranged by the school administration for researcher to implement "Picture Sociometry Assessment". The room was arranged specially for the children's comfort. A small sized table and chair were put. Three boxes were used for the sociometry implementation. Happy face, neutral face and sad face were stacked on each of three boxes. Each boxes designed identical with each other in size and color. The size of the boxes was 13x20x25 cm. The referent photo of boxes was given in the section (see Appendix B). Boxes that were used for the implementation was placed sequentially in front of the child as happy face at the left first, neutral face in the middle and the sad face at the right end. Each child was called sequentially from their classrooms and invited to the implementation room. Each child was welcomed to the room. During the implementation, only researcher and the corresponding child were present in the room. The researcher wanted child to sit in front of the boxes and tried to take attention of the child the procedure they will be encountered. After the explanation, photos of children were displayed to the child and wanted child to tell the names of the children that saw on the photos. The rationale behind this procedure was that, making the clarification whether child is able to recognize the photos of friends before determining likes and dislikes based on the photos. Researcher made this photo naming procedure in the play format in order to take attention of children. All children got enjoyment from this procedure.

Moreover, at the beginning of the implementation, children were explained simply the procedure and encouraged to conduct one example to make clarification. After researcher thought that the child get the idea behind the implementation, the real application was started. Each of the questions were asked sequentially and each child were encouraged to answer as like a lot, like little, and do not like by considering each child on the photos in their classrooms. In other words, each child was asked to indicate the like or dislike for each friends on the bases of 4 questions. Gülay (2008) added three more questions to the original "Picture Sociometry Scale". Children were asked 4 questions in total. The questions were as follows:

1. How much do you like to play with your friend that you see on the photo?

2. How much do you like to sit with your friend that you see on the photo?

3. How much do you like to engage in activities like art, music, painting with your friend that you see on the photo?

4. How much do you like to go on trip with your friend that you see on the photo?

After first question is completed, the researcher collected the photos that put on boxes and the second question was asked in the same logic. The procedure were explained simply again to remind child. And the remaining questions were asked sequentially and the procedure explained above was applied. The implementation lasted approximately 20 minutes in total for each child.

As mentioned before, children were directed by the researcher to decide on the peer's statuses as liking or disliking by putting the photos of each child in to the three boxes on which happy, neutral and sad face were indicated. Children were asked to rate peers, in the photos by thinking how much they liked to play with those children and request them to place the related child's photo into on of three boxes. Children were instructed that, happy face means, they like to play a lot with the child on the photo, neutral face means they sometimes prefer or like to play with that child and sad face means they did not like to play with. Researcher made evaluation of the implementation by basing on the 3 point Likert- type scale. Researcher gave 3 points

if the photo was put on to the happy face box, whereas if the child placed the related child's photo into the neutral faced box, that child received 2 points and if the photo was put to the sad face box, that child on the photo received 1 point rating. The researcher conducted the scoring of the assessment while the child decided on putting each child's photo into the related box. In other words, as the child decides on the question directed by the researcher, researcher made the related scoring.

Whole data, including meetings conducted with administrator and teachers, feedback given, reporting to results to give them families and the school administration, meeting with families who requested to be informed about the results of the implementation by face to face contact or either by telephone or e mail, was collected between May and July 2010.

3.4. Data collection instruments

Different informants completed different instruments in this study. Children will be assessed via "Sociometry Assessment". Parents were asked to determine the temperamental characteristics of their children via "Short Temperament Scale for Children" (See Appendix C). Finally, teachers of children involved in the study were asked to determine children's adaptive social behaviors and behavioral well beings through "Social Competence and Behavioral Evaluation" scale (See Appendix D).

3.4.1. Picture Sociometry Scale

In order to detect the peer relationships in the acceptance or rejection degree in early childhood period, sociometry assessment test was applied. The scale originally developed by Asher, Singleton, Tinsley and Hymel (1979). A reliability practice of the original scale was conducted with 19 4- year old children. Those children were asked to indicate the three peers that they like most and the least to play with them by showing the photos of each child. The evaluation was based on the boxes on which happy, neutral and sad faces were presented. Children were asked to rate children on the photos on the idea that, how much they liked to play with that

child. Test- retest practices were also conducted by Asher et al. (1979) on the bases of 2 evaluations made for 4 weeks intervals. Through the use of sociometry assessment, children's positive, negative and neutral preferences were determined. According to the results of the test- retest practice, r (17) = .56 (p < 0.5) for the positive preferences, r (17) = .81 (p < 0.1) for the negative preferences were found. This reflected the fact that, originally, "Picture Sociometry Scale" scale was valid measurement.

The original "Picture Sociometry Scale" which designed by Asher et al. (1979), was adapted into Turkey by Gülay (2008) in her doctorate thesis under Prof. Dr. Alev Önder's supervision. Linguistic equivalence, reliability and validity practices of "Picture Sociometry Scale" were conducted by Gülay (2008). 100 children consisting of 50 boys and 50 girls were used in the adaptation of the Picture Sociometry Scale. 43 of them were 5 year old and 57 of them were 6 year-old age. The socioeconomic statuses of children were distributed as follows by basing on the monthly fees of the schools they continued; 40 of them were belong to low SES, 24 of them middle SES, 36 of them high SES.

Means and standard deviations of each question of original forms of Picture Sociometry Assessment were given below (Table 3.1).

Table 3. 1 *Means and Standard Deviations of questions of Picture Sociometry Assessment*

Questions	Mean	Standard Deviation
Q1	2.37	.77
Q2	2.39	.79
Q3	2.43	.79
Q4	2.43	.76

When we look at the Cronbach alpha value for the internal consistency, we see that, it was .91 (p < .001). This value implies that, the scale has very good internal consistency since the alpha is between .80 and 1.00 (Kalaycı, 2008). In the current study, the Cronbach alpha value was .987, which again indicated very good reliability.

When test- retest practice was analyzed, which was conducted two weeks intervals; we see that, there was statistically significant difference between the pre and posttests, which was .98 at the .001 level. This result indicated that, the scale has good reliability in means of continuity. Moreover, when the item analysis was conducted for the adaptation of "Picture Sociometry Scale", it was revealed that, all the items of "Picture Sociometry Scale" was both statistically significant at the .001 level in item total and item remainder. This reflects the fact that, all of the items (questions) of "Picture Sociometry Scale" were reliable and they should be remain for conducting "Picture Sociometry Scale" (Gülay, 2008).

Content validity of the adapted "Picture Sociometry Scale" was provided by getting the expert judgment, from 6 academicians, 1 psychologist who has field specialist degree and 2 experienced preschool teacher which all were specialized in early childhood education area. As Fraenkel and Wallen (2006) stressed, the content and the format of the study should have some kind of consistency with the variable definitions and the subjects. Therefore, as Gülay (2008) stressed in her study, the adapted "Picture Sociometry Scale" has evidence of having content related evidence of validity by giving internal consistency values, and evidence in measuring what is intended to measure by the related items. Therefore, the study provides a kind of content related validity for the adapted "Picture Sociometry Scale".

Construct related evidence of validity requires the use of factor analysis. Since the Gülay's study (2008) was a kind of adaptation study, the study should be tied to the construct related validity practices of the original scale. Therefore, in the adaptation study, content validity of the scales was not examined. As Gülay (2008) proposed, if the study is an adaptation study, instead of factor analysis, the subscales should have relationship with the total points. However, since the "Picture Sociometry Scale" does not have any subscale, the scale was not examined for the construct related evidence of validity.

For providing criterion related evidence of validity, in the adaptation study, before conducting the real implementation, children were asked by the researcher to indicate three children they like most. Answers of children were recorded and 3 points were given to a child whose name were said firstly, 2 points to the child whose

name were said secondly and 1 points to the child whose name were said thirdly. The total points each child get from this question were calculated. For the determination of the criterion related validity, the Pearson product- moment correlation coefficient were looked at by looking at the points gathered from the "Picture Sociometry Scale" and the answers gathered from the question asked at the beginning of the implementation. The mentioned relationship was found to be statistically significant at the .05 level by indicating the middle level positive relationship ($r = .31$). In other words, as the points gathered from the "Picture Sociometry Scale" increase, the points gathered from the question asked at the beginning of the implementation increases too. As Gülay (2008) stressed, the result of a positive relationship is an expected one for the criterion related evidence of validity.

3.4.2. Social Competence and Behavioral Evaluation

"The Social Competence and Behavioral Evaluation Scale" was adapted for the project conducted by academicians from Boğaziçi University and Koç University in the year 2008. Two academicians in developmental and clinical psychology areas translated the original form of the scale into Turkish and back-to-back translation was also conducted (Çorapçı, Aksan, Arslan- Yalçın, Yağmurlu, n.d.).

The scale was adapted for the aim of evaluating emotional and social development of children. Through the use of the scale, social competences that are expected to exhibit by preschool children when together with peers, screening the symptoms related with behavioral disorders in early childhood period could be achieved. After the project team conducted the pilot study, it was revealed that, **"**The Social Competence and Behavioral Evaluation Scale" is reliable and valid screening instrument for detecting indicators related with emotional and behavioral problems of children and also social competences of children in early childhood period. In order to reveal the psychometric characteristics of the **"**The Social Competence and Behavioral Evaluation Scale", 417 children whose age's ranges from 42-59 months and 60-73 months (221 boys, 196 girls), their mothers and preschool teachers were included in the study (Çorapçı et al., n. d.).

"The Social Competence and Behavioral Evaluation Scale" has 30 items with 3 subscales namely; Social Competence (SC), Anger- Aggression (AA), Anxiety-Withdrawal (AW). Social Competence subscale measures children's ability to find solutions to the problems experienced when be with peers and also measures children's collaboration skills with peers such as helps or comfort peer who need help, search for solutions for the problems, etc. (Çorapçı et al., n.d.). As it can be understood, social competence subscale measures the positive characteristics of children. Moreover, the items related with Anger- Aggression subscale measures symptoms related with problems about opposing to adults or behaving maladaptive or discordant in peer relationships such as; getting angry when his/her activity is disrupted, hitting, biting or kicking other children. In addition, the last subscale which is Anxiety- Withdrawal, measures symptoms related with problems about depressive, worried moods or shyness in group such as; behaving timid, shy or avoiding new environments or situations, being worried, unhappy or depressive, etc.

The internal consistency values of each of the subscales of the original scale of social competence (SC), anger- aggression (AA), anxiety- withdrawal (AW) subscales were given below (Table 3.2). Moreover, Cronbach Alpha values for the subscales in the current study with the present data set also presented below table. These values indicate good internal consistency (Pallant, 2007). The reason why the value of anxiety- withdrawal subscale was found to be smaller in the present study may be that, teachers reported that, they sometimes found hard to differentiates or decide on some of the items since items seems as if reflecting more than one thing. For example, the item 8 which is "seem unhappy, worried or depressive "or the item 7 which is "seem withdrawn, nervous; avoids from new situations or places" might direct teachers to decide hardly on the exact meaning of the items.

Table 3. 2 *Reliability statistics for subscales of "The Social Competence and Behavioral Evaluation Scale" from the original and current study*

	Cronbach Alpha		N of Items
	Original Form	Current Study	
social competence	.88	.88	10
anger- aggression	.87	.75	10
anxiety- withdrawal	.84	.47	10

Moreover, the test- retest reliability analyses done with three months intervals of the adapted scale was revealed that, correlational values of SC, AA, AW subscales were statistically significant, .45 for AW indicating moderate, .64 and .71 for SC and AA indicating high correlation respectively (Çorapçı et al., n. d.). Results of the reliability and validity analyses of the scale was revealed that, "The Social Competence and Behavioral Evaluation Scale" is short and comprehensive screening instrument in means of identification of at-risk children in early years and enable them to benefit from preventive interventions.

Through the use of pilot study, Turkey norms for early childhood (42- 59 months) and preschool (60- 73 months) children were determined and by conducting "The Social Competence and Behavioral Evaluation Scale", it was revealed that, it will be beneficial for detecting children who are at risk at an early age, will be guide for the families and even for teachers to take preventive intervention. After the research project conducted for the use of "The Social Competence and Behavioral Evaluation Scale", the scale was distributed by the directors of the project (Asst. Prof. Feyza Çorapçı, Assoc. Prof. Nazan Aksan, and Asst. Prof. Bilge Yağmurlu) to the kindergartens for enabling them to use and detect children who in need of help at an early age. Therefore, it seems that, "The Social Competence and Behavioral Evaluation Scale" is really informative, beneficial and devoted for the intervention purposes. It was stated that, it is critical to take preventive interventions for behavioral disorders in young children as early as possible.

A table that indicates means values and percentage tables of age groups as early childhood (42- 59 months) and preschool (60- 73 months) of each subscale

were created by the project team. For the evaluation of children and also for determining the points belongs to each subscale, reference table prepared by the project team were used as a guide. Table differentiates values for each subscale by considering gender and age (either between 42- 59 months or 60- 73 months).

For the interpretation of the data, a kind of procedure was developed by the project team (Çorapçı et al., n.d.). Intended for the aim of clinical practices, following norms were determined to reveal children at risk at an early age. If the points that a child gathered from the "Anger- Aggression" subscale corresponds with the .90 percentage of the related subscale, this means that child exhibits angry and aggressive behaviors 90% more than his/her peers who belongs to the same gender and age group. For example, if a 62-month-old boy has 16 points from the "Anger- Aggression" subscale, this point corresponds with .40 percentages. This means that, if the child is compared with his peers, this child exhibits angry and aggressive behaviors 40% more than his friends. Similarly, if the points that a child obtained from the "Anxiety- Withdrawal" subscale corresponds with the .90 percentage of the related subscale, this means that child exhibits anxiety and withdrawal problems 90% more than his/her peers who belongs to the same gender and age group. In addition, if the points that a child have from the "Social Competence" subscale corresponds with the .90 percentage of the related subscale, this means that child experiences problems related with social abilities 90% more than his/her peers who belongs to the same gender and age group. For example, if a 62-month-old boy has 43 points from the "Social Competence" subscale, this point corresponds with .70 percentages. This means that, if the child is compared with his peers, in terms of social behaviors, this child is in 30% higher level than his friends. This shows that, for the "Social Competence" subscale, higher percentage indicates less competence in means of social abilities in children when compared with peers. Social Competence subscale's evaluation reflects inverse ratio since higher percentage in other 2 subscales indicates either more Anger- Aggression or Anxiety- Withdrawal related behaviors. Consequently, higher percentage indicates deficiency in social competences and higher problematic behaviors related with Anger- Aggression and Anxiety- Withdrawal more than their peers.

In order to determine children who have the possibility of evaluating as at risk, two criteria should be used. The percentage that the child has in each subscale should be higher than 90%. In other words, if the child's point in both Anger-Aggression subscale corresponds with the 90%, reflects that, that child have both higher aggression related behavior and fewer social competence. This is the category that the preventive interventions should be delivered since the child is in at risk situation. In this case, it can be suggested for the child to get consultation from the consultant. However, if the child both has higher level Anger- Aggression related behavior and also has higher level social competence; this means that, the child can not be evaluated in the status that requires immediate prevention or intervention. All these explain that, social abilities and competencies have compensation and balancing role in determining children at risk.

The mean and standard deviation values of **"**Social Competence and Behavioral Evaluation Scale" considering gender and age groups for each of subscales were indicated in Table 3.3 (Çorapçı et al., n. d.) and in Table 3. 4 for the current study.

Table 3. 3 *Mean and standard deviation values of " Social Competence and Behavioral Evaluation Scale" considering gender and age groups*

		Boys			Girls		
		Social Competence	Anger Agression	Anxiety Withdrawal	Social Competence	Anger Agression	Anxiety Withdrawal
42- 59 Months	M	43.0	21.43	19.41	47.32	18.77	18.17
(N_{Boys}= 121) (N_{Girls}=104)	SD	10.51	8.91	7.83	7.92	7.67	7.05
60-72 Months	M	46.7	20.04	18.79	49.5	16.4	20.37
(N_{Boys}= 83) (N_{Girls}=79)	SD	8.24	8.91	7.19	8.3	6.0	9.33

Table 3. 4 *Mean and standard deviation values of " Social Competence and Behavioral Evaluation Scale" considering gender and age groups in the current study*

| | | Boys | | | Girls | | |
		Social Competence	Anger Agression	Anxiety Withdrawal	Social Competence	Anger Agression	Anxiety Withdrawal
5 year olds	M	36.66	52.50	35.0	44.66	64.0	29.33
(N_{Boys}= 12) (N_{Girls}=15)	SD	26.05	16.58	12.43	25.59	17.23	12.79
6 year olds	M	41.42	57.14	38.57	52.85	65.71	34.28
(N_{Boys}= 7) (N_{Girls}=7)	SD	27.94	28.11	24.10	22.88	19.02	15.11

Moreover, in order to examine the criterion related validity of the scale; scores in each subscale interpreted by relating the scores with other variables or behaviors. Significant results were found between subscales of the scale and the other related subscales of the some scales. For example, specifically, in order to test the validity of the scale, differences in scores of subscales were investigated in terms of gender and age. When the differences in gender on the subscales of the scale were examined, it was seen that, girls scores (M= 48.41, SD= 8.30) on Social Competence subscale are higher than the boys' (M= 44.53, SD = 9.66) (F (1, 415) = 19.08, $p <$ .001) but girls' scores (M= 17.69, SD = 7.09) on Anger- Aggression subscale are lower than boys' (M=20.64, SD= 8.78) (F (1, 415) = 14.03, $p < $.001) (Çorapçı et al., n.d.).

3.4.3. Short Temperament Scale for Children

Child's temperament was determined by based on the scale which is a tool in the "TEÇGE (Türkiye'de Erken Çocukluk Gelişim Ekolojileri) Studies" which aimed to determine the changes occur in early childhood period in each developmental level and determine the ecological factors affecting the early childhood development

continuum (TEÇGE Çalışması, n. d.). In the direction of the objectives, they are studying with the representative sample in Turkey longitudinally by qualitatively and quantitatively. Within the framework of "TEÇGE", numerous scales have been used. One of them is "Short Temperament Scale for Children". The scale consists of 30 items with 4 subscales that measures approach, persistence, rhythmicity and reactivity dimensions. This scale was adapted from different temperament scales and adapted for the usage in Turkey. "Short Temperament Scale for Children" originally was developed by Prior, Sanson, and Oberklaid (1989) in order to evaluate the temperamental characteristics of young children (as cited in the electronic source namely TEÇGE Çalışması). The original scale was consists of 30 items with 4 subscales. Parents evaluate their children's temperamental characteristics on a basis of Likert type scale with 6 frequency choices. Parents were wanted to evaluate each item by considering their children's frequency of engagement in each behavioral pattern. Subscales of the original scale can be listed as approach (my child behave shy to people who are unfamiliar to him/ her), persistence (my child likes to finish the work that he/ she has already started before starting a new work), rhythmicity (my child wants to eat something almost the same time in each day), and reactivity (my child can cry, throw the things or slam the door while engaging in something if he/ she get bored or be worry). The Turkish version of the "Short Temperament Scale for Children" were translated back to back and adapted by Kumru, Sayıl, and Yağmurlu (2006, as cited in an electronic source namely TEÇGE çalışması-TEÇGE'de kullanılan ölçekler hakkında ayrıntılı bilgi). Beside the translation made from the original scale, evaluation of children's temperamental characteristics on a basis of Likert type scale with 6 choices were changed as 5 point Likert scale in order for making the scale consistent with other scales that are part of the TEÇGE project.

Analysis of the internal consistency values of subscales in the original form (Baydar, Küntay, Gökşen, Yağmurlu, & Cemalcılar, 2008) and with the current data set were indicated Table 3.5.

Table 3. 5 *Reliability statistics for subscales of "Short Temperament Scale for Children" from the original and current study*

	Cronbach Alpha		N of Items
	Original Form	Current Study	
Approach	.66	.81	7
Persistence	.75	.88	7
Rhytmicity	.51	.61	7
Reactivity	.75	.87	9

Rhythmicity refers to the sleep routines and eating patterns of children and the items related with the rhythmicity subscales mention those issues. It was revealed that, there is not much strong relationship between the evaluations of sleep and eating routines of mothers and children's routines. Therefore, it was stated that, rhythmicity concept may not be proper for the Turkish society (as cited in an electronic source namely TEÇGE çalışması- TEÇGE'de kullanılan ölçekler hakkında ayrıntılı bilgi).

The validity of the "Short Temperament Scale for Children" was determined by identifying the convergent validity of the approach subscale of the "Short Temperament Scale for Children" with identifying the discriminant validity of the persistence, rhythmicity, reactivity and approach subscales (as cited in an electronic source namely TEÇGE çalışması- TEÇGE'de kullanılan ölçekler hakkında ayrıntılı bilgi).

When we look at the relationship between the subscales and other scales used under the TEÇGE project we see some kind of a relationship. For example, there was a significant relationship between the "approach" subscale and the item "he/ she is relax and confident when be with other people" in the "Adaptive Social Behavior Inventory" within the scope of TEÇGE studies ($r = 0.31$, $p < .05$). Moreover, by conducting one- way Anova, the discriminant validity of the "approach" subscale were tried to be conduct. By conducting Anova, the difference between children who are confident when be with other people and children can not be confident when be with other people were looked at in order to see whether their points in approach subscale differ or not. The results revealed that, children who are confident when

with other people have higher points ($\overline{X}$ = 65.3, SD = 15.1) than children they are not confident ($\overline{X}$ = 43.9, SD = 21.0) (F (4, 1047= 53.95, $p < 0.001$).

The discriminant validity of the "persistence" subscale of the "Short Temperament Scale for Children" were acquired through differentiating children whose attentions were distracted easily ($\overline{X}$ = 39.8, SD = 20.1) and whose distracted hardly ($\overline{X}$ = 58.3, SD = 16.1) by making their mothers to fill "Externalizing Behavior Scale" within the scope of TEÇGE studies. The significant difference was found between those children's total points of persistence subscale (F (4, 1047) = 31.07, $p < 0.001$).

Moreover, the discriminant validity of the "rhythmicity" subscale of the "Short Temperament Scale for Children" were acquired through basing on the "refuses to go sleep on time" item of the "Externalizing Behavior Scale" within the content of TEÇGE studies. It was revealed that, in rhythmicity subscale, the total points of children who refuse to go sleep on time ($\overline{X}$ = 51.8, SD = 11.8) were less than children who do not refuse to go to sleep on time ($\overline{X}$ = 61.8, SD = 13.1). In other words, there is a significant difference between rhythmicity scores of those children (F (4, 1047) = 15.90, $p < 0.001$).

When we come to the discriminant validity of the "reactivity" subscale of the "Short Temperament Scale for Children" were evaluated through basing on the "can accept changes without making fight or be worry" item of "Adaptive Social Behavior Inventory" as part of TEÇGE studies. This item differentiates the reactivity level of children (F (4, 1047) = 27.49, $p < 0.001$). Furthermore, the answers given to "yells or screams" item of the "Eyberg Child Behavior Inventory" as part of TEÇGE studies can also be discriminant for the reactivity subscale of the "Short Temperament Scale for Children" (F (4, 1047) = 56.45, $p < 0.001$).

3.5. Internal Validity Threats

In order to guarantee that the difference on the dependent variable is due to the effects of independent variables and not due to other factors that may

unintentionally distort or affect the data, internal validity of the study should be considered (Fraenkel & Wallen, 2006).

Source of the information can be a threat to the internal validity of the present study. In other words, source of the information can be biased. Since the data were collected from both parents and teachers, they may distort the data in a way that for example, parents may exhibit a tendency to favor their children or hide some characteristics of their children. However, since we are studying with children in early childhood period, we have to rely on the information gathered from the parents or teachers. However, the researcher should be aware of the possible inconsistencies in the parents' answers and should determine the credibility of the answers given. Another way to provide more reliable information can be increasing the number of information givers. In other words, besides parents, teachers can be asked to fulfill the temperament scale about each child in classroom. However, this may require a great time for teacher and it can also be a time consuming. Therefore, this procedure should be examined in means of feasibility and applicability by the researcher.

In addition to those threats, since teachers was requested to fulfill "Social Competence and Behavioral Evaluation Scale" for each child, teachers can be exhausted and it can affect the answers that teachers gave. However, in order to prevent exhaustion of teachers, teachers were wanted not to fill the forms consecutively. In the direction of this aim, the researcher gave forms on which the names of three children were written to teacher and teacher were requested to fill forms throughout one school day by considering only the children whose name were written on the form. At the end of the day, the researcher collected forms and researcher implemented the same procedure the next time she went to school. It is assumed that, by implementing this procedure, the exhaustion of teacher was prevented and the answers given were thought to be more reliable.

Location threat cannot be an issue since the implementation with children was conducted in the same room in the same conditions. Moreover, all teachers were requested to fill the "Social Competence and Behavioral Evaluation Scale" in the school environment. Since the implementation location is the same, it is not an issue that the location can change the nature of the responses that the researcher gets.

Since the implementation was administered to an individual child in the same day, the mortality is not a threat for the internal validity of the study. Moreover, implementation threat cannot be an issue since the implementation was administered by the same person like in Sociometry assessment. By considering the implementation threat, sociometry assessment was administered only by the researcher. However, at the same time, the researcher will try not to implement herself as a researcher as much as possible.

Due to the implementation procedure (Picture Sociometry Scale), children who involved in the implementation may tell the procedure applied to them and acknowledge other children about intend of the study, their responses and behave accordingly. However, in order to deal with that threat, the researcher told children that, "we played an enjoyable game with you, let's play another. We do not share the things we have done in this room with our friends until I told you the reverse". It is expected that, this will prevent the possibility of making other children who have not go through the implementation process yet, to know the aim, the answers other children get and enable them to behave more naturally.

In the implementation process, the researcher tried to made automation of instruction and standardize the tone of voice while asking questions in order to prevent children from being directed by the researcher.

3.6. Assumptions

In the present study, there may be some factors that may affect the usefulness of the study. Therefore, the assumptions of the study were indicated below.

1. The teachers participated in the study was considered as responding the items of the "Social Competence and Behavioral Evaluation Scale" sincerely.

2. The parents participated in the study were considered as responding the items of the "Short Temperament Scale" sincerely.

3. As explained in the procedure section above, before starting the study, the researcher conducted a meeting with four teachers and also the principal to explain

the significance and utility of the study. Therefore, it is expected that, teachers and the principal were willing to be involved in the study.

4. Since parents were also informed about the significance and the utility of the study, and since parents were informed about their children's social and behavioral well being by written reports, it is expected that, due to the practical value of the study, parents were willing to be involved in the study.

5. In order to prevent parents' fear about declaring theirs or children's names, their surnames were not used in the research process. However, using the names of children in the study was a kind of requirement due to the nature of the instrument used.

6. The instruments of this study were assumed to measure the related instruments' aims. In other words, it was assumed that, "Short Temperament for Children" measured the temperamental characteristics of children, "Social Competence and Behavioral Evaluation Scale" was assumed to determine adaptive social behaviors, abilities and behavioral well- beings of children and finally, "Sociometry Assesment" was assumed to point out the peer statuses of children.

3.7. Data Analysis

Statistical analyses in this study were conducted by using Predictive Analytics Software (PASW 18) program. The 0.05 level was established as a criterion of statistical procedures performed. For the sociometry assessment, the total points each child get was entered the SPSS program as a data. Then values of each child were transformed into standardized values in order to compare different distributions. Moreover, in order to determine percentage of competencies in social area and also the percentage of behavioral problem variables, the determined values were used to point out each subscales' percentages for each child in "Social Competence and Behavioral Evaluation Inventory". In other words, the points gathered from each subscales were recoded into different variable and the girls' and boys' percentage related to each subscales according to the age groups were determined. Also for the temperament variable, children's total points in each

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subscale were evaluated. While exploring the relationship in the data, Pearson Correlation was used to explore the strength of the relationship between peer preference, social competence, anger aggression, anxiety withdrawal and also the subscales of temperament like approach, persistence, reactivity and rhythmicity. Moreover, related statistical analysis, Multivariate Analyses of Variance was conducted to determine the group differences of peer preference, child's temperamental characteristics and gender on social competence and behavioral problems.

CHAPTER 4

RESULTS

This chapter is devoted to display results of the study that were obtained by analyzing the data in the way described in the prior chapter. The findings concerning children's peer preferences, their social competences, externalizing and internalizing behavioral problems (namely anger- aggression and anxiety- withdrawal respectively) and the temperamental characteristics of 5-6 year old children will be presented in three sections. The first section includes data cleaning procedures. The second section includes descriptive analyses, general assumption checks and specific checks for the related analysis and the third section displays comparison between groups.

4.1. Preliminary Analyses

Prior to the main analysis, data was examined through various PASW programs for accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analysis (Pallant, 2007; Tabachnick & Fidell, 2007). Firstly, error check was conducted to detect scores that deviate from possible range. Results of error check indicated that, scores were within the appropriate range. After that, analyses of valid and missing cases indicated that, approximately 3% of the cases were missing. Further analyses revealed that, missing cases were due to unsystematic factors. To deal with them, missing cases were replaced with mean scores of the related scale. Among the scales used in the study, only temperament scale included negatively worded items that were reversed before any statistical analyses.

In order to determine peer preference, each child was evaluated by every class member. Since the class sizes were not equal, in order to standardize the preference

scores that each child get, all preference scores were converted into Z scores which further required other variables to be converted into Z scores. Therefore, all the statistical analyses were conducted by using Z values of each variable. However, mean and standard deviation scores were reported by basing on their raw scores.

Continuous independent variables in this study were changed into categorical variables. For example, based on children's peer preference responses, children were classified into peer statuses by creating equal groups. In order to prevent unequal sample size, equal groups were created by dividing scores into three equal groups like high (N = 12), average (N = 14) and low (N = 15) through Visual Binning (Pallant, 2007). Peer preference variable was preferred to be dividing into three groups by basing on literature (Lindsey, 2002; Lansford et al., 2006). Moreover, other continuous independent variables (temperamental characteristics) in this study were changed into categorical variables by dividing them into two groups as high and low. All these categorizations were conducted in order to make "Analyses of Variance" conductible.

4.2. Descriptive Statistics

The data was inspected for deviations from normality. Skewness and kurtosis values were investigated. It was revealed that, anxiety- withdrawal variable was peaked indicating kurtosis value of 3.140. Moreover, the maximum Cook's Distance value of the data indicated the potential problem since it exceeds the value of 1 (Tabachnick & Fidell, 2007). Therefore the outlier case was detected and executed (Pallant, 2007) from the data reducing the sample size from 42 to 41. After the case was removed from the data set, kurtosis value decreased to .989 and also the Cook' distance to .155 indicating normal distribution (Skewness and kurtosis values for all predictors for total sample were presented in Table 4.1). Furthermore, analyses showed that, values were within the 95% confidence interval and the mean values and 5% trimmed mean were close to each other.

Table 4. 1 *Skewness and Kurtosis Values for All Variables*
(N = 41)

Variable	Skewness	Kurtosis
anger.aggression	-.027	-.435
anxiety.withdrawal	1.026	.989
socialcompetence	-.085	-1.021
approach	.675	.040
persistence	-.007	-1.110
rhythmicity	-.563	1.015
reactivity	.435	-.889
peerpreference	.139	-1.49

4.3. Correlation Analyses

In order to determine the relationships between peer preferences, children's temperamental characteristics (approach, persistence, rhythmicity and reactivity), gender, social competence and behavioral problems (anger-aggressive and anxiety-withdrawal), bivariate correlational analyses was employed.

4.3.1. Correlation of "Social Competence and Behavior Evaluation"

According to bivariate correlational analyses, there was a moderate (Cohen, 1988, as cited in Pallant, 2007) negative correlation between anxiety- withdrawal and social competence (r (41) = -.42, $p < .05$) (see Table 4.2). Anxiety- withdrawal subscale helps to explain nearly 18 percent of the variance in children's scores on the social competence subscale. Moreover, there is no correlation between anger-aggression and social competence (r (41) = -.20, $p > .05$) and between anger-aggression and anxiety- withdrawal (r (41) = -.12, $p > .05$).

Moreover, there was a strong positive correlation between social competence and peer preference (r (41) = .85, $p < .001$). In addition, there was a moderate negative correlation between anxiety- withdrawal and peer preference (r (41) = -.37, $p < .05$). Moreover, there was a strong positive correlation between social

competence and approach (r (41) = .76, p < .001), persistence (r (41) = .90, p <.001) and negative correlation between social competence and reactivity (r (41) = -.39, p < .05). In addition, there was a strong positive correlation between anger- aggression and reactivity (r (41) = .57, p < .001). Moreover, anxiety- withdrawal was moderately and negatively correlated with persistence (r (41) = -.47, p < .05) (see Table 4.2).

When we look at the coefficients of determination for each correlation, it can be seen that, Anxiety- withdrawal subscale helps to explain nearly 14 percent of the variance in children's peer preference scores and 22 percent of the variance in persistence subscale. Moreover, social competence subscale helps to explain nearly 58 percent of the variance in children's scores on the approach subscale, 81 percent of the variance in children's scores on the persistence subscale, 15 percent of the variance in children's scores on the reactivity subscale and 72 percent of the variance in children's peer preference. In addition, anger- aggression subscale helps to explain nearly 33 percent of the variance in children's scores on the reactivity subscale.

4.3.2. Correlation between Temperament, Peer Preference and Gender

According to bivariate correlational analyses, there was a strong positive correlation between approach and peer preference of children (r (41) = .76, p < .001), between persistence and peer preference (r (41) = .73, p < .001), and moderate negative correlation between reactivity and peer preference (r (41) = -.41, p < .05). There is no correlation between rhythmicity, anger- aggression and peer preference (p > .05). Approach was strongly and positively correlated with persistence (r (41) = .65, p < .001). There is no significant relationship between gender of children and any of the variables included in the study (p > .05).

When we look at the coefficients of determination for each correlation, it can be seen that, approach subscale helps to explain nearly 58 percent of the variance in children's peer preference scores. Moreover, persistence subscale helps to explain nearly 53 percent of the variance in children's peer preference scores whereas reactivity subscale explain nearly 17 percent of the variance in children's peer

preference scores. In addition, approach subscale helps to explain nearly 42 percent of the variance in children's scores on the persistence subscale.

Table 4. 2 *Pearson Product-Moment correlation between all variables*

	1	2	3	4	5	6	7	8	9
1. Gender	-	,267	-,179	,176	,097	,158	,092	-,112	,144
2.anger. aggression	-	-	-,123	-,200	-,003	-,090	-,018	,573(**)	-,162
3.anxiety. withdrawal	-	-	-	-,423(**)	-,211	-,473(**)	-,022	,119	-,373(*)
4.social competence	-	-	-	-	,756(**)	,898(**)	-,087	-,393(*)	,853(**)
5.approach	-	-	-	-	-	,646(**)	-,101	-,266	,758(**)
6. persistence	-	-	-	-	-	-	-,019	-,279	,733(**)
7.rhythmicity	-	-	-	-	-	-	-	,053	,084
8.reactivity	-	-	-	-	-	-	-	-	-,414(**)
9. peer preference	-	-	-	-	-	-	-	-	-

** p< 0.001 (2-tailed)
* p< 0.05 (2-tailed).

4.4. Multivariate Analyses of Variance

As the research questions of the study implied, Multivariate Analyses of Variance (MANOVA) was considered to be conduct. MANOVA is a kind of statistical technique that is conducted to make group comparisons on a group of dependent variables (Pallant, 2007). By conducting MANOVA, possible increase in risk for Type 1 error was considered to be controll instead of conducting a series of ANOVA separately for each dependent variable (Pallant, 2007).

4.4.1. Assumptions

Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted.

In terms of multicollinearity and singularity, the data were examined. Results indicated that, there were no problems concerning multicollinearity or singularity. In other words, there were no high correlation between the dependent variables (see Table 4.2) and the correlations between them were less than .9 (Pallant, 2007). Moreover, it is pointed that, it is better to have moderate negatively correlated DV's when conducting Manova (Tabachnick & Fidell, 2007). This important issue was also achieved with the present data set. In order to control for the multicollinearity assumption, VIF and Tolerance values were also looked at. The cut- off points of VIF and Tolerance values were all within the possible range. Therefore, mullticolinearity assumption was not violated.

In terms of outliers, to check the existence of multivariate outliers, Mahalanobis distance value was examined. Since we have 3 dependent variables the critical value is 16.27. Since our maximum value for Mahalanobis distance (10.049) was less than the critical value, we can safely assume that, there were no substantial multivariate outliers. After investigating multivariate outliers, univariate outliers were also looked at. No univariate outliers by looking at the z scores (above and below 3.29) were found in the data set. Moreover, linearity assumption indicated the

presence of linear relationship between each pair of the dependent variables by plotting scatter plots. In addition, to test "homogeneity of variance- covariance matrices" assumption, Box's Test of Equality of Covariance Matrices was examined and since the significance values were nonsignificant (larger than .001), the related assumption was not violated (Tabachnick & Fidell, 2007). Related values for "homogeneity of variance- covariance matrices" assumption were listed below in the Table 4. 3.

Table 4. 3 *Box's Test of Equality of Covariance Matrices*

Varible	Box's M	F	df1	df2	Sig.
Gender	2.894	.442	6	10356,779	.851
Peer preference	13.72	1.01	12	6398.222	.436
Persistence	16.011	2.434	6	8075,301	.024
Approach	9.866	1.503	6	9330,435	.173
Rhythmicity	5.488	.838	6	10942,887	.540
Reactivity	1.733	.265	6	10942,887	.953

4.4.2. Results of Specific Research Questions

Research Question 1

Does gender differentiates children in terms of Social Competence and Behavioral Problems?

**Do boys have higher scores than girls in terms of social competence, anxiety- withdrawal and anger- aggression?

When we look at the "Levene's test of Equality of Error Variances", since none of the dependent variables indicated significant values, we can assume that, equal variances achieved (Pallant, 2007).

After that, when we look at the multivariate test of significance which indicates whether there are any statistical significant difference among the groups on a linear combination of dependent variables, we should look at the Wilks's Lambda value. According to Tabachnick and Fidell (2007), if the data have problems related

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with sample size, unequal sample size and violation of assumptions, it is better to use Pillai's Trace since it will be stronger. Although, there is no violation of assumption, due to the possible effect of small sample size, "Pillai's Trace" value will be evaluated in the present study.

One-way between- groups multivariate analyses of variance was performed to investigate gender differences in terms of Social Competence and Behavioral Problems. Three dependent variables were used: Social competence, anxiety-withdrawal and anger- aggression. The independent variable was gender. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted. There was not a statistically significant difference between boys and girls on the combined dependent variables, Multivariate F (3, 37) = 1.81, p > .05; Pillai's Trace= .13; partial eta squared (η2) = .13. (see Table 4.4). Since the non-significant result was found, between subject effects were not examined.

Table 4. 4 *Results of Multivariate Test for Gender effect*

Effect	Statistics	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Gender	Pillai's Trace	,13	1,81	3	37	,162	,13

Research Question 2

Does peer preference differentiates children in terms of Social Competence and Behavioral Problems?

**Do children with higher preference different than children with lower or average preference in terms of social competence, anxiety- withdrawal and anger-aggression?*

When we look at the "Levene's test of Equality of Error Variances", it can be seen that, one of the dependent variables (social competence) have significant value (.043, p < .05), therefore, assumption of equal variances can not be achieved (Pallant, 2007). According to Tabachnick and Fidell (2007), if we have problems related with equality of variances, alpha level of .025 or .01 can be used instead of .05 for specific variable.

One-way between- groups multivariate analyses of variance was performed to investigate differences in peer preference of children in terms of Social Competence and Behavioral Problems. Three dependent variables were used: Social competence, anxiety- withdrawal and anger- aggression. The independent variable was peer preference. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted. There was a statistically significant difference between children peer preference on the combined dependent variables, Multivariate F (6, 74) = 6.87, p < .001; Pillai's Trace = .71; partial η2 = .36. (see Table 4.5).

After finding significant result on multivariate test of significance, further investigation for each of dependent variables should be conducted. It is suggested to use higher alpha level for reducing the chance of Type 1 error since separate analyses were investigated, Bonferroni adjustment should be conducted by dividing original alpha level of .05 by number of dependent variables (Pallant, 2007). Therefore new alpha level of .017 was used and results were considered as significant only if the probability value (sig.) is less than .017. When the results for the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .017, was social competence (see Table 4.6), Univariate F (2, 38) = 38.86, p < .001, partial η2 = .67. In order to identify where the significant differences lie, a follow up univariate analysis of variance have been conducted (see Table 4.7). It was found that, high preferred peers in terms of social competences significantly different from both average and low preferred group. An inspection of the mean scores indicated that, children with higher peer preference have higher levels of social competence (M = 1.10, SD = .41) than children with

lower levels of peer preference (M = -.85, SD = .50) and also from children with average levels of peer preference (M = .08, SD = .73). The partial eta square represented 67 percent of the variance in social competence scores explained by peer preference.

Table 4. 5 *Results of Multivariate Test for Peer Preference effect*

Effect	Statistics	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Peer Preference	Pillai's Trace	.71	6.87	6	74	,000	.36

Table 4. 6 *Results of Univariate Effects for Peer Preference*

Effect	Dependent Variable	F	Sig.	Partial Eta Squared
Peer Preference	anger.aggression	.73	.48	.03
	anxiety.withdrawal	1.10	.34	.05
	socialcompetence	38.86	.000*	.67

* Bonferroni adjusted alpha level= .017

Table 4. 7 *Multiple Comparison for social competence variable across three peer preference groups (Bonferronni)*

Dependent variable	Peer Preference (I)	Peer Preference (J)	Mean Difference (I-J)	Std. Error	Sig.	95%Confidence Interval	
						Lower Bound	UpperBound
Social Competence	Low prefered	Avarage	-,9376053*	,21374552	,000	-1,4729553	-,402255
		High	-1,962536*	,22276825	,000	-2,5204851	-1,40458
	Avarage prefered	Low	,937605*	,21374552	,000	,4022554	1,472955
		High	-1,02493*	,22627663	,000	-1,5916669	-,458195
	High prefered	Low	1,96253*	,22276825	,000	1,4045882	2,520485
		Avarage	1,02493*	,22627663	,000	,4581958	1,591666

*. The mean difference is significant at the .017 level.

Research Question 3

Do children with different temperamental characteristics differ in terms of Social Competence and Behavioral Problems?

*"Approach" and Social Competence and Behavioral Problems

When we look at the "Levene's test of Equality of Error Variances", it can be seen that, one of the dependent variables (anxiety- withdrawal) have significant value (.016), therefore, assumption of equal variances can not be achieved (Pallant, 2007). According to Tabachnick and Fidell (2007), if we have problems related with equality of variances, alpha level of .025 or .01 can be used instead of .05 for specific variable.

One-way between- groups multivariate analyses of variance was performed to investigate differences in approach subscale of temperament of children in terms of Social Competence and Behavioral Problems. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted. There was a statistically significant difference between children with high approach and children with low approach on the combined dependent variables, Multivariate $F (3, 37) = 7.31$, $p < .05$; Pillai's Trace= .37; partial $\eta 2 = .37$ (see Table 4.8). When the results for the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .017, was social competence (see Table 4.9), Univariate $F (1, 39) = 21.35$, $p < .001$, partial $\eta 2 = .35$. An inspection of the mean scores indicated that, children with higher approach scores have higher levels of social competence ($M = 60.00$, $SD =19.70$) than children with lower levels of approach scores ($M = 30.00$, $SD = 21.32$). Approach subscale of temperament accounted for 35 percent of the variance in social competence scores.

Table 4. 8 *Results of Multivariate Test for Approach effect*

Effect	Statistics	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
approach	Pillai's Trace	,37	7,31	3	37	,001	,37

Table 4. 9 *Results of Univariate Effects for Approach*

Effect	Dependent Variable	F	Sig.	Partial Eta Squared
approach	anger.aggression	,01	,929	,00
	anxiety.withdrawal	1,63	,209	,04
	socialcompetence	21,35	,000*	,35

* Bonferroni adjusted alpha level= .017

"Persistence" and Social Competence and Behavioral Problems

When we look at the "Levene's test of Equality of Error Variances", it can be seen that, one of the dependent variables (anxiety- withdrawal) have significant value (.007), therefore, assumption of equal variances can not be achieved (Pallant, 2007). According to Tabachnick and Fidell (2007), if we have problems related with equality of variances, alpha level of .025 or .01 can be used instead of .05 for specific variable.

One-way between- groups multivariate analyses of variance was performed to investigate differences in persistence subscale of temperament of children in terms of Social Competence and Behavioral Problems. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted. There was a statistically significant difference between children with high persistence and children with low persistence on the combined dependent variables, Multivariate $F (3, 37) = 22.47$, $p < .001$; Pillai's Trace = .65; partial $\eta2 =$ .65. (see Table 4.10) When the results for the dependent variables were considered

separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .017, was social competence (see Table 4.11), Univariate F (1, 39) = 70.90, $p < .001$, partial η2 = .65. An inspection of the mean scores indicated that, children with higher persistence scores have higher levels of social competence ($M = 67.05$, $SD = 11.04$) than children with lower levels of persistence scores ($M = 26.25$, $SD = 17.64$). Persistence subscale of temperament accounted for 65 percent of the variance in social competence scores.

Table 4. 10 *Results of Multivariate Test for Persistence effect*

Effect	Statistics	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
persistence	Pillai's Trace	,65	22,47	3	37	,000	,65

Table 4. 11 *Results of Univariate Effects for Persistence*

Effect	Dependent Variable	F	Sig.	Partial Eta Squared
persistence	anger.aggression	,81	,372	,02
	anxiety.withdrawal	5,61	,023	,13
	socialcompetence	70,90	,000*	,65

* Bonferroni adjusted alpha level= .017

"Rhythmicity" and Social Competence and Behavioral Problems

When we look at the "Levene's test of Equality of Error Variances", since none of the dependent variables indicated significant values, we can assume that, equal variances achieved (Pallant, 2007).

One-way between- groups multivariate analyses of variance was performed to investigate differences in rhythmicity subscale of temperament of children in terms of Social Competence and Behavioral Problems. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers,

homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted. There was not a statistically significant difference between children with high rhythmicity and children with low rhythmicity on the combined dependent variables, Multivariate $F(3, 37) = .56$, $p > .05$; Pillai's Trace = .04; partial $\eta2 = .04$. (see Table 4.12). Since the non-significant result was found, between subject effects were not examined.

Table 4. 12 *Results of Multivariate Test for Rhythmicity effect*

Effect	Statistics	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
rhythmicity	Pillai's Trace	,04	,56	3	37	,646	,04

"Reactivity" and Social Competence and Behavioral Problems

When we look at the "Levene's test of Equality of Error Variances", since none of the dependent variables indicated significant values, we can assume that, equal variances achieved (Pallant, 2007).

One-way between- groups multivariate analyses of variance was performed to investigate differences in reactivity subscale of temperament of children in terms of Social Competence and Behavioral Problems. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance- covariance matrices, and multicollinearity, with no serious violations noted. There was a statistically significant difference between children with high reactivity and children with low reactivity on the combined dependent variables, Multivariate $F(3, 37) = 4.53$, $p < .05$; Pillai's Trace = .27; partial $\eta2 = .27$. (see Table 4.13). When the results for the dependent variables were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .017, was anger- aggression (see Table 4.14), Univariate $F(1, 39) = 12.48$, $p < .05$, partial $\eta2 = .24$. An inspection of the mean scores indicated that, children with higher reactivity scores have higher levels of anger- aggression ($M = 69.50$, $SD = 18.48$) than children with lower levels of reactivity scores ($M = 50.47$,

SD = 15.96). Reactivity subscale of temperament accounted for 24 percent of the variance in anger- aggression scores.

Table 4. 13 *Results of Multivariate Test for Reactivity effect*

Effect	Statistics	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
reactivity	Pillai's Trace	,27	4,53	3	37	,008	,27

Table 4. 14 *Results of Univariate Effects for Reactivity*

Effect	Dependent Variable	F	Sig.	Partial Eta Squared
reactivity	anger.aggression	12,48	,001*	,24
	anxiety.withdrawal	,14	,713	,00
	socialcompetence	2,40	,130	,06

* Bonferroni adjusted alpha level= .017

CHAPTER 5

DISCUSSION

The purpose of this study was to explore the social competence and behavioral problems of children by basing on the differences on gender, peer preference and temperamental characteristics of 5- 6 year old children. The social competence and behavioral problems of children were measured by "Social Competence and Behavioral Evaluation" inventory, temperamental characteristics of children were determined by "Short Temperament Scale" and peer preference scores of children were examined through the implementation of Picture Sociometry Scale".

This chapter includes the discussion of the results, implications derived from the present study, recommendations for practice and further studies. The results of the study are going to be discussed by taking into account of each group of the research questions.

5.1 Key Findings and Discussions Specifying on Research Questions

Research Question 1
•Does gender differentiates children in terms of Social Competence and
Behavioral Problems?

    -Do boys have higher scores than girls in terms of social competence, anxiety- withdrawal and anger- aggression?

In the present study, there was not any significant difference between boys and girls on the social competence and behavioral problems of children. In other words, neither girls nor boys differ on social competence and behavioral problems. Moreover, gender of children did not have any association with neither of the

variables of the study. It was expected that, anxiety- withdrawal scores do not differentiated across gender in early childhood period (Çorapçı et al., n.d.). This is because gender differences in anxiety- withdrawal aspect of behavioral problems become more prevalent in adolescent years not in early childhood years (Twenge, Nolen- Hoeksema, 2002). However, it was expected that, there could be a gender difference on anger- aggression scores of children based on the literature findings. Since both genders socialize differently, it is natural for both to have different kinds of behavioral patterns. However, it is interesting that, the results related with gender in the present study are unexpected ones and also inconsistent with the related literature.

When we consider the possible reasons for this indifference, base on the observations made with the sample, in some classes, there was great segregation among children in means of gender. In other words, the play, activities and routines they conducted were gender segregated one. Even, in the implementation part, especially one classroom's children really favored children who are belong to their own gender. In other words, they verbalize that, "I do not like to play with boys in this classroom" or "I hate girl's play so I do not like to play, sit with them". It is believed that, children from both genders generally tend to become friends with same- sex children (Barten & Cohen, 2004). Beside this fact, similarly, it is also known that, as Fabes et al. (2006) proposed, approximately at the age of 3, children start to make gender segregation. In other words, the group in which the present study was conducted was the one who are at the age that gender segregation might be experienced harshly. This situation may imply the situation that, girls may undervalue boys while overvaluing their same sexes and boys might undervalue girls while overvaluing boys. Therefore, scores might accumulate at the center indicating a neutral evaluation in means of gender.

Similarly gender indifference in means of anger- aggression scores of children may be due to the beliefs or schemas of teachers about genders and behavioral pattern they have. In other words, teacher may have some kind of belief that, boys behave in some ways while girls behave differently. Therefore, teacher might evaluate children within their gender groups. By making such an evaluation,

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the behaviors of both genders might be normalized and this may created the non-significant result in means of gender.

Another possible reason related with gender came from the literature. It was stated that, girls' aggression is different than boys'. While girls exhibit more indirect forms of aggression, boys' display more directs ones (Archer, 2004). It is evident that, girls and boys display different kinds of aggression or the way they exhibit their anger may be different. However, as Kim, Kim, and Kamphaus (2010) stressed, many studies reported that, boys display more aggression related behavioral patterns than girls. However, this well known fact may not be proper if the measurement do not have equivalency in means of gender as a measure of aggression. In other words, if non-significant result occurs in means of aggression of boys and girls, this may be due to the absence of equivalency of a measure of aggression in the assessment method (Kim, et al., 2010). In other words, since most of the measurements includes items generally related with the direct aggression (which can be considered as belong to boys' aggression) and not include any items related with indirect or relational kinds of aggression (considered as belong to girls' aggression) may be undervalued. Therefore, this may cause evaluators to report more gender difference on aggression patterns of children. Therefore, the non-significant result of the present study might not be so unexpected.

Research Question 2
•*Does peer preference differentiates children in terms of Social Competence and Behavioral Problems?*
  -Do children with higher preference different than children with lower preference in terms of social competence, anxiety- withdrawal and anger-aggression?

As has been expected from the very start of the study, a difference between children with high peer preference and children with low peer preference on the combination of social competence, anger- aggression and anxiety- withdrawal was

found. The dependent variable that specifically explains the difference in peer preference of children was social competence. In other words, children with higher peer preference have higher levels of social competence than children with lower levels of peer preference. Moreover, it was found that, differences in anxiety-withdrawal and anger- aggression levels of children couldn't be explained by the children's peer statuses. In addition to the multivariate analysis of variance, the results of correlation analyses showed that, children who were rated as socially competent preferred more by their peers whereas children rated as higher in anxiety-withdrawal were less preferred.

There have been parallel findings in the literature to this finding. As stated in the literature, having the capability of getting well with peers or adults in social contexts can be considered as the indicator of the socially competent behavior for young children (Rose- Krasnor, 1997). Similarly, as Newcomb and Bagwell (1996) stressed, in the absence of the peer relationships, children exhibit less adaptive strategies related with social competence and consequently remain scarce in interacting with peer relationships, which requires social skills. Moreover, according to parents' or teachers' ratings, as the social competence levels of children increased, they became more capable of forming relationships, tended to be rated as socially capable and highly preferred by their peers (Sebanc, 2003; Zanolli, Paden, & Cox, 1997). Therefore, it seems that, there is a great interdependency between the social competence and the peer relationships of children. As the present study found, teachers rated children who were evaluated by their peers as more preferred as more socially competent whereas teachers rated children who were not preferred much, as less competent socially. Children with higher levels of social competence experience lower levels of anxiety- withdrawal related problem behaviors. It was stated in the literature that, children who evaluate by their teachers as exhibiting internalizing problems also rated by their teachers as having low social competence (Walter& LaFreniere, 2000). Similarly as Semrud- Clikeman (2007) stressed, if the child less preferred by their peers as well as experiencing depressive kind of symptoms hold the risk for experiencing social isolation in relationships.

It was stated in the literature that, peer relationships in early childhood period has a crucial effect on the interpersonal interactions of young children in their adolescence and adulthood years (Hepler, 1997). Moreover, beside the importance of peer relationships, social development of children also holds great importance. As Joseph and Strain (2003) stated, having high social competence levels enable children to be engage in daily conversations and experiences at home and schools, do not experiencing any difficulties while interacting with others. Instead of difficulty, they feel trust in themselves, feel relax in daily routine social interactions. Therefore, since the present study found difference between children in terms of their peer preference scores on social competence levels, it seems that peer relationships have critical role in differentiating the social competence levels of children. It is evident from this finding that, having a healthy peer relationship early in life is crucial for the developmental well being of children. As a support to this finding, as Newcomb and Bagwell (1996) stressed, building a positive relationship, getting acceptance from peers have a critical role in children's social developmental well being. Therefore, this finding of the study is consistent with the literature findings.

However, another finding of the present study posed inconsistency with the previous research. As Coie et al. (1990) indicated there is a general notion that, experienced rejection has association with aggression whereas acceptance has relation with social behaviors, helpfulness. It is evident that, peer acceptance have strong association with social competence of children, however, in the present study no difference were found between children with different preference levels on their anger- aggression scores. In addition, there are many studies indicating the inconsistent findings with the present study in terms of anger- aggression aspect. For example, as Hoza (1989) indicated, children with lower levels of acceptance tended to display more aggressive- disruptive behaviors, get more evaluations indicating more externalizing behavior problems compared to children with higher levels of acceptance. The reason why significant results did not appear in means of peer preference on anger- aggression and anxiety- withdrawal aspect of behavioral evaluation might be the multiple sources of informants. In other words, teachers did the behavioral evaluations of children while peers determined the peer statuses of

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children. We know that, children have a kind of dynamics in themselves. It is expected that, the status of being accepted or rejected is a kind of determinant mechanism on the both aggressive and anxiety related behaviors. In other words, since the child does not preferred by their peer as a playmate, friend, etc. he/she may feel anxious or withdrawn or contrary to this internalizing kind of reactions, child may get angry with this rejection and exhibit externalizing and anger related behaviors. However, the rationale for rejecting a child for children may be very different than the rationale of the teachers' of evaluating the child's behavioral problems. In other words, things children see as a problem may not necessarily need to constitute a problem for teacher or vice versa.

Another reason for the inconsistent result with the literature can be that, the items measures anger-aggression or anxiety- withdrawal subscale is really discriminant for the clinical incidents since it covers general points in the identification of children who are in need of help due to high risk for psychological well- being. Items like, "hits, bites, kicks other children, harm properties when angry, or hits teacher when aggressive, seem unhappy and depressive, etc." may represent extreme aspects of behavioral problems. This aspect verified by the Çorapçı et al. (n. d.) that, Social Competence and Behavioral Evaluation scale is informative in evaluating preventive interventions as well as detecting children who are at risk of displaying behavioral disorders. Therefore, teacher may perceive the items as extremely polarized and under evaluated children's related behaviors. In other words, child may exhibit angry behaviors but not necessarily bites or kicks. Thus, teacher may underestimate child's existing aggression. That may be one of the possible reasons of not finding significant mean differences in peer preference of children on anger- aggression and anxiety- withdrawal.

Research Question 3
•Do children with different temperamental characteristics differ in terms of Social Competence and Behavioral Problems?
    -Approach& Persistence

When correlation analyses were examined in terms of approach and persistence subscales of children, it was found in the present study that, children rated by their parents as higher in approach and persistence as a temperamental characteristic was evaluated as having more social competence. Moreover, children who were rated by their parents as higher in approach, and persistence subscales of temperament also preferred more by their peers. Moreover, children having high scores in persistence subscale were found to have higher score in approach subscale. These results show consistent findings with the literature. Approach was used in the literature as ability of engaging in new situations, being social and neither withdrawn nor inhibited (Sanson et al., 2002; Thomas et al., 1968). Moreover, persistence defined by Thomas et al. (1968) as a continuation of a specific activity despite the various obstacles. It means in the present study that, child likes to finish the work that he/she has already started before starting a new work. By basing on these, the results of the present study supported the general notion that, specific dimensions of temperament of young children have an important relationship with their social competences (Sanson et al., 2002). Parallel with this finding; as Gleason et al. (2005) stressed, some dimensions of temperament can be related with the development of friendship in children in early childhood period. The results, which indicated the high relationship between approach and persistence, dimensions of temperament and both social competence and peer preference is parallel with the literature findings. Therefore, we may infer that, if a child has warmth attitude, may approach to new situations, behave socially in new situations, may be decisive on the thing they dealing with, is perseverant, there may be a kind of association between child's those temperamental characteristic and the both social competence level and preference or acceptance gather from peers.

In addition to the results of the correlation analyses, the present study also found a significant difference between children with different levels of approach and persistence on the combination of social competence, anger- aggression and anxiety-withdrawal levels of children. Social competence was the only outcome variable that was affected from the approach and persistence characteristics of children. It was found that, children with higher approach scores and also higher persistence scores

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have higher levels of social competence than children with lower levels of approach and persistence scores. The children's approach or persistence scores cannot explain differences in anxiety- withdrawal and anger- aggression levels of children. Actually, it was expected to find a significant difference in approach or persistence scores of children on the anxiety- withdrawal and anger- aggression scores of children since anxiety- withdrawal can includes the emotions like unhappiness, depressed mood, shyness like internalizing behavioral symptoms, and anger- aggression includes maladaptive behaviors exhibited toward peers, opposing adults, and behaving aggressively, it was expected that, as the children's approach scores change (if the child is shy, inhibited, avoid new situations), their scores on especially anxiety- withdrawal and anger- aggression also change. Similarly as the children persistence level change (if the child is perseverant, not giving up the thing she engaged in despite difficulties) child's level of anxiety- withdrawal and anger- aggression should be differentiated. However, result did not occur in the expected way. Beside the mean indifference in approach and persistence subscales on anxiety- withdrawal and anger- aggression, children's higher persistence scores have association with children's lower levels of anxiety- withdrawal scores.

The reason why significant results did not appear in means of approach and persistence subscales on anger- aggression and anxiety- withdrawal aspect of behavioral evaluation might be the multiple sources of informants. In other words, teachers did the behavioral evaluations of children while parents determined the temperament of children. As stated in the literature, source of the information can be biased in a way that, parents and teachers may distort the data to favor their children or hide some characteristics of them. Moreover, there may be some kind of inconsistencies in the responses of both parents and teachers. For example, as stated in the literature part, the behavior of children may be seen as problematic by parents do not require teacher to consider that behavior as problematic (Balat - Uyanık et al., 2008). Therefore, as stated in the literature, assessing behavioral problems or social skills of children with multiple informants is important as well as supporting them with observation in the detection and intervention of the behavioral problems. Thus, we should be aware of the possible inconsistencies in the parents' answers and

should consider the credibility of the answers given. Specifically for the present study, in order to handle with this distortion and to provide more reliable information, besides parents, teachers could be asked to evaluate each of the children's temperamental characteristics in their classrooms. However, this may require a great time for teacher and it may also be a time consuming. Therefore, this procedure was examined in means of feasibility and applicability. Thus, in the present study, teachers were selected as a source of informant in means of Social Competence and Behavioral Evaluation. This notion is supported by the literature that, as Coie et al. (1990) stated teachers are the unique group that can give information about the social statuses of children basing on behavioral correlates. Not only behavioral assessment but also social competence assessment also requires to select teachers as rater. Semrud- Clikeman (2007) justified this view in a way that, parents may be seen as having more limited view of their children's level of social competence and skills whereas teachers have the chance of comparing children with a larger comparison group. Therefore, for the present study, teacher will be the rater of the children's level of social competences and behavioral problem statuses. All these show that, teachers are more reliable source of information over parents. On the contrary to this belief, in the assessment of the temperamental characteristics, questionnaires filled by caregivers/ parents give beneficial information since temperament is the biological make- up which is determined with the birth of child and therefore parents can monitor the child in different and various settings for long periods. Besides the advantageous role of parents in means of evaluating the child's temperamental characteristics, there are some disadvantages of caregiver reports in a way that caregiver may be biased in giving some information. However, although the treat in means of source of biased is critical, still parent reports are the most beneficial ones since parents have the chance for observing child in various settings and since the validity of it, is quite fine (Rothbart & Bates, 2006). Therefore, based on the literature, in the present study, parents were preferred to be used for the assessment of the children's temperamental characteristics.

By taking all into account, since anxiety- withdrawal and anger- aggression rates the indicators of problems, it seems that, teachers may underestimated the

children's possible or existing problems. Similarly, parents may distort the data about their children's temperamental characteristics. Therefore, all these may constitute possible reasons of not finding significant mean differences in approach and persistence characteristics of children on anger- aggression and anxiety- withdrawal.

-Rhythmicity

Rhythmicity scores of children were not differentiated on social competence, anger- aggression and anxiety- withdrawal levels of children. Beside the mean difference results related with rhythmicity scores, there are no correlation between rhythmicity scores of children and neither of the variables of the present study. These results reflected the fact that, rhythmicity scores do not have any association with any of the variables of the present study and also differences in rhythmicity scores did not differentiated on the outcome variables of the study. This may be due to the fact that, items of rhythmicity subscale is designed to deal with the sleeping and feeding patterns of children (as cited in an electronic source namely TEÇGE çalışması- TEÇGE'de kullanılan ölçekler hakkında ayrıntılı bilgi). It was stated that, there is not much strong relationship between the evaluations of sleep and eating routines of mothers and children's routines. Therefore, it was stated that, rhythmicity concept may not be proper for the Turkish society (as cited in an electronic source namely TEÇGE çalışması- TEÇGE'de kullanılan ölçekler hakkında ayrıntılı bilgi). However, the reason why no associations with any of the variables of the present study were found may be due to the excessive expectations of Turkish mothers about their children's sleeping and eating patterns. Due to the extreme expectancy, parents may rate their children as having moderate levels of rhythmicity, which in turn may distort the results and cause insignificant results in terms of rhythmicity aspect of temperament.

-Reactivity

When correlation analyses were examined in terms of reactivity subscale of temperament, it was found in the present study that, children rated by their parents as higher in reactivity were also evaluated as having more anger- aggression related

behaviors. Furthermore, a significant association was found between social competence and reactivity in a way that, higher scores in reactivity subscale have an association with the lower scores of social competence. Moreover, lower scores in reactivity subscale of temperament have association with the higher preference gathered by peers.

Moreover, besides the results of correlation, there was also a difference between children with different levels of reactivity on the combination of social competence, anger- aggression and anxiety- withdrawal levels of children. Anger-aggression is the only outcome variable that was affected from the reactivity characteristics of children. It was found that, children with higher reactivity scores have higher levels of anger- aggression than children with lower levels of reactivity. Differences in anxiety- withdrawal and social competence levels of children can not be explained by the children's reactivity scores although a significant correlation was found between reactivity and social competence. In the literature, reactivity defined as responding situations negatively like fearfully, experiencing irritation, behaving strict not being flexible towards the emotional situations (Sanson et al., 2002; Rothbart & Bates, 1998). The results of the present study implied that, differences in children's levels of reactivity like behaving negatively or fearfully to the situations or not, make the difference in the anger- aggressive behavioral patterns of children. Therefore, children with reactive temperament have the possibility of experiencing anger- aggressive related behavioral problems.

5.2. Limitations of the Study

Some limitations can be listed that should be considered in the interpretation process of the results. The first limitation is that, the study was conducted only in one early childhood education center in Ankara with a small sample. This means that, this situation may limit the generalizability of the study. Despite this limitation, the present study will be beneficial since it gives practical information to teachers and parents. Not generalization but informing individuals to improve their practice and

future well beings of schools, children, families and in general society levels was desired.

The second limitation is that, data of this study was collected through different sources as peers, parents and teachers. Therefore, the final data of each child includes information gathered from different sources. Thus each information source may have evaluated the same child from their own point of view reflecting their own perceptions of the child rather than the child's real characteristics. This way of data collection may have affected the actuality of the data.

One of the data collection instrument (Social Competence and Behavior Evaluation) is newly developed inventory that the publication of the related article, which points the reliability and validity results, is in progress. However, it was indicated that, the instrument is reliable and valid screening instrument for detecting indicators related with emotional and behavioral problems and also social competences of children in early childhood period. With the replications by using the instrument with larger samples, reliability and validity of the instrument can be tested.

5.3. Implications

In the direction of the findings of this study and previous studies about this issue, some implications can be offered to preschool teachers, specialists who work with young children as consultants, schools and parents. Related literature parallel with the findings of the present study will be discussed in this section in order to point out the importance of the present issue and to suggest some strategies for teachers and parents.

As results related with peer relations indicated, by knowing the crucial effects of peer relations on the psychological well being of children, peer relations should be encouraged and paid attention by teachers, schools and parents. As Fabes et al., (2006) pointed early childhood is the period that the surrounding of the young children grows in a large extend by including peers into the repertoire other than the family members. Therefore, early childhood years are the times that peer

relationships should be mentioned, supported and handled with caution both by teachers and parents. It is evident that, the peer that child chose to be with might direct the child in early childhood period into the way he/she wants. In other words, since children in those times have open minds to learn new things, the peer can deliver both positive and negative patterns to the child. Therefore, early childhood educators should be aware of the importance of the preschool years in supporting the early social interactions among peers. In the direction of those notions, it is though that, teachers should be educated for supporting social interactions of children. At this point, education of teachers becomes important. Education of the early childhood teachers should include more courses related with children's social and emotional developments and also enriching the content of the courses related with social and emotional developments of children to include the importance of peer relationships for the overall well- being of young children is crucial. Some strategies for coping with rejection among some children should be taught to teachers.

Beside the importance of the education of the early childhood teachers, the models that teachers constitute in means of providing standards for social interactions with other individuals create a base for children in the development of social competence. Therefore, teachers should be a good model for children in forming healthy social interactions with others. Beside teacher's role, families are also vital for the formation of the behavioral patterns of children. Families also should be a role model for children in developing successful social network. This way of behaving will definitely guarantee the healthy and successful development of young children which in turn facilitates for the adaptation of children to school more easily and decrease the risk for experiencing possible behavioral problems.

As present study indicated, differences in the temperamental characteristics of children have different roles on the social competence and behavioral well- beings of children. Therefore, early childhood institutions should be aware of the different characteristics of each child, should assess them, detect and identify the ones who are at risk for behavioral problems and try to implement some kind of intervention when needed. Moroever, it is important for early childhood institution to provide appropriate practice for each individual child by basing on children's temperamental

characteristics and needs. Therefore, identification of less preferred peers, children with low social skills, having aggressive behaviors, having externalizing or internalizing behavior problems early in life are critical for preventing the permanency of the problematic behavioral patterns through the life span.

Beside the teacher's role, families are also vital for the formation of the behavioral patterns of children. Not only behavioral patterns but also peer relations and competence levels of young children get also affected from the familial factors. As stated in the literature, parenting style has an effect on the behavioral problems in children. In other words, the style of parental child- rearing and the interaction occur in the family and home environment crucially contribute to the children's social functioning, behavioral problems and friendship formation (Walker, 2009; Williams et al., 2009). Therefore, it may be inferred that, parenting holds a great importance in means of determining the psychological well being of children in early childhood period. In addition, responsive parenting given early in life is so crucial for the healthy formation of the child's social interactions and relations. By taking all the information related with the parenting style into account, we may expect that, the way parents approach their children would shape the children's social and emotional developmental outcomes.

It was stressed in the literature that, peer relationships can not be investigated by only giving attention to the psychological bases and the development of child, rather it should be studied with the combination of school, classroom, family and the surrounding of the child that have an effect on the friendship formation (Epstein, 1989). Therefore, teachers and parents should be aware of the peer relationships children form. Applying effective and planned strategies for coping is crucial for the successful formation of children's self- concept. Before designing of the intervention program, detailed analysis of the identification of the child's characteristics (temperament) with the collaboration of professionals and parents is critical. Therefore, careful identification of the young children who are at risk for developing behavioral problems is crucial in implementation of the intervention and the collaborative interaction between families and the school staff is a key factor in the success of the intervention program. As present study conducted, identification of the

child's temperamental characteristics is a good step towards understanding the underlying reasons of the behavioral, social outcome, determining the current situation and deciding on the intervention if necessary.

Therefore, early recognition and diagnosis is vital for the well- being of children. As Ştefan et al. (2009) stressed, "aim of screening is not simply labeling children as deficient in acquiring certain abilities, but rather promoting an early detection and intervention in such cases" (p.142). Therefore, the present issue is essential and the detection of children who are at risk is crucial, but more importantly, the development of this study with designing of the social skill training program is extremely vital.

5.4. Recommendations for Further Studies

In order for developing social- emotional competencies, school readiness and social adjustment of preschool children to future life, some social skill teaching programs should be applied. These are prosocial skills, communication skills, understanding emotions, regulation of emotions, control for aggression and problem solving skills. In order to support those skills, social skill coaching programs and related classroom curricula should be performed. It is evident that, social skill development programs have great effects on the improvement of the social- emotional competences of preschool children and it deserves attention. Therefore, it can be said that, educational strategies applied by teachers can be effectively promote acceptance among young children. In the light of the results of the present study and related literature, this study can be developed by designing a social skill training program and the effectiveness of it in means of supporting social competence levels of children which in turn have a positive effect on the peer relationships of children can be tested. It is evident that, a kind of social skill training program should be an essential part of the early childhood education curriculum to create healthier generation in means of their social and emotional developments.

It is expected that, the way parents approach their children would shape the children's social and emotional developmental outcomes. Therefore, due to the

critical role of parenting on the behavioral well- beings and social functioning of children, the present study can be developed by measuring the parenting style of the families. By getting information about parenting style of families, the present issue will be more informative.

Moreover, predictive value of peer relations, children's temperamental characteristics with the interaction of parenting style on social competence and behavioral problems of children can be studied with a larger sample. Furthermore, the present study can also be developed as examining mediation between some variables of present study. In the light of the information gathered from literature, temperament may have an indirect effect on social competence and behavioral problems through the mediator role of peer preference. This direction can be studied in order to have more detailed picture about studied issue.

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APPENDIX A

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27 Aralık 2010

Gönderilen: Yrd.Doç.Dr. Feyza Erden
İlköğretim Bölümü

Gönderen : Prof. Dr. Canan Özgen
IAK Başkan Yardımcısı

İlgi : Etik Onayı

"5-6 Yaş Çocuklarında Sosyal Yetkinlik ve Davranış Sorunlarının, Akran Kabulü, Mizaç ve Cinsiyet Açısından İncelenmesi" başlıklı çalışması "İnsan Araştırmaları Etik Komitesi" tarafından uygun görülerek gerekli onay verilmiştir.

Bilgilerinize saygılarımla sunarım.

Etik Komite Onayı

Uygundur

27/12/2010

Prof.Dr. Canan ÖZGEN
Uygulamalı Etik Araştırma Merkezi
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ODTÜ 06531 ANKARA

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APPENDIX B

Picture of the boxes used in the study

APPENDIX C

Short Temperament Scale for Children

ÇOCUKLAR İÇİN KISA MİZAÇ ÖLÇEĞİ

	Hiçbir Zaman Böyle Değildir	Genellikle Böyle Değildir	Bazen Böyledir Bazen Değildir	Genellikle Böyledir	Hemen Herzaman Böyledir
1. Tanımadığı yetişkinlere karşı utangaçtır.	1	2	3	4	5
2. Resim yapmak veya dağıttıklarını toplamak gibi bir işin üstünde, uzun zaman alsa bile, bitirene kadar çalışır.	1	2	3	4	5
3. Her gün, hemen hemen aynı zamanlarda kakasını yapar.	1	2	3	4	5
4. İlk kez tanıştığı çocuklara karşı utangaçtır.	1	2	3	4	5
5. Yeni bir işe geçmeden önce, başlamış olduğu işi tamamlamayı ister.	1	2	3	4	5
6. Her gün, hemen hemen aynı zamanlarda acıkır.	1	2	3	4	5
7. Bir işle uğraşırken (yap-boz, resim yapmak vb.) üzülür veya canı sıkılırsa yaptığı şeyi yere atar, ağlar, kapıları çarpar.	1	2	3	4	5
8. Alışveriş yaparken, oyuncak ya da şeker istediğinde, onun yerine başka bir şeyi kolayca kabul eder.	1	2	3	4	5
9. Yattıktan sonra uykuya dalması aşağı yukarı her gece aynı zamanı alır.	1	2	3	4	5
10. Tamamlamadığı bir oyunu ya da işi bırakmayı istemez.	1	2	3	4	5
11. Saçını taranması gibi bir işe karşı çıkarsa, buna direnmeyi aylarca sürdürür.	1	2	3	4	5
12. Bir faaliyete başladığında, bununla uzun zaman uğraşır.	1	2	3	4	5
13. Parkta ya da misafirlikteyken, tanımadığı çocukların yanına gider ve onların oyununa katılır.	1	2	3	4	5
14. Uyuduğu süre her gece değişir.	1	2	3	4	5
15. Yeni tanıştığı bir yetişkinin yanında ilkin utangaç davransa da, yarım saat gibi kısa bir süre içerisinde ısınır.	1	2	3	4	5
16. Bir şeye kızgınsa, bunu geçiştirmek zor olur.	1	2	3	4	5

Lütfen arkaya geçiniz.

	Hiçbir zaman Böyle Değildir	Genellikle Böyle Değildir	Bazen Böyledir Bazen Değildir	Genellikle Böyledir	Hemen Her zaman Böyledir
17. Her gün farklı zamanlarda acıkır.	1	2	3	4	5
18. Ailece yolculuğa veya gece yatısına bir yere gittiğimizde, yeni yere hemencecik alışır.	1	2	3	4	5
19. Beraber alışveriş yaparken, istediğini almazsam (örneğin; şeker, oyuncak gibi) ağlar ve bağırır.	1	2	3	4	5
20. Üzüntülü ise, onu rahatlatmak zordur.	1	2	3	4	5
21. İlk kez evimize gelen bir yetişkine yaklaşır ve dostça davranır.	1	2	3	4	5
22. Her gün aynı miktarda yemek yemek yerine, bir gün fazlasıyla bir gün de çok az yemek yer.	1	2	3	4	5
23. Bir oyuncak ya da oyun zor geldiği zaman ilgisini hemen kaybeder.	1	2	3	4	5
24. Sevdiği bir oyun ya da oyuncakla istediğini yapamazsa, buna çok üzülür.	1	2	3	4	5
25. Bir kıyafeti giymek istemediğinde, bağırır ya da ağlar.	1	2	3	4	5
26. Hafta sonu ve tatillerde, her sabah aşağı yukarı aynı saatte uyanır.	1	2	3	4	5
27. Bir şeyi iyice öğreninceye kadar (yap- boz, yeni şarkı veya yeni bir kelime gibi) o faaliyetin üzerinde çalışır.	1	2	3	4	5
28. Annesinin olmadığı yeni bir yere (yuva, komşu ya da arkadaş evi gibi) ilk kez bırakıldığı zaman üzülür.	1	2	3	4	5
29. Bir şeyle oynamaya başladığında, bırakmasını istersem çok zorluk çıkarır.	1	2	3	4	5
30. Kitap okumak, kitaplara bakmak ve ya el işi yapmak gibi faaliyetlerde uzun zaman uğraşır.	1	2	3	4	5

Anketi tamamladığınız için teşekkürler.

APPENDIX D

Social Competence and Behavioral Evaluation

SOSYAL YETKİNLİK VE DAVRANIŞ DEĞERLENDİRMESİ

Aşağıdaki listede bir çocuğun duygusal durumu ve davranışları ile ilgili ifadeler yer almaktadır. Verilen numaralandırma sistemini göz önünde bulundurarak ifadelerdeki davranışları anketi doldurduğunuz çocukta ne kadar sıklıkla gözlemlediğinizi işaretleyiniz:

Bu davranışı
(1) HİÇBİR ZAMAN   (2 veya 3) BAZEN   (4 veya 5) SIK SIK   (6) HER ZAMAN gözlemliyorum.

1. Yüz ifadesi duygularını belli etmez.	1	2	3	4	5	6
2. Zorda olan bir çocuğu teselli eder ya da ona yardımcı olur.	1	2	3	4	5	6
3. Kolaylıkla hayal kırıklığına uğrayıp sinirlenir.	1	2	3	4	5	6
4. Faaliyeti kesintiye uğradığında kızar.	1	2	3	4	5	6
5. Huysuzdur, çabuk kızıp öfkelenir.	1	2	3	4	5	6
6. Gündelik işlerde yardım eder (örneğin sinif toplanirken ya da beslenme dagitilirken yardımcı olur).	1	2	3	4	5	6
7. Çekingen, ürkektir; yeni ortamlardan ve durumlardan kaçınır.	1	2	3	4	5	6
8. Üzgün, mutsuz ya da depresiftir.	1	2	3	4	5	6
9. Grup içinde içe dönük ya da grupta olmaktan huzursuz görünür.	1	2	3	4	5	6
10. En ufak bir şeyde bağırır ya da çığlık atar.	1	2	3	4	5	6
11. Grup içinde kolaylıkla çalışır.	1	2	3	4	5	6
12. Hareketsizdir, oynayan cocukları uzaktan seyreder.	1	2	3	4	5	6
13. Anlaşmazlıklara çözüm yolları arar.	1	2	3	4	5	6
14. Gruptan ayrı, kendi başına kalır.	1	2	3	4	5	6

Bu davranışı
(1) HİÇBİR ZAMAN   (2 veya 3) BAZEN   (4 veya 5) SIK SIK   (6) HER ZAMAN gözlemliyorum.

15. Diğer çocukların görüşlerini dikkate alır.	1	2	3	4	5	6
16. Diğer çocuklara vurur, onları ısırır ya da tekmeler.	1	2	3	4	5	6
17. Grup faaliyetlerinde diğer çocuklarla birlikte çalışır, onlarla iş birliği yapar.	1	2	3	4	5	6
18. Diğer çocuklarla anlaşmazlığa düşer.	1	2	3	4	5	6
19. Yorgundur.	1	2	3	4	5	6
20. Oyuncaklara iyi bakar, oyuncakların kıymetini bilir.	1	2	3	4	5	6
21. Grup faaliyetleri sırasında konuşmaz ya da faaliyetlere katılmaz.	1	2	3	4	5	6
22. Kendinden küçük çocuklara karşı dikkatlidir.	1	2	3	4	5	6
23. Grup içinde farkedilmez.	1	2	3	4	5	6
24. Diğer çocukları istemedikleri şeyleri yapmaya zorlar.	1	2	3	4	5	6
25. Öğretmene kızdığı zaman ona vurur ya da çevresindeki eşyalara zarar verir.	1	2	3	4	5	6
26. Endişeye kapılır.	1	2	3	4	5	6
27. Akla yatan açıklamalar yapıldığında uzlaşmaya varır.	1	2	3	4	5	6
28. Öğretmenin önerilerine karşı çıkar.	1	2	3	4	5	6
29. Cezalandırıldığında (örneğin herhangi bir şeyden yoksun bırakıldığında) başkaldırır, karşı koyar.	1	2	3	4	5	6
30. Kendi başarılarından memnuniyet duyar.	1	2	3	4	5	6